

# SELF STUDY REPORT

FOR INSTITUTIONAL RE-ACCREDITATION

**(CYCLE - III)**

SUBMITTED TO

**NATIONAL ASSESSMENT & ACCREDITATION COUNCIL**

BANGALORE

SUBMITTED BY

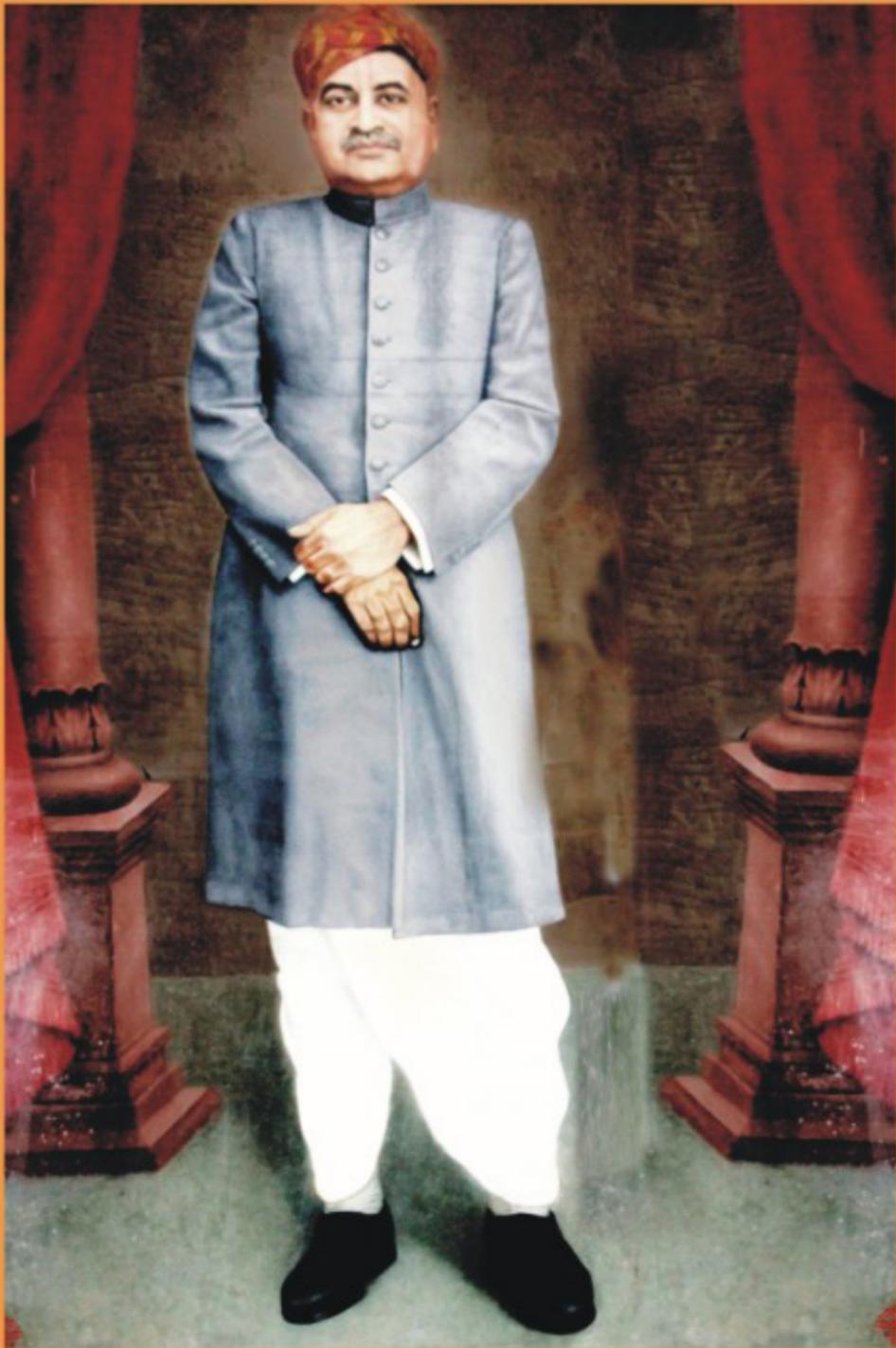


**NAGPUR SHIKSHAN MANDAL'S**  
**SHRI MATHURADAS MOHOTA COLLEGE OF**  
**SCIENCE, NAGPUR**  
MAHARASHTRA

Website : [mohotasci.edu.in](http://mohotasci.edu.in)

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**Seth Mathuradasji Mohota**

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## **NAAC STEERING COMMITTEE**

Dr. S. G. Charalwar	Chairman (Principal)
Dr. Mrs. R. S. Saha	Coordinator (Vice-Principal)
Dr. I. M. Sarin	Member (Vice-Principal)
Dr. R. P. Deshpande	Member
Dr. A. S. Muktibodh	Member
Dr. M. S. Atone	Member
Dr. V. V. Soman	Member
Dr. A. A. Fulzele	Member
Dr. M. G. Dhonde	Member
Dr. N. D. Meshram	Member
Dr. N. V. Palande	Member
Ms. S. D. Khalatkar	Member
Shri S. K. Dhote	Member

## PREFACE

Shri Mathuradas Mohota College of Science, Nagpur is run by **Nagpur Shikshan Mandal (NSM)**, one of the reputed and prestigious organizations in Nagpur. The college is affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur since 1967-68. The college offers basic programmes with wide academic flexibility of subject combinations at undergraduate level in Science faculty. All the programmes are directed towards realization of our mission and achieving our objectives. The college is among top colleges in central India.

The first cycle of assessment and accreditation of our college by National Assessment and Accreditation Council (NAAC), Bangalore was conducted in July 2002 and '**B**<sup>+</sup>' grade was awarded to the college. One of the main initiatives taken by the college was to constitute the Internal Quality Assurance Cell (IQAC). The IQAC is functional with well-defined roles, goals and responsibilities since 2005. The college was assessed and reaccredited for second cycle by NAAC, Bangalore in 2010 and the college was awarded '**B**' grade.

During past five years, the college has made tireless efforts to comply with the NAAC peer team recommendations. These recommendations have assisted the college to analyze and improve on quality parameters. The college has made many improvements during the last five years. New academic programmes like postgraduate courses, short-term certificate courses and Career Oriented Programmes (COPs) were initiated. These are being conducted successfully. This has also given us an opportunity to invite and interact with experts from various fields, including some of our retired teachers, who share their knowledge and help us in chasing our academic goals and enhancing the overall quality of teaching-learning process.

Mobilization of resources from various funding agencies and financial assistance received from the management has proved as a vital source for improvements in the infrastructure and teaching-learning facilities. The college and the management always strive to make teaching learning process student focussed.

Recently, R. T. M. Nagpur University, Nagpur has recognized the college as Place for Higher Learning and Research in Physics and Chemistry. Since then the college offers Ph.D. degree in Chemistry and Physics. This has motivated our teachers to moil for excellence by redefining the teaching learning process and carry out research of better quality. The staff members of the college received funding for research through major research projects sanctioned by BARC, Department of Atomic Energy, Govt. of India and University Grants Commission, Govt. of India. These endeavours have been

initiated in the last five years with increased participation of students and teachers in research.

Senior faculty members have retired on superannuation and baton of the tradition and legacy of the college has been carried forward to the next generation of teachers. Introspections and brain storming meetings amongst the staff members along with the IQAC have helped in making a precise Self Study Report (SSR). The SSR preparation has been a teamwork in which the staff members have poured in immense efforts. The SSR comprises of two parts. The first part includes the Preface, Principal's Message, Executive Summary, SWOC of the institution, Profile of the college, Criterion wise inputs, Post Accreditation Initiatives, and Evaluative Reports of the Departments. The second part provides the Annexures supporting the data provided in the first part. The SSR has been shared with the management and students.

I sincerely thank the teaching, non-teaching staff members, especially the IQAC, Steering Committee members and Heads of the departments for their contribution in preparing the SSR. I offer my deep sense of gratitude to the members of the governing body of NSM, namely, President Shri A. K. Gandhi, Vice-Presidents Shri Ramesh Khazode and Dr. T. S. V. Naidu and Secretary, CA Sudhir Baheti for their great support in all the endeavours of the college. All the honourable members of Local Management Committee (LMC) have always been supportive and source of inspiration. I am also thankful to those who have directly or indirectly helped and worked efficiently in providing data to the Steering Committee.

I am extremely happy that the recommendations of NAAC Peer Team have helped us in defining policies in a better way to bring out roadmap for further growth and development of the college.

I am eagerly waiting to interact with the NAAC Peer Team during their forthcoming visit to our college.

**Dr. Sanjay Charalwar**

Principal

Shri Mathuradas Mohota College of Science,

Nagpur

## PRINCIPAL'S MESSAGE

Shri Mathuradas Mohota College of Science, Nagpur was established with kind help and generous donation of Rs. One lakh by Seth Shri Mathuradasji Mohota in 1949. It is a matter of pride that the college is recognized as one of the best science colleges in Central India.

The college imparts science education to the students who come from urban as well as rural areas in Vidarbha and from states around Maharashtra. The college provides safe and conducive atmosphere with excellent teaching learning facility. The management of the college with the assistance of the faculty and supporting staff is committed to the progress of the college.

The teaching faculty of the college is well qualified and is carrying out good quality research as well. The management of the college is always positively inclined towards quality of education and research. The college has collaborated with other institutes in India and abroad for organizing international conferences. In the last few years, we have also efficiently organised seminars and workshops for the academic upliftment of the faculty. The college is closely associated with some national institutes and organizations like National Environmental Engineering Research Institute (NEERI), Laxminarayan Institute of Technology (LIT), Central India Research Institute (CIRI), Indian Association of Physics Teachers (IAPT), etc. Recently, Chemistry and Physics laboratories have been recognised as Place for Higher Learning and Research by R. T. M. Nagpur University, Nagpur. Major and minor research projects have been sanctioned to the faculty members by various funding agencies.

The college has made further progress as regards the academic, co-curricular and extracurricular activities. The students of the college have received accolades and brought laurels by representing the university at various national level cultural events. In addition to undergraduate courses, the college also offers postgraduate courses in Chemistry, Mathematics, Physics and Botany. The college has initiated Career Oriented Programmes (COPs) and Short Term Certificate Courses as well.

Our management, teaching faculty and the supporting staff strives for all-round development of the students. We continuously try to recognize and unfold the talent of the students by giving them the required assistance and most needed environment for transforming a person into personality. We are very attentive towards turning, to our advantage, the students' demographic dividend of our region.

We all believe that there is always scope and space for improvement and progress of the institution. Thus, our organisation has taken many efforts

to achieve betterment of curricular, extracurricular and sports activities. The institution is continuously making efforts for the infrastructural development.

I, along with our management, colleagues and the supporting staff are ready to meet the NAAC Peer Team for the third cycle of assessment. The NAAC Peer Team suggestions have always been precious to us and have given newer horizons of progress. We eagerly look forward to welcome the NAAC Peer Team.

**Dr. Sanjay Charalwar**

Principal

Shri Mathuradas Mohota College of Science,

Nagpur

## EXECUTIVE SUMMARY

Shri Mathuradas Mohota College of Science, Nagpur is one of the prestigious colleges in Central India. The college proudly caters to junior and senior college students. We strongly believe that advances in basic sciences will mainly contribute towards the progress and development of society. This college has an intellectually rich environment for the faculty and students. Our fundamental mission is to transform a 'person into personality'.

The members of the managing committee of Nagpur Shikshan Mandal (NSM) are as follows:-

Shri A. K. Gandhi	President
Shri R. B. Khanzode	Vice-President
Dr. T. S. V. Naidu	Vice-President
CA Sudhir Baheti	Secretary
Shri M. S. Binzani	Joint Secretary
Adv. R. J. Rathi	Joint Secretary
Shri G. D. Bagri	Member
Dr. N. J. Saoji	Member
Dr. V. B. Deshmukh	Member
Dr. B. R. Akre	Member
Smt. R. R. Chandak	Member
Dr. S. G. Charalwar	Ex officio member
Dr. Mrs. M. M. Niyazi	Ex officio member
Smt. S. S. Paldhikar	Ex officio member
Smt. A. P. Khotpal	Ex officio member
Shri V. S. Gaiki	Ex officio member
Smt. S. C. Kedar	Teachers' Representative

Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur, has recently recognized the departments of Physics and Chemistry as 'Place for Higher Learning and Research'.

The college has started following self-financed programs in last five years:

1. Ph.D. in Chemistry and Physics,
2. M.Sc. in Mathematics,
3. M.Sc. in Physics,
4. M.Sc. in Botany,
5. A new combination for B.Sc. as Industrial Chemistry, Chemistry and Botany,
6. 34 'Short Term Certificate' courses,
7. Career Oriented Program entitled on 'Molecular Medicinal Biochemistry'.

The college is closely associated with national institutes, other colleges and industries for research.

The college receives feedback from students, parents, alumni and other stakeholders which helps in improvement of syllabi. Teaching learning process involves continuous evaluation of students on various aspects. These include student-teacher mentorship, sponsoring scholarships and prizes to students as well as promoting active participation of students in research and publication.

All the departments are actively engaged in research. The faculty members of the college have completed sufficient number of major and minor research projects; while few major research projects are on-going. New proposals for research projects have been sent to various funding agencies. More than 95% of the faculty have Ph.D./ M.Phil. degree. The policies adopted for overall improvement are i) e-learning, ii) interdepartmental collaboration, iii) encouragement to interdisciplinary research, iv) students' involvement in research, v) encouragement to the teachers for participating and organizing workshops, seminars, conferences, etc. The other quality sustenance and enhancement measures taken by the institute are formation of QAC, IQAC, women cell, training and placement cell and research committee. The college is a member of 'Cluster of eight Colleges' led by the LAD College, Nagpur.

The college library and the office are digitalized. Faculty and staff members make optimum use of information technology. The college management contributes to the maintenance of infrastructural facilities, construction of new rooms and development of laboratories.

The college has established a 'Training and Placement Cell' to provide placement services. Also, the library provides extensive resources for the students aspiring for jobs in various fields.

Beautification of college premises and extension of Botanical garden has been a regular practice. The departments of Botany, Geology and Zoology maintain an extensive and up to date museum. Regular visits by the members of the management help for better governance and also help to maintain cordial relationship with the staff members.

A 'Grievance and Redressal Cell' is established in the college. The college has also established the 'Legal Aid Club', which is a counselling centre for the students. Our institute has already provided number of reputed lawyers, doctors, academicians, sportspersons, artists, and politicians, etc. to the society since its inception. Under the aegis of NSS and Continuing Adult Education and Extension (CAEE), the college organizes various activities as our social responsibility. The college collaborates with various reputed

national institutes and organizations for research activities to foster global competence among students and faculty members.

The extracurricular and extension activities are taken up to imbibe moral values and ethics among students. Inclusion of ICT in curriculum is a motivating factor that keeps pace with global development and increases competence and confidence of the students. Optimum use of information technology in administration has also helped for transparent governance.

Sincere efforts have been made to comply with the suggestions made by the previous NAAC Peer Team.

“Change is constant”; and the college thrives for achieving excellence in this changing scenario.

### **Staff Profile**

- 25 - Ph.D.
- 02 - M.Phil.
- 01 - M.Sc.
- 09 - NET/SET
- 17 - Ph.D. Supervisors

### **Staff Awards**

- Society has instituted ‘Late T. G. Deshmukh Award for the Best Teacher’

### **Facilities to Students:**

- Students make optimum use of the ICT, which includes facilities like,
  - e-learning
  - INFLIBNET
  - Digitalized library and computer facilities
- Student are supported with Mentoring/Academic schemes

### **Students’ Achievements:**

- Good results at UG and PG level
- Merit positions at UG level
- Students have bagged several Gold, Silver medals and prizes from R. T. M. Nagpur University, Nagpur
- Many students have won Gold, Silver and Bronze medals in sports in the National and State level competitions.

### **Major activities in relation to academics and research:**

The college has close association with national and international associations and organizations like:

- NEERI,

- LIT,
- CIRI,
- IAPT.

**The college offers following courses for the benefit of students:**

- *Two* UGC sponsored Career Oriented Programmes (COPs),
- *Thirty* four ‘Short Term Certificate’ courses.

**Publications and recognitions**

- 02 departments (Chemistry and Physics) are recognized as Place for higher learning and research by R. T. M. Nagpur University, Nagpur.
- 01 Major research project funded by BARC and 02 major research projects funded by UGC are on-going.
- 01 Major research project sanctioned by UGC is completed.
- 17 Minor research project funded by UGC are completed.
- 01 Minor and 01 major research project proposals are submitted to UGC.
- 03 faculty members are awarded Ph.D. degree by R. T. M. Nagpur University, Nagpur.
- 01 faculty member has submitted Ph.D. thesis; while, 01 is pursuing Ph.D. degree.
- 01 student of the college has been awarded Ph.D. degree by R. T. M. Nagpur University, Nagpur.
- 19 students are pursuing Ph.D. under the supervision of the faculty members of the college. Out of these 04 students are working in the college.
- 99 research papers were published in the international journals; while 43 were published in the national journals in the last five years.
- 24 research papers were published in the proceedings of the international conferences; while 51 were published in the proceedings of the national conferences in the last five years.
- Impact factor of the published research papers in various journals range from 0.098 to 5.618.
- Average h-index is 1.69.
- 07 books were published by faculty members of the college.
- Staff members have attended and presented their research papers several times in international conferences organized abroad.
- Staff members have delivered invited talks at International conferences.
- Many staff members have been invited as resource persons at National & State conferences.

**Conferences/ symposia, seminars organized:**

- During the current assessment period,
- 02 international conferences have been organized by the college in collaboration with the other institution;
  - 07 national conferences/seminars, sponsored by UGC, in different subjects have been organized;
  - The faculty members of the college have conducted 04 workshops.

**Infrastructure Facilities:**

- 01 - Girls' Hostel (NOC is yet to be received),
- 01 - Auditorium cum conference room (Capacity 250),
- 09 - Laboratories,
- 01 - Computer laboratory with 20 machines,
- 05 - research laboratories,
- 12 - well-furnished class rooms,
- 03 - Museums,
- 01 - Canteen
- 01 - Audio visual cum meeting hall with ICT Facility
- Well-equipped gymnasium,
- Girls' common room,
- IQAC office,
- NSS office,
- Separate administrative block,
- Training and placement cell office,
- Botanical garden,
- Fully furnished and well equipped library with ICT facility,
- 31534 books in the library,
- Book bank and question bank for the students,
- Subscription to 19 Journals, e-journals through INFLIBNET and other sources available on the internet, 154 educational CDs, 3153 reference books, 12 magazines, 10 manuscripts, etc. for students and faculty members,
- ICT facility in all the departments,
- 60 - Computers,
- 07 - Laptops,
- Wi-Fi facility,
- One broadband connection with speed of 2-10 mbps,
- 06 - LCD projectors,
- 10 - Cameras,
- 01 - Fax machine,
- 02 - Photocopy machines,
- 02 - All in one printers,
- 23 - Printers (Color jet, laser jet and barcode printers),
- 03 - Scanners,

- 03 - Water purifiers,
- Solar water heater and cooker,
- Solar energy powered street lights,
- Energy saving LED lighting,
- 01 - Silent Generator (25kVA),
- 01 - Dug-well,
- Annual Maintenance Contract for the office computers,
- Playground with facilities for various sports,
- Green and clean campus,
- Vehicle parking.

**Some of the salient features of the college are:**

- Increase in the admissions of students at UG, PG and research levels,
- Increase in demand ratio,
- Health services (doctor on call) for staff and students,
- Medical reimbursement for staff,
- The meritorious students are felicitated by giving cash prizes,
- Wall Magazine (*Chhatrasamvaad*),
- Media presentation,
- Skill development programmes namely, Career Oriented Programmes and Short Term Certificate courses ,
- Training and placement cell,
- Good percentage of students' progression,
- College campus under electronic surveillance,
- Performance of the sport persons highlighted through print media,
- First aid medical facility,
- Incentive marks for students participating in NSS, NCC, CAEE and sports.

**Sports and Games facilities available are:**

- Indoor Games - Table tennis, chess, etc.
- Outdoor Games - Volleyball, *kabaddi*, *kho-kho*, football, basketball, badminton, cricket, gymnastics, etc.,
- Well-equipped gymnasium,
- Many students are color holders,
- Large number of students participate in sports and games,
- Incentives in the form of medal, shield, cash prizes and certificates to sport persons,
- Financial support to students,
- Various support facilities offered to physically challenged students.

The college regularly organizes the university level tournaments. All these efforts help the college to find out hidden talents among the students and groom them further.

### **Governance, Leadership and Management:**

The managing committee of NSM and the Local Management Committee (LMC) in coordination with the faculty members strive for smooth and effective functioning of the institution following the constitution of NSM. Some of the strategies and processes adopted for this purpose are as follows:-

- Well-structured internal organization leading to effective decision making process,
- Strategies for overall quality improvement,
- Feedback system adopted for students and other stakeholders,
- Establishment of grievance redressal cell,
- Installation of suggestion box,
- Awarding faculty members to encourage them towards excellence,
- Decentralization of governance through various administrative assistance committees,
- Utilization of the services of alumni for the college by inviting them for delivering guest lectures,
- Organizing computer literacy and acquaintance programmes for the administrative and clerical staff for bringing modernization and smoothness in functioning of the office,
- Establishment of Internal Complaint Committee for the benefit of the faculty members, students and other stakeholders,
- Establishment of Anti-ragging cell,
- Women empowerment and hygiene education through various programmes,
- Publishing the annual magazine 'Prerana',
- Maintenance of eco-friendly campus,
- Driving the students and staff members towards 'Clean Campus Green Campus',
- Extension and outreach programmes with special focus on the under-privileged and the vulnerable sections of the society
- Organization of various camps on a regular basis by the NSS unit,
- Organization of various activities like blood donation, talent search during annual gathering function as well as during activities conducted by the NSS, CAEE units.

**The college is proud to contribute to the core values of the NAAC. The prime contributions are:**

#### **1. Contribution to National Development (National Area)**

- Research projects sanctioned by various funding agencies and publication of research findings in the reputed national and international journals,
- Community services: Clean village (NSS), Social awareness (NSS and CAEE), etc.,

- The college motivates the students to contribute towards cultural and economic development of the society;
- The college takes up the initiative to produce responsible citizens;
- The college promotes organization of various sport events and promotes participation of large numbers of students.
- Staff members of the college have also been recognized by various agencies at national and international levels for their achievements.

## **2. Global competence among students**

- The college makes students aware of future global challenges;
- The college makes sincere efforts in inculcating leadership qualities among the students, which helps them in organizing various events;
- The college regularly organizes international and national conferences, seminars and workshops in various disciplines;
- The college has introduced various short term certificate courses for skill based development of the students.

## **3. Values among students (human value)**

- The college organizes various programmes through the women's cell;
- *Swachata Abhiyan* is regularly organized in association with YIN- Young Inspirators Network- an initiative of daily newspaper 'Sakal';
- Tree plantation,
- Participation in NCC, NSS, CAEE,
- Celebration of Republic, Independence Day and Gandhi Jayanti (International Non Violence Day).

## **4. Promoting use of Technology**

- Optimum use of ICT in teaching learning and evaluation,
- Broadband line/ Wi-Fi Campus available to the students as well as staff members;
- The college, through the website [mohotasci.edu.in](http://mohotasci.edu.in), displays various events and notifications.

## **5. Quest for Excellence**

- Thrust for continuous progress,
- IQAC makes regular efforts towards academic excellence;
- Feedback mechanism for constant improvement,
- Career Oriented Programmes,
- Short Term Certificate courses,
- Promotion of research and establishing Place for Higher Learning and Research.

## **SWOC Analysis of the Institution**

### **Strength:**

- Qualified and competent staff
- Safe and secure environment for co-education
- Supportive management
- Continuously increasing strength of students seeking admission to basic sciences
- Continuously growing research atmosphere with recognition as Place for Higher Learning and Research
- Grooming of sportspersons

### **Weaknesses:**

- Constraints for construction of new classrooms
- Network constraints for alumni association
- Academic dependence on the university
- Less employment opportunities due to lack of courses imparting skill development

### **Opportunities:**

- Centrally located college campus
- Recognized research laboratories of the subjects Chemistry and Physics
- Training and Placement cell
- Employment potential in Butibori Industrial area, Nagpur

### **Challenges:**

- Becoming financially self sufficient
- Growing competition with the cropping up of new colleges
- Making students compatible with the current needs of the industries
- High cost of maintenance for the old infrastructure

### **Future plans:**

- Overall improvement leading towards getting 'A' grade in NAAC accreditation
- Applying for various funding schemes under different policies of the government
- Establishing research centre in Zoology

**Section A: Profile of the Affiliated / Constituent College**

## 1. Name and Address of the College:

Name:	Shri Mathuradas Mohota College of Science	
Address:	Umrer Road, Sakkardara Square, Nagpur	
City: Nagpur	Pin: 440009	State: Maharashtra
Website:	mohotasci.edu.in	

## 2. For Communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr. S. G. Charalwar	O: 0712-2744992 R: 0712-2745984	9823044640	0712-2744992	mohotacollege@yahoo.co.in s.charalwar@yahoo.co.in
Vice-Principals	Dr. I. M. Sarin	O: 0712-2744992	9822229093		<a href="mailto:indersarin@gmail.com">indersarin@gmail.com</a>
	Dr. Mrs. R. S. Saha		9822724232		<a href="mailto:saha.rina.s@gmail.com">saha.rina.s@gmail.com</a>
Steering committee coordinator	Dr. Mrs. R. S. Saha		9822724232		<a href="mailto:saha.rina.s@gmail.com">saha.rina.s@gmail.com</a>

## 3. Status of the Institution:

Affiliated College ✓  
 Constituent College  
 Any other (specify)

## 4. Type of Institution:

a. By Gender  
 i. For Men  
 ii. For Women  
 iii. Co-education ✓

b. By Shift  
 i. Regular ✓  
 ii. Day  
 iii. Evening

## 5. It is a recognized minority institution?

Yes  
 No ✓

If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.

## 6. Sources of funding:

Government: --

Grant-in-aid: Yes  
 Self-financing: Yes  
 Any other: --

7. a. Date of establishment of the college: **17/07/1949**  
 b. University to which the college is affiliated /or which governs the college (If it is a constituent college): **Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur**  
 c. Details of UGC recognition:

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks(If any)
i. 2 (f)	June 1996	Letter Number. F-8-101/93 (CPP-I) dated June 1996 (Refer Annexure II)
ii. 12 (B)	June 1996	Letter Number. F-8-101/93 (CPP-I) dated June 1996 (Refer Annexure II)

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act): **Enclosed** (Refer Annexure II)

- d. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)

Under Section/ clause	Recognition/Approval details Institution/Department Programme	Day, Month and Year (dd-mm-yyyy)	Validity	Remarks
i.	<b>Not applicable</b>			

(Enclose the recognition/approval letter)

8. Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges?

Yes ✓ No

If yes, has the College applied for availing the autonomous status?

Yes No ✓

9. Is the college recognized  
 a. by UGC as a College with Potential for Excellence (CPE)?  
 Yes No ✓  
 b. for its performance by any other governmental agency?  
 Yes No ✓

10. Location of the campus and area in sq.mts:

Location *	Urban
Campus area in sq. mts.	5.79 acres ~ 23431.8 sq. mts.
Built up area in sq. mts.	3998.057 sq.m.

(\* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

11. Facilities available on the campus (Tick the available facility and provide numbers or other details at appropriate places) or in case the institute has an agreement with other agencies in using any of the listed facilities provide information on the facilities covered under the agreement.

- Auditorium/seminar complex with infrastructural facilities: **Yes**
- Sports facilities
  - Playground -- **Yes**
  - Swimming pool – **Not in our campus but there is an understanding of facility with Maharashtra Kamgar Kalyan Kendra, Raghuji Nagar, Nagpur.**
  - Gymnasium – **Yes**
- Hostel
  - Boys' hostel: **No**
  - i. Number of hostels
  - ii. Number of inmates
  - iii. Facilities (mention available facilities)
    - Girls' hostel: **Yes**
    - i. Number of hostels: **01**
    - ii. Number of inmates: **Nil, NOC from UGC yet to be received**
    - iii. Facilities (mention available facilities): **Canteen**
- Working women's hostel: **Nil**
  - i. Number of inmates
  - ii. Facilities (mention available facilities)
- Residential facilities for teaching and non-teaching staff (give numbers available - cadre wise)
 

**There are quarters available for teaching and non-teaching staff in a residential area earmarked by Nagpur Shikshan Mandal, known as Vidyanagari. At present 14 non-teaching staff members are staying in Vidyanagari.**

Cafeteria- **No**

Health centre- **No**

- First aid, Inpatient, Outpatient, Emergency care facility, Ambulance, health center for staff – **First aid is available in the college**

Qualified doctor: **No**      Full Time: **No**      Part Time: **No**

Qualified Nurse: **No**      Full Time: **No**      Part Time: **No**

**But doctor is available on call.**

- Facilities like banking, post office, book shops: **No**
- Transport facilities to cater to the needs of students and staff: **No**
- Animal house: **No**
- Biological waste disposal: **No**
- Generator or other facility for management/regulation of electricity and voltage: **Yes (25 kVA)**
- Solid waste management facility: **No**
- Waste water management: **No**
- Water harvesting: **No**

12. Details of programmes offered by the college (Give data for current academic year)

Sr. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student strength	No. of students admitted
1	Under-Graduate	9	6 semesters	H.S.C.	English	960 (320 each semester)	686 (In all semesters)
2	Post-Graduate	4	4 semesters	B. Sc.	English	176 (22 each semester)	130 (In all semesters)
3	Ph.D.	2 subjects Physics and Chemistry	Min. 18 months	PG + PET/ NET/ SET	English		04
4	Certificate courses	i. Solar Energy ii. Medicinal Molecular Biochemistry	1 year	H.S.C.	English	320	42  26

13. Does the college offer self-financed Programmes?

Yes: ✓      No

If yes, how many? 08

(Computer Science and Industrial Chemistry in B.Sc. And M.Sc.in 4 subjects- Mathematics, Chemistry, Physics and Botany and Ph.D. in Physics, Chemistry)

14. New programmes introduced in the college during the last five years if any?

Yes	✓	No		Number	06
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(01 M.Sc. Programme each in Mathematics, Physics and Botany and 01 at B.Sc. with subjects Industrial Chemistry, Chemistry and Botany, Ph.D. in Physics and Chemistry)

15. List the departments: (respond if applicable only and do not list facilities like Library, Physical Education as departments, unless they are also offering academic degree awarding programmes. Similarly, do not list the departments offering common compulsory subjects for all the programmes like English, regional languages etc.)

Faculty	Departments	UG	PG	Research
Science	1. Physics	✓	✓	Physics Chemistry
	2. Chemistry	✓	✓	
	3. Botany	✓	✓	
	4. Mathematics	✓	✓	
	5. Geology	✓		
	6. Zoology	✓		
	7. Industrial Chemistry	✓		
	8. Computer Science	✓		
	9. Electronics	✓		
	10. Languages	✓		

16. Number of Programmes offered under (Programme means a degree course like BA, BSc, MA, MCom)

- Annual system: Annual up to 2013 and semester thereafter.
- Semester system: **B.Sc. and M.Sc.**
- Trimester system: **Nil**

17. Number of Programmes with

- Choice Based Credit System **04 in M.Sc.**
- Inter/Multidisciplinary Approach **Nil**
- Any other (specify and provide details) **Nil**

18. Does the college offer UG and/or PG programmes in Teacher Education? **No**
- If yes,
- a. Year of Introduction of the programme(s).....(dd/mm/yyyy)  
and number of batches that completed the programme: **Nil**
- b. Is the institution opting for assessment and accreditation of Teacher Education programme separately? Yes            **No ✓**
19. Does the college offer UG or PG programme in Physical Education?  
Yes                            **No ✓**
- If yes,
- a. Year of Introduction of the programme(s)..... (dd/mm/yyyy)  
and number of batches that completed the programme
- b. NCTE recognition details (if applicable)  
Notification No.:.....  
Date: .....(dd/mm/yyyy)  
Validity:.....
- c. Is the institution opting for assessment and accreditation of Physical Education Programme separately?  
Yes                            **No ✓**

## 20. Number of teaching and non-teaching positions in the Institution

Positions	Teaching faculty						Non-teaching staff		Technical staff	
	Professor		Associate Professor		Assistant Professor		*M	*F	*M	*F
	*M	*F	*M	*F	*M	*F				
Sanctioned by the UGC / University / State Government	01		39 posts, not on basis of gender. First appointment as Assistant Professor				55 posts, not on the basis of gender		No provision for technical staff	
<i>Recruited</i>	01		16 (M)	01 (F)	06 (M)	04 (F)	44 (M)	09 (F)		
<i>Yet to recruit</i>	00		It is on the basis of promotion		11 posts to be filled in, not on basis of gender.		02 posts to be filled in, not on basis of gender.			
Sanctioned by the Management/ society or other authorized bodies					10					
					10					

\*M-Male \*F-Female

## 21. Qualifications of the teaching staff:

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent teachers							
D.Sc./ D.Litt.	-	-	-	-	-	-	-
Ph.D.	-	-	15	01	06	03	25
M.Phil.	-	-	01	-	01	-	02
PG	-	-	-	-	-	01	01
Temporary teachers							
Ph.D.	-	-	-	-	01	01	02
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	05	20	26
Part-time teachers							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-

22. Number of Visiting Faculty /Guest Faculty engaged with the College.  
**Nil**
23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	Year 1 2011-12		Year 2 2012-13		Year 3 2013-14		Year 4 2014-15	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	37	60	34	62	34	70	28	60
ST	15	05	21	13	16	09	17	15
OBC	141	175	125	230	138	279	151	337
General	42	48	41	80	41	94	46	104
Others	28	65	19	47	25	59	34	47

24. Details on students enrollment in the college during the current academic year:

Type of students	UG	PG	M.Phil.	Ph.D.	Total
Students from the same state where the college is located	674	130	-	-	804
Students from other states of India	12	00	-	-	12
NRI students	-	-	-	-	-
Foreign students	-	-	-	-	-
Total	686	130	-	-	816

25. Dropout rate in UG and PG (average of the last two batches)  
UG **0.15%** PG **1%**
26. Unit Cost of Education  
(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)  
(a) including the salary component **Rs. 82,462/-**  
(b) excluding the salary component **Rs. 733/-**
27. Does the college offer any programme/s in distance education mode (DEP)? Yes No ✓

If yes,

- a) is it a registered centre for offering distance education programmes of another University

Yes

No

- b) Name of the University which has granted such registration.

- c) Number of programmes offered

- d) Programmes carry the recognition of the Distance Education Council. Yes No

28. Provide Teacher-student ratio for each of the programme/course offered:

1: 15

29. Is the college applying for Accreditation:

Cycle 1      Cycle 2      Cycle 3 ✓      Cycle 4

Re-Assessment:

*(Cycle 1 refers to first accreditation and Cycle 2, Cycle 3 and Cycle 4 refers to re- accreditation)*

30. Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only)

Cycle 1: **01 October 2002**

Accreditation Outcome/Result: Grade **B<sup>+</sup>** Institutional score: **75.25**

Cycle2: **08 January 2011**

Accreditation Outcome/Result: Grade **B**: CGPA **2.74**

Cycle 3: **Applied**

Accreditation Outcome/Result:

**\* Kindly enclose copy of accreditation certificate(s) and peer team report(s) as an annexure.**

31. Number of working days during the last academic year: **228**

32. Number of teaching days during the last academic year: **181**

*(Teaching days means days on which lectures were engaged excluding the examination days)*

33. Date of establishment of Internal Quality Assurance Cell (IQAC) IQAC **01.11.2005**

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC
- AQAR (i) 22. 09.2012
  - AQAR (ii) 20. 09.2013
  - AQAR (iii) 16.12.2014
  - AQAR (iv) 06. 08. 2015
35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information): **Nil**

## Section –B: Criteria-wise Analytical Report

### CRITERION I: CURRICULAR ASPECTS

#### 1.1 Curriculum Planning and Implementation.

##### 1.1.1 State the vision, mission and objectives of the institution, and describe how these are communicated to the students, teachers, staff and other stakeholders.

###### **Vision:**

- To convert ‘a person into personality’.
- To create human resources through quality, progressive and affordable education.

###### **Mission:**

- To provide students with an environment for all round development of their intellectual, physical, aesthetic and social potentials.
- To discover and develop the academic and intellectual skills of the students.
- To encourage attitudes of integrity, hard work, honesty, fairness and tolerance in students so that they give their best to the society based on human values.
- To inculcate passion for excellence through information and communication technology, industrial exposures and scientific projects leading to elevated career profiles and national development.
- To stimulate the students to perform at the peak of their potentials.

###### **Objectives:**

The college aims at developing the students into disciplined, self-motivated, independent, creative and innovative persons to overcome the problems of poverty, unemployment, inequality, illiteracy, superstition and religious obscurantism and to become an active partner in the nation building process.

###### **Communication of Vision, Mission and Objectives:**

Vision, Mission and objectives of the institution are communicated to students, teachers, staff and other stakeholders through prospectus, handbook, college magazine ‘*Prerana*’, Principal’s address, meetings with students and parents, display board in the corridor and girls’ common room, library and the college website.

##### 1.1.2 How does the institution develop and deploy action plans for effective implementation of the curriculum? Give details of the process and substantiate through specific example(s).

College frames its own academic calendar in accordance with that of the university for effective implementation of curriculum. It is a routine practice to hold a meeting of college council in the beginning

of academic session to discuss the action plan. The positive suggestions given by faculty members are noted and discussed in view of their merits and demerits and the appropriate inputs are included in action plan for effective implementation of curriculum.

Curriculum/syllabi of all the **Short term Certificate** courses are designed by the respective coordinators of the college.

IQAC plays a significant role in design, development and deployment of action plan. It coordinates and monitors the academic activities throughout the year.

- The heads of all the departments conduct their departmental meeting for distribution of curriculum/ syllabi/ workload among the staff members and to discuss various activities to be conducted during the session.
- The Principal and Vice-Principals conduct meeting with all heads and approve the academic activities to be conducted during the session.
- Time table committee frames the time table and allots the periods as per workload prescribed by the university.
- Each faculty maintains academic diary and attendance of students. Monthly plan of syllabi is displayed on the departmental notice board.
- Continuous evaluation is carried out through unit tests, home assignments, homework, etc.
- Study material and question banks are provided.
- College faculty members actively participate in the syllabus restructuring workshops, seminars and conferences.
- Feedback mechanism helps for effective implementation of the curriculum.

**1.1.3 What type of support (procedural and practical) do the teachers receive? (from the University and/or institution) for effectively translating the curriculum and improving teaching practices?**

- Principal encourages the faculty members to attend the seminar, workshop based on implementation of curriculum organized by other colleges/ the university.
- College organizes workshop for effectively translating/ implementing of the curriculum.
- College provides teaching aids, well equipped laboratories, charts, text and reference books, periodicals, magazines, journals, class rooms, internet, ICT facilities, library facility etc.
- Department of Geology, Botany, and Zoology are enriched with collection of various specimens.
- The college arranges industrial visits, computer awareness programs, guest lectures and study tours to research laboratories, mines, fields etc.
- Faculty members are encouraged to attend the orientation, refresher courses and Faculty Improvement Program.

**1.1.4 Specify the initiatives taken up or contribution made by the institution for effective curriculum delivery and transaction on the Curriculum provided by the affiliating University or other statutory agency.**

- Faculty members are involved in effective delivery and transaction on the curriculum provided by the affiliating University.
- The department wise curriculum plan is prepared for Annual/Semester pattern of examinations.
- Seminars, group discussions, guest lectures and quiz competitions are organized. ICT based modern teaching aids along with conventional chalk and talk method are used for teaching and learning.
- The teachers take the review of the curriculum to be taught and prepare the teaching plan for theory and practical.
- Faculty members participate in the orientation programs, refresher courses, workshops, seminars and conferences, both in India and abroad.
- Library is enriched with reference books, text books, and internet facility is also available.
- Field excursions are organized to provide practical experience.
- The remedial classes are arranged for the SC/ST students, while special attention is given to the meritorious students.
- Inter-collegiate seminar, workshop and quiz Competition on syllabi are organized.

**1.1.5 How does the institution network and interact with beneficiaries such as industry, research bodies and the university in effective operationalisation of the curriculum?**

The faculty members have interactions with the beneficiaries on the occasion of field visits to the industries, research laboratories and universities.

Many faculty members are recognized as research guides of Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.

The curriculum of 'Short Term Certificate' courses is designed in coordination with industrialists and research bodies.

The college invites experts, industry personnel and university professors as resource persons which helps effective operationalisation of the curriculum.

The college has associations with

- 1. International Institutes** Nil.
- 2. National Institutes/Research Laboratories**  
National Environmental Engineering Research Institute/  
(NEERI), Nagpur.
- 3. Universities**

- i. Department of Physics, Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur.
  - ii. Nagpur University Mathematics Teachers Association, Nagpur (NUMTA).
  - iii. Laxminarayan Institute of Technology (LIT), Nagpur.
- 4. Affiliated Colleges -**
- i. Shri Shivaji Science College, Congress Nagar, Nagpur.
  - ii. Cluster of Colleges like LAD College, Nagpur, G. S. College of Commerce, Nagpur.
- 5. Industries - Nil.**

**1.1.6 What are the contributions of the institution and / or its staff members to the development of the curriculum by the University? (Number of staff members / departments represented on the Board of Studies, student feedback, teacher feedback, stakeholder feedback provided, specific suggestions etc.**

The following faculty members represent/represented the Board of Studies/Academic Council and different bodies of the university.

Sr. No.	Name of Board	Name of Faculty	Name of University	Chairman/Member
1	Physics	Dr. S. G. Charalwar Principal	RTM Nagpur University, Nagpur	Member of Senate (2010-15)
				Member of special task committee Physics (2015-2016)
				Member of Students' welfare committee
2	Geology	Shri R. P. Deshpande	RTM Nagpur University, Nagpur	Member BoS (2010-2015),
				Member of 32(5) committee (2010-2015)
3	Botany	Dr. A. A. Fulzele	RTM Nagpur University, Nagpur	Member of BoS (2010-2015)
				Faculty Member (2010-2015)) Member special task committee for Botany (2015-2016)
4	Geology	Dr. S. P. Joshi	RTM Nagpur University, Nagpur	Coopted Member for revision of syllabus in BoS (Geology)
5	Geology	Dr. M. B. Bhagat	RTM Nagpur University, Nagpur	Coopted Member for revision of syllabus in BoS (Geology) Member of special task committee (2015-16)
6	Electronics	Dr. N. D. Meshram	RTM Nagpur University, Nagpur	Member of special task committee (2015-16)

The problems and queries of the students related with the curriculum are communicated to the university through the faculty members involved in the development of curriculum.

The college organizes workshops for providing the platform for discussion and restructuring the syllabus.

**1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the purview of the affiliating university) by it? If yes, give details on the process (“Needs Assessment”, design, development and planning) and the courses for which the curriculum has been developed.**

Nil.

**1.1.8 How does institution analyze/ensure that the stated objectives of curriculum are achieved in the course of implementation?**

The college has a mechanism to ensure that the objectives of curriculum are achieved through the critical analysis of the following methods:

- Students’ performance is analyzed through internal assessment, result analysis, project work, presentations, seminars, workshops and skill based programs.
- Training programs are organized. Faculty members participate in national and international workshops, seminars, conferences, discussions through which quality enhancement of faculty is achieved. Faculty members acquire professional qualifications pertaining to the areas of specialization. They publish research papers/articles in reputed journals.

Programs regarding the Health and Hygiene, Computer Awareness, Human Rights, Environmental Issues, Women Empowerment are organized.

College runs innovative courses/short term certificate courses to accomplish the objectives.

**1.2 Academic Flexibility**

**1.2.1 Specifying the goals and objectives give details of the certificate/ diploma/ skill development courses etc., offered by the institution.**

- College offers certificate/diploma course in Solar Energy, and Medicinal Molecular Biochemistry.
- **Self-Financed Courses**  
The objectives of these courses are:
  - To provide additional knowledge to the students along with regular curriculum.
  - To improve technical skills, and
  - To make students economically independent.

**1.2.2 Does the institution offer programmes that facilitate twinning / dual degree? If “Yes”, give details.**

The college does not have programs of twinning/dual degree.

**1.2.3 Give details on the various institutional provisions with reference to academic flexibility and how it has been helpful to students in terms of skills development, academic mobility, progression to higher studies and improved potential for employability.**

The college runs M.Sc. courses in Physics, Chemistry, Mathematics and Botany. The CBCS pattern for M.Sc. has been implemented by RTM Nagpur University, Nagpur from 2015-16 session.

Range of Core / Elective options offered by the University and those opted by the college are given below.

Sr. No.	Courses	Core / Group Options
1	B.Sc.	1. English (Compulsory) <i>For B.Sc. Semester-I &amp; II only</i>
		2. Marathi / Hindi / Supplementary English
		(Any one Subject) <i>For B.Sc. Semester-I &amp; II only</i>
3	Career Oriented Programme	3. Combination (Any one) Physics, Chemistry, Mathematics (PCM) Physics, Electronics, Mathematics (PEM) Physics, Computer Science, Mathematics (PCSM) Chemistry, Industrial Chemistry, Mathematics (CICM) Chemistry, Botany, Zoology (CBZ) Chemistry, Zoology, Geology (CZG) Chemistry, Botany, Geology (CBG) Physics, Chemistry, Geology (PCG) Chemistry, Geology, Mathematics (CGM) Chemistry, Industrial Chemistry, Botany (CBIC)
		1) Chemistry 2) Mathematics 3) Physics 4) Botany
		For M.Sc. in Zoology recognition from University is awaited.
		1) Solar energy 2) Molecular Medicinal Biochemistry
		1) Chemistry 2) Physics

**Choice Based Credit System and range of subject options:** No provision of Choice Based Credit System, as per the university

norms at UG level. However, the university has already introduced CBCS based semester pattern for university examinations at PG level from 2015-16 session.

**Courses offered in modular form:** No provision, as per university norms.

**Credit transfer and accumulation facility:** No provision, as per the university norms.

**Lateral and vertical mobility within and across programmes and courses:** As per the university norms.

**Enrichment courses:** College offers short term courses to enrich the existing courses. These Add-on courses are certificate courses.

**1.2.4 Does the institution offer self-financed programs? If yes, list them and indicate how they differ from other programs, with reference to admission, curriculum, fee structure, teacher qualification, salary etc.**

Yes, the institution offers self-financed programs listed below:

- 1) B.Sc. in Computer Science and Industrial Chemistry.
- 2) M.Sc. in following subjects:  
(i) Chemistry (ii) Mathematics (iii) Physics (iv) Botany

The Management appoints teachers for these courses on Ad-hoc / Clock hour basis (CHB).

**1.2.5 Does the college provide additional skill oriented programs, relevant to regional and global employment markets? If yes, provide details of such program and the beneficiaries.**

Yes, the college offers additional skill oriented programs relevant to regional and global employment markets as given below.

Sr. No.	Name of the subject	Name of course	Name of the Coordinator	Fee Rs.
1	Physics	Instrumentation for BSc students	Dr. M. S. Atone	200/-
2		Noise pollution and its control	Dr. J. N. Ramteke	200/-
3		Environment and Ecology	Dr. V. V. Soman	200/-
4		Bird watching and Jungle Safari	Dr. D. V. Nandanwar	200/-
5		Legal awareness	Dr. S. G. Goswami	200/-
1	Electronics	Circuit design , printing and implementation	Dr. N. D. Meshram	200/-

2		Measuring instruments, testing, fault finding and repairs	Dr. N. D. Meshram	200/-
1	Botany	Mushroom cultivation	Dr. A. A. Fulzele	200/-
2		Cyber crimes	Dr. Mrs. A. M. Sawane	200/-
3		Aerobiology and its importance in Human health	Dr. S. K. Giri	200/-
4		Natural resources and their conservation	Dr. S. K. Giri	200/-
5		Basics of computer applications	Ms. S. D. Khalatkar	200/-
6		Handwriting and calligraphy	Ms. S. D. Khalatkar	200/-
7		Career Oriented Programme	Conducted by all teaching staff	1500/-
1	Chemistry	Workshop on processed fruit products	Dr. I. M. Sarin	200/-
2		Water Analysis	Dr. S. S. Sakhare	200/-
3		Soil testing	Dr. Mrs. R. R. Gupta	200/-
4		Chemistry in Pharmacy	Dr. C. B. Talwatkar	200/-
5		Benefit to students	Dr. C. B. Talwatkar	200/-
6		Water recycle	Dr. C. B. Talwatkar	200/-
7		Medicinal Chemistry	Dr. M. G. Dhonde	200/-
1	Zoology	Sericulture	Dr. Mrs. U. R. Sonparote	200/-
2		Integrated Post Management(IPM)	Dr. P. U. Gajbe	200/-
3		Introduction to Womens' reproductive health and hygiene	Dr. Mrs. R. S. Saha	200/-
4		Ornithology	Dr. Mrs. R. S. Saha	200/-
5		Commercial Fisheries	Dr. N. V. Palande	200/-
1	Geology	Groundwater prospecting	Dr. M. B. Bhagat	200/-
2		Fundamentals and applications of Remote sensing and GIS	Dr. S. P. Joshi	200/-
3		Art of breathing	Shri R. P. Deshpande	200/-

1	Mathematics	Guitar playing	Dr. A. S. Muktibodh	200/-
2		Personality Development	Shri S. T. Rathod	200/-
1	English	Vocabulary Building	Dr. J. A. Janbandhu	200/-
2		Effective Communication	Dr. J. A. Janbandhu	200/-
1	Library	Information Management	Dr. E. B. Raut	200/-
2		Human resource Management	Dr. E. B. Raut	200/-

All the above courses are designed to develop special skills among the students so as to make them employable.

Some students who secured job in different companies on the basis of their expertise in respective courses are the beneficiaries. The students acquire necessary skills in view of their own enterprise.

**1.2.6 Does the University provide for the flexibility of combining the conventional face-to-face and Distance Mode of Education for students to choose the courses/combination of their choice? If yes, how does the institution take advantage of such provision for the benefit of students?**

No. The college has submitted the proposals to IGNOU (Indira Gandhi National Open University) and YCMOU (Yeshwantrao Chavan Maharashtra Open University) for obtaining study centers so as to offer the facility of distance mode of education.

**1.3 Curriculum Enrichment**

**1.3.1 Describe the efforts made by the institution to supplement the University's Curriculum to ensure that the academic programs and Institution's goals and objectives are integrated?**

The curriculum designed by the university is common for all the colleges affiliated to the university.

The college offers different courses like, fisheries, groundwater prospecting etc. and these courses are termed as 'Short term Certificate' course as they are need-based.

Cultural and co-curricular activities such as debate, elocution, essay writing, rangoli competition, science exhibition, talent search are conducted.

The students are motivated to participate in activities like personality development, communication skills, computer skills, birth and death anniversary celebrations of social reformers, guest lectures, community development, extension activities, 'Earn while Learn' scheme and campus cleanliness drive etc.

NCC imparts training with the motto of 'Unity and Discipline' and residential NSS camp of one week is organized every year to

inculcate the importance of the dictum 'Work is Worship'.

Continuing Adult Education & Extension (CAEE) unit of the college every year conducts 'Cleanliness Program' to mark 'Rakshabandhan' at *Panchvati* Old Age Home to create social awareness among the students.

The students are encouraged to appear for competitive examinations.

The College arranges educational tours, industrial visits, visit to mines, and the students have the opportunity to understand the academic culture in different renowned institutions by way of participating in students exchange programs (Cluster of Colleges).

The students are encouraged to participate in national programs such as AIDS-awareness, blood donation, monetary funding and charitable services at the time of natural calamities.

**1.3.1 What are the efforts made by the institution to modify, enrich and organize the curriculum to explicitly reflect the experiences of the students and cater to needs of the dynamic employment market?**

The College runs different short term courses to make the students competent in view of the dynamic employment market.

The college enriches the curricular activities such as field work and field visits.

Language department conducts workshop on communication skills which helps the students to acquire fluency and flair in English.

Participation of the students in project work, group discussion and seminars help them to enhance their capabilities in terms of career building.

Suggestions received are regularly communicated to the university through the members of Board of studies of the concerned subjects with a view to modify and enrich the curriculum.

**1.3.2 Enumerate the efforts made by the institution to integrate the cross cutting issues such as Gender, Climate Change, Environmental Education, Human Rights, ICT etc., into the curriculum?**

The college puts in sincere efforts to integrate the cross cutting issues such as

**Gender:**

- The college has girls-boys ratio of approximately 60:40 which reflects the fact that both the genders feel secure in this college. The college conducts workshop/ seminar/ guest lectures for attaining the goal of women empowerment.
- The college constituted Internal Complaint Committee (Women Cell) to safeguard the women employee and students in accordance with Sexual Harassment and Prevention Act 2013.
- The college constituted Anti-ragging Committee to address the

grievances /complaints of students.

- The college has its location in the heart of city which is very convenient for the students in general and girls in particular.

**Climate Change and Environmental Education:**

- The college gives emphasis on *Green Campus, Clean Campus*.
- The students organize plays in villages (during NSS camp) to create awareness in terms of de-addiction, cleanliness, water conservation, eradication of illiteracy, health and hygiene etc.
- Environmental Studies is a compulsory subject for the students of B. Sc. II (Semester III and IV) to integrate with environmental education.
- Departments of Zoology and Botany organize programs on biodiversity, environment protection, flora and fauna preservation, protection of endangered species etc.
- The College organizes guest lectures of eminent scientists/researchers to enlighten the students on the issue of Climate Change/Environmental Education.
- Continuing Adult Education & Extension unit of the college regularly conducts 'Cleanliness Program' at Panchvati Old Age Home every year to create social awareness among the students.

**Human Rights:**

- NCC and NSS unit organize Human Rights Day every year and organize awareness program on Disaster Management Training.
- The college organizes 'Gandhi Jayanti' on 2<sup>nd</sup> October every year to spread message of nonviolence.

**ICT:**

- Teachers are encouraged to make optimal use of information technology as regards the teaching and learning process.

**1.3.3 What are the various value-added courses / enrichment programs offered to ensure holistic development of students?**

- Moral and ethical Values
- Employable and Life Skills
- Better Career Options
- Community Orientation
- The students are motivated on the occasion of birth and death anniversaries of great Indian leaders and social reformers with view to highlight their contributions to the society and nation building.
- The College endeavors to inculcate moral and ethical values in the youngsters by celebrating Independence Day, Republic day, Teachers' day, National Science Day, Women's Day, World Environment day, World Population Day, No- Addiction talk, Dr. Babasaheb Ambedkar Jayanti etc.
- The college aims at making the students confident in terms of acquiring life sustaining skills and professional skills which help

them to be employable and self-reliant. For achieving this goal, due importance is given to following activities/programs:

- (1) Short Term Certificate courses
  - (2) Field visits/ Industrial visits
  - (3) Spoken English Classes
  - (4) Personality Development and Soft Skills
  - (5) Group Discussions
  - (6) Interview facing techniques
  - (7) Life sustaining skills.
- Students' Council, Science Association and Training and Placement cell organize various curricular, co-curricular and extra-curricular activities which help the youngsters to chisel new dimensions in their personalities.
  - Students participate in district level workshop/seminar on 'Soft Skill & Personality Development.'
  - Department of Computer Science imparts training to the students so as to help them understand the technicalities of MS Office, internet surfing, browsing etc.
  - Career Guidance Cell and Training and Placement cell renders necessary guidance to the students for higher education, placements, coaching for competitive examinations and organization of campus interview.
  - NSS and NCC Unit of the college organize myriad activities of social significance such as Blood donation camp, NSS Camp, Rally on the occasion of ozone day, fund collection for the relief of victims in calamities, disaster management training, tree plantation, water-shed management program, eco-friendly activities, cleanliness drive and students' participation in different NCC camps.

#### **1.3.4 Citing a few examples enumerate on the extent of use of the feedback from stakeholders in enriching the curriculum?**

The college solicits the feedback from different stakeholders through suggestion / idea box and feedback cell. The College received good suggestions from the stakeholders to enrich and update the curriculum, some of them are:

1. To start employment based skill oriented courses,
    - 1 Computer Literacy Program for non-teaching staff.
    - 2 To develop communication skill among students.
- The College implemented the suggestions given by the stakeholders:
- The College started skill oriented courses as mentioned in 1.2.1 as per needs other students & for job orientation particularly in industry.
  - Computer literacy training program is arranged by the computer department.
  - Department of English conducts the classes to enhance the communicative skills of the students.

**1.3.5. How does the institution monitor and evaluate the quality of its enrichment programmes?**

- Management of the college, Principal, Vice-Principal, IQAC coordinator, Heads of all the departments and the conveners of different committees monitor and evaluate the quality of enrichment programs.
- The annual report of the college is discussed in college council and Local Management Council (LMC) with a view to determine the output of enrichment programs.
- The level of the students and their understanding is monitored through internal examinations, seminars, placement interviews, etc.

**1.4 Feedback System**

**1.4.1 What are the contributions of the institution in the design and development of the curriculum prepared by the University?**

- Since some of the faculty members are the member of BoS of the university and syllabus designing committees, they contribute in designing and development of curriculum.
- The suggestions from other stakeholders are communicated to members of BoS for corrective measures.
- The curriculum of Short Term Certificate courses in the college is designed and developed by the faculty members in view of the social needs and job potentiality.

**1.4.2 Is there a formal mechanism to obtain feedback from students and stakeholders on Curriculum? If yes, how is it communicated to the University and made use internally for curriculum enrichment and introducing changes / new programmes?**

Yes. There is formal mechanism. The college has designed the questionnaire for obtaining feedback on curriculum from different sources.

- Students: Through feedback form

The Principal and senior staff members have interactions with the students regarding the content of curriculum which is communicated to the university through the members of BoS. Faculty members participate in the workshop on curriculum and communicate the requisite changes to the concerned authorities.

**1.4.3 How many new programmes/courses were introduced by the institution during the last four years? What was the rationale for introducing new courses/programmes?**

The College introduced following new programmes:

- U.G. Programmes : Chemistry, Industrial Chemistry, Botany
- P.G. Programmes (M.Sc.): Physics, Mathematics, Botany
- Ph.D. Programmes: Chemistry, Physics  
(M.Sc. in Botany started from 2015-16 session and M.Sc. in Zoology is in process.)

**Rationale for introducing new courses/programmes:**

As the percentage of graduating students is more and the numbers of seats available in the colleges are limited, there is a demand from stakeholders to start above mentioned courses. P.G. and Ph.D. programs are started to meet the demands for enhancement of higher education and research with a view to establish centers for research and higher learning.

**Any other relevant information regarding curricular aspects which the college would like to include:**

The students in the college have the privilege of following facilities which add feather in the glory of their academic achievements.

- Recognized Place for Higher Learning and Research,
- Well-equipped laboratories and marvelous collection of books in library,
- Audio Visual Hall,
- Hostel facility for girls,
- Highly competent faculty,
- Teacher Mentor Scheme,
- Visits to industries for training and placement,
- In order to create a healthy competition amongst the students the college has initiated number of awards for students. The awards also motivate the students to excel amongst all and give their best. The awards instituted by the college are as under-
- **“Late Kumari Mandakini Bhurley Prize”** and **“Sushila Naidu Memorial Prize”** for obtaining highest number of marks at the B.Sc. Final Examination.
- **“Late S. S. Purohit Memorial Prize”** and **“Professor S. S. Khot Memorial Prize”** for obtaining highest number of marks in Geology at the B.Sc. Final Examination.
- **“Shri P. W. Mokashi and Late V. L. Mutatkar Prize”** for obtaining highest number of marks in Mathematics at the B.Sc. Final Examination.
- **“Shri S. L. Shinde Memorial Prize”** and **“Late Principal M. J. Pahade Memorial Prize”** for obtaining highest number of marks in Botany at the B.Sc. Final Examination.
- **“Murkute Memorial Prize”** and **“Wamanrao and Umabai Vaidya Memorial Prize”** for obtaining highest number of marks in Chemistry at the B.Sc. Final Examination.
- **“Chitale Memorial Prize”** for obtaining highest number of marks in Chemistry at the B.Sc. Final Examination.
- **“Bapurao Maharaj Khatkhedkar Memorial Prize”** for obtaining highest number of marks in Physics at the B.Sc. Final Examination.
- **“Late Smt. Umabai Nilkanth Deshpande Memorial Prize/ scholarship”** for poor and needy student of Non-teaching

- employee admitted in Junior/Senior college.
- **“Late Kashibai Murhar memorial Prize”** for obtaining highest number of marks in Zoology at the B.Sc. Final Examination.
  - **“Late Vijendra Vinayak Pande Memorial Scholarship/Freeship”** to the ward of non-teaching employee admitted in Junior/Senior college.
  - **“Late Shrimati Indumati Naidu Memorial Prize”** for obtaining highest number of marks in Electronics.
  - **“Late Smt. P. S. Jodh Memorial Prize”** for obtaining highest number of marks in B.Sc. for girl students.
  - **“Late Smt. P. S. Jodh memorial Prize”** for obtaining highest number of marks in M.Sc. II (Topper student).

## **CRITERION II: TEACHING-LEARNING AND EVALUATION**

### **2.1 Student Enrollment and Profile**

#### **2.1.1 How does the college ensure publicity and transparency in the admission process?**

The College ensures publicity of the admission process as follows:

- **Prospectus:** Every year, the college publishes the updated prospectus, stating the rules, regulations and norms for admission, courses/programmes available, fee structure, details of freeships, scholarships and prizes.
- **College Notice Board:** Courses offered, admission process and documents required for admission are displayed on the College Notice Board.
- **Print Media:** Admission for various courses is timely advertised in local newspapers.
- **College Website:** Details regarding courses, faculty and admission process are given on the College website mohotasci.edu.in.

**Transparency in the admission process** is ensured by inviting applications through prospectus and thoroughly scrutinizing them. The College teachers help the students regarding any queries on filling up the application form. Any mistakes or discrepancies in the application forms are communicated to the applicants by the College office. On-spot admissions are given to the meritorious students.

#### **2.1.2 Explain in detail the criteria adopted and process of admission (Ex. (i) merit (ii) common admission test conducted by state agencies and national agencies (iii) combination of merit and entrance test or merit, entrance test and interview (iv) any other) to various programmes of the Institution.**

The criteria adopted for admission process are as follows:

##### **Undergraduate Courses**

Admission process for B.Sc. (Part-I) begins immediately following the declaration of State Board Examination result. Admission procedure is displayed on the College Notice Board and the sale of prospectus and application forms begins. The teaching staff guides the students in selecting suitable courses keeping in view their interest in specific subjects. Students are admitted to specific courses on the basis of academic performance, after ensuring personal interaction with students and their parents. Admission forms received from the students are scrutinized with reference to subject combinations and reservation norms. Admission is finalized after the

verification of documents and payment of the requisite fees. A list of the admitted students is displayed on the College Notice board.

The College gets students from different backgrounds and parts of Nagpur district. The criteria adopted for admitting students in the College are as per the guidelines laid by RTM Nagpur University, Nagpur.

### Postgraduate Courses

The concerned department carries out the admission process as per the merit of students with regard to the University norms and regulations and reservation policy of the Government.

### Career Oriented Certificate Courses

Students who are admitted to undergraduate courses are also eligible to seek admission to relevant career oriented certificate courses.

**2.1.3 Give the minimum and maximum percentage of marks for admission at entry level for each of the programmes offered by the college and provide a comparison with other colleges of the affiliating university within the city/district.**

Course	2014-15		2013-14		2012-13		2011-12		2010-11	
	Min %	Max %	Min %	Max %	Min %	Max %	Min %	Max %	Min %	Max %
<b>(UG) B.Sc. I</b>										
PCM	44	75	41	88	37	78	40	82	41	81
PEM	44	67	42	63	41	75	42	66	39	85
CBZ	38	66	38	72	36	75	39	74	38	71
PCG	47	81	41	71	40	69	41	67	40	68
MCG	46	74	40	71	45	63	43	71	43	71
CBG	40	69	41	68	41	61	38	74	38	74
CZG	43	71	42	61	42	67	38	65	38	70
<b>B.Sc. I</b> Computer Science	42	69	43	72	41	70	41	68	40	73
<b>B.Sc. I</b> Industrial Chemistry	47	65	41	62	NA	NA	44	70	59	59
<b>(PG) M.Sc. I</b>										
Chemistry	41	92	NA	NA	46	70	NA	NA	41	61
Physics	46	63	45	57	45	54	NA	NA		
Mathematics	47	65	48	69	46	69	45	68		

- When compared to other colleges of the affiliating university, more or less the same trend is observed in other colleges as well.

**2.1.4 Is there a mechanism in the institution to review the admission process and student profiles annually? If 'yes,' what is the outcome of such an effort and how has it contributed to the improvement of the process?**

Yes, there is a mechanism in the institution to review the admission process and student profile annually.

- At the beginning of the academic session, the principal has a meeting with the admission committee for inviting suggestions to improve the admission process.
- After the admission process is over, a report is prepared providing details of the total number of students admitted to specific courses, ratio of boys and girls, percentage of students from different categories (reserved category, differently abled, etc.).
- Teacher Mentor Scheme has been introduced for helping the students. Every teacher is allotted a batch of students to mentor and guide.

The outcome of this mechanism is as follows:

- Increase in the cut-off percentage for admission.
- Improvement in examination results.

**2.1.5 Reflecting on the strategies adopted to increase/improve access for following categories of students, enumerate on how the admission policy of the institution and its student profiles demonstrate/reflect the National commitment to diversity and inclusion**

- \* SC/ST
- \* OBC
- \* Women
- \* Differently abled
- \* Economically weaker sections
- \* Minority community
- \* Any other
- The College is committed to spread education among all sections of the society including SC, ST, OBC, Women, Minority community, physically handicapped, etc. The College strictly follows the Government norms regarding reservations in College admission process. The following table shows the percentage of SC/ST/OBC/Women/Minority/PH students admitted during the last five years:

Category	2014-15		2013-14		2012-13		2011-12		2010-11	
	Admitted	%	Admitted	%	Admitted	%	Admitted	%	Admitted	%
<b>SC</b>	88	10.5	104	13.6	96	14	97	16	92	18
<b>ST</b>	32	4	25	3.3	34	5	20	3	21	4
<b>OBC</b>	488	58	417	54.5	355	53	316	51	246	48
<b>Women</b>	563	67	511	67	431	64	353	57	294	56
<b>Minorities (Muslims/ Christian/ Sikhs)</b>	NA	NA	2	0.3	NA	NA	29	5	9	1.7
<b>Physically Handicapped</b>	1	0.12	NA	NA	NA	NA	NA	NA	3	0.6

NA- Not admitted

- Students coming from the economically weaker sections of the society are advised to apply for scholarships.
- Book Bank Scheme has been launched by the College to provide books free of cost to the students coming from economically weaker families.

**2.1.6 Provide the following details for various programmes offered by the institution during the last four years and comment on the trends. i.e., reasons for increase / decrease and actions initiated for improvement.**

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Category	2014-15			2013-14			2012-13			2011-12			2010-11		
	Number of applications	Number of students admitted	Demand ratio	Number of applications	Number of students admitted	Demand ratio	Number of applications	Number of students admitted	Demand ratio	Number of applications	Number of students admitted	Demand ratio	Number of applications	Number of students admitted	Demand ratio
(UG)															
<b>B.Sc. I</b>	390	310	1.3:1	385	307	1.3:1	332	293	1.2:1	360	318	1.1:1	315	285	1.1:1
<b>B.Sc. I Comp. Sci.</b>	36	34	1:1	45	42	1:1	45	43	1:1	-	-	-	-	-	-
<b>B.Sc. I Industrial Chemistry</b>	26	23	1:1	25	23	1:1	-	-	-	-	-	-	-	-	-
(PG)															
<b>M.Sc. I</b>															
Chemistry	26	22	1:1	18	14	1:1	17	15	1:1	15	13	1:1			
Physics	46	21	2:1	44	22	2:1	12	06	2:1		NA			NA	
Mathematics	48	22	2:1	50	22	2:1	43	20	2:1		NA			NA	
(Career Oriented Certificate Courses funded by UGC)															
(i) Solar Energy	131	131	1:1	Nil	Nil		15	15	1:1	11	11	1:1	61	61	1:1
(ii) Molecular Medicinal Biochemistry		35		12	12	1:1		NA			NA			NA	

NA: Not applicable

- There is a constant average demand ratio for all programmes offered by the College.
- Some programmes/subject combinations have a higher demand ratio as they provide better prospects to the students.

## 2.2 Catering to Student Diversity

### 2.2.1 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?

- Every year very few differently-abled students take admissions in our college. The college pertinently adheres to government norms regarding the differently-abled students and their requirements.
- The college provides infrastructural facilities like ramps, wheelchair, etc. to such students, for visually challenged students, the college library has a collection of educational audio CDs.

- In addition to students of our college, few students from other colleges appear for University and other examinations at our centre. The college makes appropriate arrangements for such students including vehicular access, which is possible up to the college office and the ground floor classrooms.
- The teaching and nonteaching staff, including the security personnel, supports such students in every possible way. These students are given special counseling to strengthen them psychologically.

**2.2.2 Does the institution assess the students' needs in terms of knowledge and skills before the commencement of the programme? If 'yes', give details on the process.**

Yes.

- The college takes care of students' needs right from the admission process itself. The information about the courses offered by the college and concerned faculty members is provided in the prospectus.
- Along with the degree courses, every student is encouraged to opt for short-term courses (two courses per student) conducted by our teaching staff with help from expert guest faculties. These courses help the students to get acquainted with different skills in addition to the regular courses.
- The information collected from the students in the application form during the admission process, helps the college to understand educational, social, financial background of every student.
- In the beginning of the academic year, the principal along with the senior faculty members interact with the students admitted to the college. The college uses this interaction meet to make students well aware of the functioning of the college, facilities like library and laboratories available to the students, co-curricular activities supported by the college including sports and other activities like NCC, NSS and Continuing Adult Education and Extension. The students are asked for the co-curricular activities they wish to participate in. Accordingly, the staff of our college nurtures them further.
- The students are encouraged to participate in various activities with the help of concerned faculty members to promote skills of the students. To impart knowledge, the students are advised to follow conceptual learning. They are advised to bridge theoretical and practical knowledge.

**2.2.3 What are the strategies adopted by the institution to bridge the knowledge gap of the enrolled students (Bridge/Remedial/ Add-on/Enrichment Courses, etc.) to enable them to cope with the programme of their choice?**

- In the beginning of every academic year students are informed about the curriculum, internal as well as university pattern of examinations and evaluation. The discussions regarding the subject help the teachers to evaluate basic understanding of students about the subject. After this assessment, students are advised and counseled depending on their needs.
- In the beginning teachers informally conduct introductory interactive sessions so that students can recollect the subject knowledge and can relate to the additional information in their syllabus. Further special efforts are made by the faculty members to bridge the gap between advanced and slow learners by giving additional attention to the slow-learners. The emphasis is given on conceptual teaching-learning process after assessing the abilities and limitations of the students.
- The Department of Library Science along with different departmental libraries provides books, journals, newspapers and internet to the enrolled students, including slow-learners, so that they become aware about information about the programme of their choice as well as other future prospects. Remedial coaching is provided to those in need so that they can keep pace with others.
- The college provides two short term courses per student in the first year of their graduation. The students choose courses of their choice. These courses help in the overall development of the students both academically and socially.
- College conducts various competitions such as essay, quiz, debate, elocution, slogan and other competitions for the overall development of the students.

**2.2.4 How does the college sensitize its staff and students on issues such as gender, inclusion, environment etc.?**

**Gender equality and inclusion:**

- The College firmly believes in gender equality.
- This is evident from the male: female ratio (Approximately 40:60) of the students. Various programs such as essay writing, skits, debates, poster competitions are often held in different forums such as the Women's cell and NSS.
- Women's cell, cell against sexual harassment and all other faculty members sensitize the students about the discrimination that is observed in the outside world and are advised not to discriminate based on gender, cast, creed, etc.

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- Various programs were organized on these issues as follows:

<b>Sr. No.</b>	<b>Event</b>	<b>Name of Speaker</b>	<b>Designation and Institute</b>	<b>Title of the lecture</b>	<b>Date</b>
1.	International women's day celebration and felicitation of girl students excelling in sports	Mrs. Chhaya Sawarkar	Social Worker	Belief and misbelief	10/03/2015
2.	<i>Jagar Janivancha Abhiyan</i>	Dr. Asha Bhate	Principal, Dharampeth Science College, Nagpur	"How Woman is made different from Man"	21/12/2013
3.	<i>Jagar Janivancha Abhiyan</i>	-	-	Open Forum Discussion	28/12/2012
4.	Guest lecture for <i>Jagar Janivancha Abhiyan</i>	Ms. Rupali Bawankar	Police sub-inspector, Sakkardara, Police station, Nagpur	The security of women in the society	21/12/2012
5.	Participation of students in <i>Jagar Janivancha Abhiyan</i>	-	-	Suggestion on women security in society were invited from students	21/12/2012
6.	Inaugural lecture for women's cell	Dr. Mrs. Alka Chaturvedi	Professor and Head, P. G. T. D. Botany, RTMNU, Nagpur	Important roles played by women in today's India	22/09/2011
7.	Participation of girl students and Dr. A. M. Sawane in conference	-	-	National Conference on Career prospects for women empowerment organized at Dr. Ambedkar College, Nagpur	16 - 17/09/2011

**Environment awareness:**

- Students are encouraged for participating in various environment

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related workshops, poster competitions, plantation programs, awareness about use of biodegradable substances etc. through various guest lectures.

- Environmental awareness is being instilled through educational tours. NSS Unit of the college organizes “Save Environment Tour” every year.
- Continuing Adult Education and Extension (CAEE) unit organizes Cleanliness drive every year at *Panchavati* Old Age Home.
- “Environment Friendly and Clean Campus” drive was conducted in collaboration with daily newspaper ‘Sakal’.
- Following events have been conducted on such issues:

<b>Sr. No.</b>	<b>Event</b>	<b>Organizing department</b>	<b>Name of Speaker</b>	<b>Designation and Institute</b>	<b>Title of the lecture</b>	<b>Date</b>
1.	Guest lecture	Botany	Mr. Kaustav Chatterjee	Green Vigil Foundation	Environmental threats at global and local level	15/09/2015
2.	Guest lecture	Chemistry	Mr. Vinod D. Deotale	Scientist, Institute of Pesticide Formulation Technology, Gurgaon, Haryana	Waste recycling and its management	09/04/2015
3.	Guest lecture	Chemistry	Dr. Sunil H. Ganatra	Associate Prof., Institute of Science, Nagpur	Environmental science and its importance	20/09/2014
4.	Guest lecture	Botany	Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Conservation of orchids	22/08/2014
5.	Poster Exhibition	CAEE unit and Electronics	-	-	World Population Day	11/07/2014
6.	Workshop	Zoology (Conducted at Kuhi Mandhad District	Dr. R. S. Saha	Assistant Professor, Department of Zoology, S. M. M.	Rural development and awareness workshop on Biology of	20/02/2014

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		Nagpur)		College of Science, Nagpur	<i>Parthenium</i> weed, threat and damage	
7.	Workshop	Zoology (Conducted at Saundarh District Bhandara)	Dr. R. S. Saha	Assistant Professor, Department of Zoology, S. M. M. College of Science, Nagpur	<i>Gazar Gawat Jan Jagruti Abhiyan</i>	29/01/2014
8.	Essay Competition	Library Science	-	-	To save environment: my view and my contribution	07/10/2013
9.	Poster Exhibition	Zoology	-	-	Conservation of biodiversity	04/09/2013
10.	Guest lecture	Zoology	Dr. S. B. Zade	Professor, P. G. T. Department of Zoology, RTMNU, Nagpur	Conservation of biodiversity	04/09/2013
11.	Poster Exhibition	Zoology	-	-	Conservation of environment	27/09/2012
12.	Poster Exhibition	Zoology	-	-	Conservation of biodiversity	14/09/2011
13.	Guest lecture	Botany	Dr. (Mrs.) S. A. Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Hazardous biopollutants	13/09/2012
14.	Poster Exhibition	Zoology	-	-	Natural ecosystems	17/08/2010
15.	Guest lecture	Botany and Women's cell	Dr. Aarti Saoji	Ex-Director, Institute of Science, Nagpur	Global warming and sustainable development	13/08/2010

**2.2.5 How does the institution identify and respond to special educational/learning needs of advanced learners?**

- The students are assessed for their abilities and special needs through various examinations conducted by the college and the University. Students are assessed throughout the programmes on their

performance in theory as well as practical classes, various competitions like debate, posters, etc. These assessments help the college to identify advanced learners.

- The top performers are awarded and felicitated by giving scholarships of Rs. 900/- every year.
- The top performers amongst the college students are awarded. Various prizes have been constituted and the meritorious recipients of these awards are as follows:

Sr. No.	Name of the student	Prize
<b>2014-15</b>		
1.	Shri Bramahcharan R. Mishra	Highest Marks in the college in B.Sc. R.T.M. Nagpur University, Nagpur (Late Mandakini Bhurley Prize and Late Smt. Sushila Naidu Memorial Prize)
		Highest Marks in Chemistry (Murkute Memorial Prize and Late Wamanrao and Umabai Vaidya Memorial Prize)
		Highest marks in Chemistry Topper boy (Late Smt. Dr. A. S. Jodh Memorial Prize)
		Highest Marks in Botany (Late S. L. Shinde Memorial Prize and Late Principal M. J. Pahade Memorial Prize)
		Highest Marks in Zoology (Late Kashibai Murhar Memorial Prize)
2.	Ms. Ashwini Burile	Highest Marks in Mathematics (Shri P. W. Mokashi and Late V. L. Mutatkar Memorial Prize)
		Highest Marks in Electronics (Late Indumati Ramanujam Naidu Memorial Prize)
3.	Ku. Anjali R. Michael	Highest Marks in Geology (Late S. S. Purohit Memorial Prize and Shri S. S. Khot Memorial Prize)
		Second Highest Marks in Chemistry (Late R. P. Chitale Memorial Prize)
		Highest marks in Chemistry topper girl (Late Smt. Dr. A. S. Jodh Memorial Prize)
4.	Ms. Harsha J. Bhojar	Highest Marks in Physics (Bapurao Khatkhedkar Maharaj Memorial Prize)
<b>2013-14</b>		
1.	Ms. Payal Bhatt	Highest Marks in the college in B.Sc. R.T.M. Nagpur University, Nagpur (Late Mandakini Bhurley Prize and Late Smt. Sushila Naidu Memorial Prize)
		Highest Marks in Mathematics (Shri P. W. Mokashi and

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		Late V. L. Mutatkar Memorial Prize)
		Highest Marks in Chemistry (Murkute Memorial Prize and Late Wamanrao and Umabai Vaidya Memorial Prize)
		Highest Marks in Physics (Bapurao Khatkhedkar Maharaj Memorial Prize)
2.	Ms. Payal Dongre	Second Highest Marks in Chemistry (Late R. P. Chitale Memorial Prize)
3.	Shri Pravin Nagdive	Highest Marks in Botany (Late S. L. Shinde Memorial Prize and Late Principal M. J. Pahade Memorial Prize)
		Highest Marks in Zoology (Late Kashibai Murhar Memorial Prize)
4.	Ms. Neha Kale	Highest Marks in Geology (Late S. S. Purohit Memorial Prize and Shri S. S. Khot Memorial Prize)
5.	Ms. Ravina Paunikar	Highest Marks in Electronics (Late Indumati Ramanujam Naidu Memorial Prize)
<b>2012-13</b>		
1.	Sajiya Ansari	Highest Marks in the college in B.Sc. R.T.M. Nagpur University, Nagpur (Late Mandakini Bhurley Prize and Late Smt. Sushila Naidu Memorial Prize)
		Highest Marks in Chemistry (Murkute Memorial Prize and Late Wamanrao and Umabai Vaidya Memorial Prize)
2.	Jyoti Sharma	Second Highest Marks in Chemistry Late R.P. Chitale Memorial Prize)
3.	Prachi Padole	Highest Marks in Mathematics (Shri P. W. Mokashi And Late V. L. Mutatkar Memorial Prize)
4.	Jyoti Sharma	Highest Marks in Physics (Bapurao Khatkhedkar Maharaj Memorial Prize)
5.	Payal Shewatkar	Highest Marks in Botany (Late S. L. Shinde Memorial Prize and Late Principal M. J. Pahade Memorial Prize)
6.	Naushi Sheikh	Highest Marks in Zoology (Late Kashibai Murhar Memorial Prize)
7.	Shraddha Deshpande	Highest Marks in Geology (Late S. S. Purohit Memorial Prize and Shri S. S. Khot Memorial Prize)
8.	Rajat Chikankar	Highest Marks in Electronics (Late Indumati Ramanujam Naidu Memorial Prize)
<b>2011-12</b>		
1.	Ms. Kalyani P. Nikure	Highest Marks in the college in B.Sc. R.T.M. Nagpur University, Nagpur (Late Mandakini Bhurley Prize and Late Smt. Sushila Naidu Memorial Prize)

		Highest Marks in Mathematics (Shri P. W. Mokashi and Late V. L. Mutatkar Memorial Prize)
		Highest Marks in Physics (Bapurao Khatkhedkar Maharaj Memorial Prize)
2.	Ms. Sapna D. Barde	Highest Marks in Botany (Late S. L. Shinde Memorial Prize and Late Principal M. J. Pahade Memorial Prize)
		Highest Marks in Zoology (Late Kashibai Murhar Memorial Prize)
		Highest Marks in Chemistry (Murkute Memorial Prize and Late Wamanrao and Umabai Vaidya Memorial Prize)
3.	Shri Ganesh R. Surkar	Second Highest Marks in Chemistry (Late R. P. Chitale Memorial Prize)
4.	Ms. Bharti R. Ghodmare	Highest Marks in Geology (Late S. S. Purohit Memorial Prize and Shri S. S. Khot Memorial Prize)
<b>2010-11</b>		
1.	Shri Roshan Supare	Highest Marks in the college in B.Sc. R.T.M. Nagpur University, Nagpur (Late Mandakini Bhurley Prize and Late Smt. Sushila Naidu Memorial Prize)
		Highest Marks in Chemistry (Murkute Memorial Prize and Late Wamanrao and Umabai Vaidya Memorial Prize)
		Highest Marks in Physics (Bapurao Khatkhedkar Maharaj Memorial Prize)
2.	Shri Deepak Supare	Second Highest Marks in Chemistry (Late R. P. Chitale Memorial Prize)
3.	Ku. Shubhangi Sorte	Highest Marks in Mathematics (Shri P. W. Mokashi And Late V. L. Mutatkar Memorial Prize)
4.	Shri Mohammad A. Karim	Highest Marks in Botany (Late S. L. Shinde Memorial Prize and Late Principal M. J. Pahade Memorial Prize)
		Highest Marks in Zoology (Late Kashibai Murhar Memorial Prize)
5.	Shri Samir Dhumal	Highest Marks in Geology (Late S. S. Purohit Memorial Prize and Shri S. S. Khot Memorial Prize)
6.	Shri Akash Dube	Highest Marks in Electronics (Late Indumati Ramanujam Naidu Memorial Prize)

**2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the programme duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically**

**challenged, slow learners, economically weaker sections etc. who may discontinue their studies if some sort of support is not provided)?**

- The faculty members critically analyze the performance of the students. Attendance proves to be one of the criteria for such assessment. Low attendance could suggest the potential risk of dropping out. Such students are identified and more attention is given to their needs.
- Student-Mentor scheme plays a major role in such issues. Students discuss their problems and reasons of dropping out. Such discussions mostly give positive outcomes.
- Teachers help economically weaker students by paying their fees. The college provides such students with facility of paying the fees in installments.
- Slow learners are given special attention through remedial coaching.

### **2.3 Teaching-Learning Process**

#### **2.3.1 How does the college plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan, evaluation blue print, etc.)**

The college plans and organizes the teaching, learning and evaluation schedule in the following manner-

- The Academic calendar is prepared in the beginning of session which contains dates of unit tests, academic activities to be conducted during the session. Academic calendar is displayed on the notice board and also distributed to the teachers.
- The heads of all the departments allot workload, distribute topics of syllabi, time-table and discuss about the co-curricular activities to be undertaken by the department.
- Every staff member maintains the record of assignment submitted by the students, marks of unit test, analysis of university result and other academic activities.
- Unit wise tests are conducted by each faculty member.
- Evaluation of the performance of the students is monitored through surprise tests, unit tests and terminal/test examination.
- The question papers of the examinations are prepared as per the university pattern.
- Results are displayed on notice board.
- Results are discussed in the class to clarify doubts or difficulties of students.
- The suggestions to the teachers are given by the principal to improve the result, if necessary.

- The teachers advise the students to adopt appropriate methodology of writing answers and solve their difficulties.
- The faculty members, students' council and various administrative assistance committees conduct various activities included in the academic calendar which are monitored by the principal, heads of all the departments and IQAC.
- The various teaching methods adopted are: interactive method, project based learning, computer assisted learning, experimental learning, home assignment, question bank, virtual instrumentation, seminar, quiz, paper presentation at the conference, use of modern teaching aids like ICT, LCD, etc.
- Students are motivated to use e-learning.
- Teachers are involved in university theory, practical and all other processes of University examination.

**2.3.2 How does IQAC contribute to improve the teaching –learning process?**

- IQAC encourages the use of ICT for teaching.
- The teachers are encouraged to adopt the new trends through refresher courses, orientation courses, conferences, workshops, etc.
- Computers, internet facilities are made available to teachers.
- Takes review of academic activities of each department and suggest measures if required.
- The teachers are encouraged to participate in faculty improvement programs.
- IQAC renders assistance to all the departments for organizing workshop/seminars/guest lectures, which helps them to interact with the eminent researchers and resource persons.
- IQAC monitors the progress of teaching, learning and evaluation. It takes review of various academic activities taken up by each department and suggests appropriate measures.

**2.3.3 How is learning made more student-centric? Give details on the support structures and systems available for teachers to develop skills like interactive learning, collaborative learning and independent learning among the students?**

- Teachers always try their level best to make teaching learning process more student-centric.
- Invited talks of different eminent personalities are arranged.
- Staff incorporates the use of LCD projectors in addition to the conventional teaching aids to make teaching learning process more

effective.

- A good number of books are made available to students in the departmental library.
- Short term courses are conducted by each teacher to acquaint the students with various related fields.
- Visual aids such as charts, models are used.
- Most of the departments are equipped with Laptops, computers and LCD projectors.
- By way of giving personal attention to every student and making available educational websites and software for experimenting with mathematical ideas, appropriate groups of students are formed under student-mentor scheme as small study circles for interaction with the teachers and amongst themselves.
- Students are encouraged to participate in seminars/workshop/poster competition, projects, field tours and excursion to research institutes and industrial training centers. Students from UG/PG level are encouraged to present papers in conferences/seminars.
- Eminent personalities from different walks of life are invited to deliver lectures on a variety of career options and competitive examinations.
- Extension and outreach activities in rural areas are organized by some departments to acquaint students with social, environmental, educational and health related issues.
- Students have the privilege to publish their articles, poems and other creative writings in college magazine '*Prerana*' and wall magazine '*Chhatrasamvaad*'.

**Support structures and systems:**

- Audio Visual with ICT facility
- Well equipped laboratories, central library with marvelous collection of books, and departmental library.
- Laptops, Computers in most of the departments.

**2.3.4 How does the institution nurture critical thinking, creativity and scientific temper among the students to transform them into life-long learners and innovators?**

- Students are encouraged to take part in various activities such as seminars, workshops, poster competitions, excursion, etc.
- Students are taken on field visits to places like Sericulture Centre, Fisheries College and Industries. Botanical excursions are a regular feature of Department of Botany and help the students to understand the intricate balance of environment. Every year, the Geology students are taken to various areas of geological interest, coal and metal mines,

government research laboratories to expose them to various aspects of Geology, and especially research methodology.

- Department has arranged various guest lectures on the recent topics.
- By organizing competitions at departmental level, college level and inter-collegiate level.
- By encouraging participation of students in various inter-collegiate competitions
- Eminent academicians and scientists are regularly invited to the department for interacting and motivating the students.
- College aims at nurturing critical thinking, creativity and scientific temper of the students. In view of this, the college organized University level research festival, AVISHKAR consecutively in 2012-13 and 2014-15 and also proposed in 2015-16, in which the students from different colleges and our college presented scientific models, charts, posters, etc.
- Class room lectures are made interactive by encouraging the students to ask questions related to the topics. Teachers also pose questions to find out whether the students have understood the topic well.
- The departments are equipped with models, charts and educational CDs. Teachers prepare and provide study material to the students.
- Scientific Projects, rangoli, art, flower decoration are organized to explore the hidden talents of students during *College Day*. Guest lectures are organized by various Scientific Societies of the College.
- Some departments encourage project at the undergraduate level while it is an integral part of curriculum for PG students.
- Students are encouraged to participate in seminars and group presentations on current topics held at intra-collegiate, inter-collegiate and state level.

**2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching? Eg: Virtual laboratories, e-learning - resources from National Programme on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.**

- Faculty members often use PowerPoint Presentations, Online Educational Resources for teaching
- Educational CDs are available in Library for reference
- The college makes extensive use of modern technologies to make teaching learning more effective.
- All departments have facilities of computers with internet and Wi-Fi connectivity so as to enable student to prepare their projects, presentations etc.

**Facilities:**

- OHP, Multimedia, Educational CDs related to the topic of the syllabus are used.
- The students access the various academic web sites (open educational resources) and visit research institutes and industries.
- Watching TV Programs on national Geographic channel, Animal planet and Discovery channel during leisure help them to crystallize ideas and enrich knowledge.

**2.3.6 How are the students and faculty exposed to advanced level of knowledge and skills (blended learning, expert lectures, seminars, workshops etc.)?**

- College organizes State, National, International seminars, conferences and workshops in collaboration with other organizations.
- Faculty members attend orientation, refresher courses, seminars and workshops to keep abreast with the recent and advanced knowledge.
- A study leave is made available to the teachers for higher studies and research under the Faculty Improvement/Development Programme.
- By organizing competitions at departmental level, college level and inter-collegiate level.
- Eminent academicians and scientists from the related fields are regularly invited to the College for interacting and motivating with the students.
- Faculty members regularly attend seminars, workshops, trainings, refresher courses, etc. at other colleges and universities.
- Also seminars, workshops and conferences are organized at the college level for gaining academic benefits and acquaint students and teacher with the recent developments/trends in various subjects.

**List of Programmes organized:**

Sr. No.	Department	Nature of Event	Date	Number of Participants
1.	Mathematics	UGC Sponsored National Seminar on 'Group Theory and Applications' GAT-15	14/03/2015	80
2.	Botany	1. UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences	14/03/2015	148

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		2. Intercollegiate student seminar competition in collaboration with ISCA, Nagpur chapter	26/02/2013	15
		3. UGC Funded Workshop on Techniques in Taxonomy: Classical to Molecular Approach	30-31/03/2012	40
		4. UGC Sponsored National Seminar Bio-Geo Sciences	14/10/2010	154
3.	Geology	UGC Sponsored National Seminar Bio-Geo Sciences	14/10/2010	154
4.	Library	National Seminar	14/03/2015	67
5.	Chemistry	National Seminar	14/03/2015	81
6.	Electronics and Physics	1. Short term basic course on Nanoscience and Nanotechnology for students	01-03/02/2012	150
		2. Workshop on Instrumentation-Students' Symposium.	27-28/01/2012	150
7.	Electronics	1. One day Students Symposium on "Emerging Trends and Applications of Electronics 2015" (ETAE-15)	03/03/2015	100
		2. One day Students Symposium on "Interactions In Fundamental Electronics 2014" (IFE-14)	22/02/2014	100
8.	Zoology	1. Rural development and awareness workshop on Biology of <i>Parthenium</i> weed, threat and damage	20/02/2014 at Kuhu Mandhad District Nagpur	70

		2. <i>Gazar Gawat Jan Jagruti Abhiyan</i>	29/01/2014 at Saundarh District Bhandara	40
9.	Physics	1. International Symposium on Ultrasonics	22-24/01/2015	180
		2. Environment and Human rights	20/01/2011	200
10.	College	Avishkar- University Research Festival	2015-16	64
			2014-15	71
			2012-13	100
11.	College	UGC sponsored Seminar on 'Examination reforms'	03/03/2012	125

**2.3.7 Detail (process and the number of students \benefitted) on the academic, personal and psycho-social support and guidance services (professional counseling/mentoring/academic advise) provided to students?**

**Academic, Personal and Psycho-social support and Mentoring:**

- A teacher-mentor looks after a group of students as a part of the teacher-mentor scheme. They regularly interact with the students.
- Proper guidance and support is given to the students so as to help them to overcome their personal issues.
- Extension activities through NSS and Continuing Adult Education and Extension (CAEE) Unit help them in grooming leadership qualities, team work, self-esteem, ethics, shouldering responsibility, etc.

**Professional Counseling**

- It is imparted through Career guidance cell.
- Students are also encouraged to participate in seminars/ quiz/ workshops.

**2.3.8 Provide details of innovative teaching approaches/methods adopted by the faculty during the last four years? What are the efforts made by the institution to encourage the faculty to adopt new and innovative approaches and the impact of such innovative practices on student learning?**

The faculty members have adopted various innovative teaching approaches / methods.

- Although the main emphasis is through 'chalk and talk' method, smart board teaching and use of IT is extensive. Use of mathematical software and websites creates conducive atmosphere for quick learning and assimilation.

- Faculty conducts Short Term Courses.
- Guest lectures on innovative topics and Exposure to field work through Botanical Excursion, field visits, industrial visits, visits to mines and government laboratories and social commitment through extension activities.
- Library is well-equipped with latest text books and reference books.
- Educational CDs are available.
- Library has internet facility and computers are available for use.
- Research journals, periodicals and newspapers are subscribed.
- Experimental models/charts are used to explain the basic concepts to the students.
- Use of ICT, e-learning, power point presentation in teaching and learning is made.

**Impact:**

- Students participated/ in workshops/conferences/ seminar/quiz etc.
- Students secured merit positions, bagged awards/prizes in university examination. Following are the students who were awarded by the RTM Nagpur University for their academic excellence:
  - Ms. Anjali Michael secured Gold medal in Geology in BSc.III R. T. M. Nagpur University, Nagpur examination 2015.
  - Ms. Payal Bhatt secured 4<sup>th</sup> Merit in R. T. M. Nagpur University, Nagpur examination 2014 and also awarded Best Student of the year 2014.
  - Ms. Prachi Padole bagged prizes in the R. T. M. Nagpur University, Nagpur examination for scoring the highest marks in Mathematics.

**2.3.9 How are library resources used to augment the teaching-learning process?**

- Library is well-equipped with up to date text books and reference books.
- Educational CDs are available.
- Library has internet facility and computers are available for use.
- Library has subscribed to various research journals, periodicals, newspapers.
- Every department has a small Library of its own.
- Staff and students avail the facility of library maintained by every department.

**2.3.10 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If 'yes',**

**elaborate on the challenges encountered and the institutional approaches to overcome these.**

- A semester pattern was introduced by RTM Nagpur University, Nagpur in 2013. Since it is a transition from annual to semester pattern, teachers encounter the difficulties to complete the curriculum within the planned time frame and calendar. However the curriculum is completed by taking extra classes even on holidays.
- Teachers also conduct unit tests, assignments and seminars for internal assessment. The college takes due care to follow academic calendar.
- The Principal and Heads of departments ensure the completion of syllabi and other academic commitments.

### **2.3.11 How does the institute monitor and evaluate the quality of teaching learning?**

- A suggestion box is placed in the office to get feedback which helps to monitor and evaluate quality of teaching-learning.
- The laboratories are under electronic surveillance system for smooth and flawless working. The principal monitors the functioning of the College through this system.
- Teachers' evaluation is done through self appraisal (PBAS). Department wise result is analyzed and discussed in the meetings of college council and LMC for corrective measures, if any.

## **2.4 Teacher Quality**

### **2.4.1 Provide the following details and elaborate on the strategies adopted by the college in planning and management (recruitment and retention) of its human resource (qualified and competent teachers) to meet the changing requirements of the curriculum**

- The faculty members are recruited by the duly constituted selection committee. There is standard and specific selection procedure laid down as per University Grants Commission, State Government and University guidelines for the selection of qualified and competent teachers.
- These guidelines are strictly followed while making appointments.
- The college has competent and qualified faculty members in all the Departments to handle all the courses. Some posts are lying vacant; however, the process is on to fill.
- The teachers are selected on the basis of their merit and qualification. The CHB faculty is appointed by the head of the institution taking into consideration their merit and teaching experience.

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- The institution adheres to the set standards of national educational policies in Higher Education. The policy of recruitment is transparent. Management follows the procedure of recruitment as per Govt. and University norms.
- The staff members are motivated to do the research work by undertaking Major and Minor research projects for which laboratories and infrastructure are made available as per their requirement.
- Best teacher award is given to motivate the faculty members for better performance in their academic activities; teachers are felicitated for their achievements in their academic fields.
- To meet the changing environment and curriculum, the college appoints contributory/ CHB teachers as well as invites visiting/ guest faculty as per the requirement.

Highest qualifications	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
<b>Permanent Teachers</b>							
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	-	-	15	01	06	03	25
M.Phil.	-	-	01	-	01	-	02
NET/SET	-	-	-	-	-	01	01
PG	-	-	-	-	-	-	-
<b>Temporary teachers</b>							
Ph.D.	-	-	-	-	-	01	02
M.Phil.	-	-	-	-	-	-	-
NET/SET	-	-	-	-	-	-	-
PG	-	-	-	-	-	20	26
<b>Part Time teachers</b>							
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-

For Aided courses 28 permanent staff out of which

Number of staff required	36
Number of staff appointed	28
Doctorate	26
M.Phil.	02
NET/ SET	09

### **Faculty retention**

- Training opportunities are provided so that all employees have a fundamental understanding of the purpose and benefit of maintaining a work culture.
- The Institution fosters a culture where all employees are equally valued for their contribution to students' progress.
- Democratic functioning, caring, better service conditions and good infrastructural resources for the teaching and learning, easy access to head of the institution etc. create a sense of belonging in the employees.
- College develops and implements a plan to retain and recruit a highly engaged and diverse workforce. To meet the changing requirements of the curriculum, the college encourages its teachers to enroll for various faculty development programmes.
- The registration fees, T.A. etc. are borne by the college for enrollment to such programmes. Similarly the salary given to the temporary and part-time faculties is as per the University norms and thereby retention of faculties is possible.
- College supports the departments, and office with information for planning and decision-making in regards to workforce development.

#### **2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programmes/ modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by the institution in this direction and the outcome during the last three years.**

- To meet the growing demand to teach new programmes, every year advertisements are published in newspapers and candidates are selected on merit basis.
- The institution being situated in prominent area and known for its high standards, Here the problem of scarcity of qualified faculty rarely arises.
- Many a times, senior and well-qualified retired teachers are invited as guest faculties.
- The College organizes guest lectures by the experts from premier institutions to deal with advances in the field. The competent faculties from other departments of the College are also involved in teaching the new programs.
- CHB and Fixed pay appointments in the department of Computer Science, Physics and Chemistry are done as per the requirements of the

subject. List of guest lecturers arranged in various departments is as following, from 2010-2014.

- The college has appointed total 03 teachers (1 UG + 2 PG) on fixed pay basis, 15 CHB for UG, 3 CHB for PG in the department of Chemistry; while 01 teacher on ad-hoc basis, 12 CHB (8 + 4) in Physics; 3 CHB in Electronics; 6 CHB in Mathematics and 01 teacher Ad-hoc and 2 CHB are appointed in the department of Computer Science.
- The outcome of this exercise is satisfactory. All these courses are running successfully.

Following lectures have been organized by the college to cope with the growing demand of teaching modern topics:

### **Physics**

<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>
Dr. Prashant Gandhi	Professor, Ramdeobaba College of Engineering, Nagpur	Careers in Physics	13/09/2013
Dr. Dilip Peshwe	VNIT, Nagpur	Basics of Nanotechnology	01/02/2012
Dr. S. B. Kondawar	P. G. T. D. RTM Nagpur University, Nagpur	Basics of Nanoscience	02/02/2012
Dr. K. G. Rewatkar	Dr. Ambedkar College, Nagpur	Application of nanotechnology	03/02/2012
Dr. K. Ghormare	Chairman, Board of Studies, RTM Nagpur University, Nagpur	Fascination in Physics	29/08/2012

### **Chemistry**

<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>
Mr. Vinod D. Deotale	Scientist, Institute of Pesticide Formulation Technology, Gurgaon, Haryana	Waste Recycling and its Management	09/04/2015
Dr. C. S. Bhaskar	Assistant Professor and HOD, Taywade College,	Synthesis and importance of Medicinal drugs	07/04/2015

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	Koradi	from natural source like plant	
Dr. M. G. Bhotmange	Professor and Head, Department of Food Technology, LIT, Nagpur	Food Preservative and its Consequences	25/04/2015
Dr. R. U. Khope	Associate Professor, Shivaji Science College, Nagpur	Quantum Mechanics	23-24/03/2015
Dr. W. B. Gurnule	Associate Professor, Kamla Nehru Mavidyalya, Nagpur	Coordination Chemistry	23-24/03/2015
Dr. Santosh D. Deosarkar	Assistant Professor, S. R. T. M. University, Nanded	Quantum Mechanics	26/09/2014
Dr. Sunil H. Ganatra	Associate Prof., Institute of Science, Nagpur	Environmental Science and its importance	20/09/2014
Dr. Hemant Pande	Head, Hislop College, Nagpur	Chemo-secrets of Advertisement	20/09/2014

**Botany**

<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>
Mr. Kaustav Chatterjee	Green Vigil Foundation	Environmental Threats at Global and Local Level	15/09/2015
Dr. Satish Wate	Director, CSIR-NEERI	Biogeochemical Processes In The Near Subsurface	14/03/2015
Dr. Keshav Kranthi	Director, CICR, Nagpur	New Advances in Plant Sciences	14/03/2015
Dr. Hemant Purohit	Principal Scientist and Head, Environmental Genomics Division, CSIR-NEERI	Genomic tools: Sequencing to Barcoding	14/03/2015
Dr. Surekha Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Chitale Herbarium Technique	14/03/2015
Dr. P. S. Jakhi	Associate	Chitale Herbarium	14/03/2015

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	Professor, Department of Botany, Institute of Science, Nagpur	Technique	
Dr. Sushma U. Borkar	Associate Professor, Department of Botany, Institute of Science, Nagpur	Judge for Poster Session in UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences	14/03/2015
Dr. S. B. Nandeshwar	Senior Scientist and Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur	Judge for Poster Session in UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences	14/03/2015
Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, R. T. M. Nagpur University, Nagpur	Conservation of Orchids	22/08/2014
Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Judge for Poster Competition organized for B. Sc. Semester I students	22/08/2014
Dr. S. B. Nandeshwar	Senior Scientist and Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur	<i>Agrobacterium</i> - mediated Gene Transfer in Plants	30/08/2013
Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Inter-collegiate Seminar Competition in collaboration with ISCA	26/02/2013
Dr. (Mrs.) S. A. Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Hazardous Biopollutants	13/09/2012
Dr. Mrs. Alka Chaturvedi	Professor and Head, PG Department of Botany, RTM Nagpur University, Nagpur	Recent developments in plant taxonomy	31/03/2012

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Dr. K. J. Cherian	Head, Dept. of Botany, Hislop College, Nagpur	Isolation of Cyanobacteria	31/03/2012
Dr. T. Shrinivasu	Associate Professor, PGTD Botany Department, RTMNU, Nagpur	Electronic Herbarium	31/03/2012
Dr. N. M. Dongarwar	Associate Professor, PGTD Botany Department, RTMNU, Nagpur	Phytochemical Analysis	31/03/2012
Dr. D. K. Kapgate	Head, Dept. of Botany, J. M. Patel College, Bhandara	Paleobotany and Taxonomy	31/03/2012
Dr. R. Badere	Assistant Professor, Dept. of Botany, Hislop College, Nagpur	DNA Finger printing	31/03/2012
Mrs. V. A. Fulzele	Shivaji Science College, Nagpur	Computational Biology and Bioinformatics	31/03/2012
Dr. Sandeep Hate	Assistant Professor, Dept. of Botany, Santaji Mahavidyalaya, Nagpur	Phytochemical Analysis	31/03/2012
Dr. R. Khapekar	Assistant Professor, Dept. of Botany, Sindhu Mahavidyalaya, Nagpur	Isolation of Algae	31/03/2012
Dr. (Mrs.) S. A. Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Palynology and taxonomy	30/03/2012
Dr. W. Y. Tagade	Assistant Professor, Dept. of Botany, Science College, Tiroda	Isolation of Phylloplane and Rhizosphere Mycoflora	30/03/2012
Dr. K. Borkar	Scientific Officer, National Dairy Development Board, Nagpur	Isolation of Phylloplane and Rhizosphere Mycoflora	30/03/2012
Dr. M. Kawale	Assistant Professor, Dept. of Botany, Dhote Bandhu Mahavidyalaya,	Column Chromatography	30/03/2012

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	Gondia		
Dr. Lalchand Dalal	Associate Professor, Department of Botany, JB Science College, Wardha	Isolation of <i>Rhizobium</i>	30/03/2012
Dr. S. K. Singh	Scientist and Coordinator, National Facility for Culture Collection of Fungi Agharkar Research Institute, Pune	Recent Developments in Fungal Taxonomy	30/03/2012
Dr. N. Naqvi	Head, Dept. of Botany, S. F. S. College, Nagpur	Isolation of Mycorrhiza	30/03/2012
Dr. Vinod Dongre	Associate Professor, Department of Botany, Seva Dal Mahavidyalaya, Nagpur	Karyotyping	30/03/2012
Dr. D. P. Gogle	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Judge for Science Model Competition	2011-12
Dr. Vinod Dongre	Associate Professor, Department of Botany, Sevalal Mahavidyalaya, Nagpur	Judge	2011-12
Dr. Mrs. Alka Chaturvedi	Professor and Head, PG Department of Botany, RTM Nagpur University, Nagpur	Naming of plants	22/09/2011

**Geology**

<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>
Dr. S. P. Khadse	Shivaji Science, Nagpur	Hydrogeology	28/01/2015
Dr. M. Manjare	P. G. T. D. Geology, RTM	Remote Sensing and GIS	02/02/2014

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	Nagpur University, Nagpur		
Dr. D. B. Malpe	P. G. T. D. Geology, RTM Nagpur University, Nagpur	Tsunami	21/10/2012
Dr. K. R. Randive	P. G. T. D. Geology, RTM Nagpur University, Nagpur	Antarctica	30/11/2011
Dr. Y. A. Murkute	P. G. T. D. , RTM Nagpur University, Nagpur	Sedimentology	21/09/2010

**Zoology**

<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>
Dr. Warsha Dhawale	President IMA gynecologist and Obstetrics	Irregularity and problems of menstrual cycle- role of hormones	22/04/2015
Dr. Anjali Tripathi	General Manager and Chief Diet and Fitness Expert at AVIS FITNESS STUDIO	Role of minerals and vitamins and fitness	22/04/2015
Shri. Vijay Choube	Radiation Physicist RST cancer Hospital	Cancer prevention and treatment.	13/09/2014
Dr. Papiya Bhattacharya	Past president of Gynecological society Nagpur Chapter	Adolescence problems and solutions	08/02/2014
Dr. Anuradha Gadkari	Retd. Scientist , NEERI	Sexual abuse at work places-how to deal with it.	08/02/2014
Dr. S. B. Zade	Professor, P. G. T. D. Zoology, RTM Nagpur University, Nagpur	Conservation of biodiversity	04/09/2013
Dr. (Mrs.) V. V. Baile	HOD, P. G. T. D. Zoology, RTM Nagpur University, Nagpur	Neuro-endocrine system of fish	27/09/2012
Dr. R. J. Andrew	Director and HOD Department of	Career opportunities in	14/09/2011

	Zoology, Hislop college	Animal Sciences.	
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**2.4.3 Providing details on staff development programmes during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.**

**a) Nomination to staff development programmes**

Academic Staff Development Programmes	Number of faculty nominated
Refresher courses	9
HRD programmes	5
Orientation programmes	3
Staff training conducted by the university	5
Staff training conducted by other institutions	2
Summer / winter schools, workshops, etc.	13
Other	3

**b) Faculty Training programmes organized by the institution to empower and enable the use of various tools and technology for improved teaching-learning**

- The college with its different department organized/ conferences/ seminars/ workshop to empower and enable the use of various tools and technology for improved teaching-learning:

S. No	Department	Nature of Event	Date	No of Participants
1	Mathematics	UGC Sponsored National Seminar on 'Group Theory and Applications' GAT-15.	14/03/2015	80
2	Botany	UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences.	14/03/2015	148
		UGC Funded Workshop on Techniques in Taxonomy: Classical to	30-31/03/2012	40

		Molecular Approach.		
3	Geology	National Seminar on 'Recent Trends in Bio-Geo Sciences'	14/10/2010	154
4	Library	National Seminar	14/03/2015	67
5	Electronics and Physics	Workshop on Instrumentation Students' Symposium	27-28/01/2012	150
6	Electronics	One day Students Symposium on "Emerging Trends and Applications of Electronics 2015" (ETAE-15)	03/03/2015	100
7		One day Students Symposium on "Interactions In Fundamental Electronics 2014" (IFE-14)	22/02/2014	100
8	Zoology	Rural development and awareness workshop on Biology of <i>Parthenium</i> weed, threat and damage at Kuhi Mandhal District Nagpur	20/02/2014	70
9		<i>Gazar Gawat Jan Jagruti Abhiyan</i> at Saundarh District Bhandara	29/01/2014	40
10	Physics	Internal symposium in ultrasonics	22-24/01/2015	180
11		Environment and Human rights	20/01/2011	200
12	Physical Education	Students Training	16-30/04/2015	60
13	Chemistry	UGC Sponsored State level Seminar: Role of Chemistry in Maintaining Ecology	14/03/2015	110

- **Content/knowledge management:** Every Department organizes lectures by experts on new and important topics of the syllabus and recent trends in the subject.

- **Selection, development and use of enrichment materials**
- **Crosscutting issues:** Cross-cutting issues are commonly defined as topics which, by their very nature, have a strong impact on all operations in a given field and, therefore, must receive special attention. Like in the field of development cooperation, this means that the topics defined as cross-cutting issues- Gender, Environmental Protection the Struggle against Global warming and employment and entrepreneurship for students” should be considered in all programmes and projects.
- Strategies for sustainable development are only successful with a strong commitment to protect the environment in every possible way. Preserving natural resources and maintaining the natural biodiversity is a must in all the projects and programmes of college.
- Gender equality is at the very center for sustainable development. Adapting the interventions to different needs of the sexes, and working seriously for equal chances of men and women, is an important part of the value system and work of college nominated committee of dedicated staff members handle all the related issues.
- Maharashtra centre for Entrepreneurship development had organised a workshop at college for “Govt. Schemes for self employment and entrepreneurship for students”

**Audio Visual and Multimedia:** Overhead projector, CCTV cameras Electronic display board, Wi-Fi facility are available in the college premises.

**O E R's-** Many teachers had training in the workshop organized by Ambedkar College for “**e-library and online learning resources**”.

**Handling new curriculum:** Staff members of different Department attended various workshops like:

**Dr. A. A. Fulzele:** worked as

**Organizing Secretary:**

UGC sponsored National Seminar on “Recent Trends in Bio-Geo Sciences” Shri M. Mohota College of Science, Nagpur on 14 October 2010.

Three days National Workshop on “Resource Generation for Biological Olympiad” Sponsored by IPT between 16-18 June 2010.

UGC Funded, National Seminar, on “Examination Reforms” Shri M. Mohota College of Science, Nagpur on 03 March 2012.

UGC sponsored National Seminar on “Modern Tools and Techniques in Plant Sciences” Shri M. Mohota College of Science, Nagpur on 14 March 2015.

**Convener:** UGC Funded, Motivational Workshop, (For Teachers and Students) on “Techniques in Taxonomy: Classical to Molecular Approach Shri M. Mohota College of Science, Nagpur between 30-31 March 2012.

Appointed as Member of LEC for Affiliation of M. Z. College, Wadsa, by RTM Nagpur University, Nagpur on 21 December 2013.

Worked as Evaluator for the programme at 21<sup>st</sup> KVS State Regional National Children Science Congress Kendriyavidyalaya, Ajni between 29-31 October 2013.

Appointed as Member of LEC for Affiliation of C. J. Patel College, Tiroda, by RTM Nagpur University, Nagpur on 25 February 2014.

Participated as teachers representative of RTM Nagpur University, Nagpur in Examination System conclave organized by daily Newspaper ‘Times of India, Nagpur’.

Participated as Expert in Nagpur Doordarshan Television Yuva Darshan programme ‘Green Gold in Peril’ that was telecast on 28 April 2015.

Appointed as Subject Expert for selection of Asst. Professor in the subject Botany by RTM Nagpur University, Nagpur at D. D. Bhoyar college, Mouda on 12 July 2014.

Appointed as Subject Expert for selection of Asst. Professor in the subject Botany by RTM Nagpur University, Nagpur at Vidya Vikas College, Samudrapur on 07 July 2014.

Appointed as Member of LEC for Affiliation of Dhote Bandhu College, Gondia, by RTM Nagpur University, Nagpur on 27 April 2012.

Appointed as observer to conduct AIPMT 2011 Examination, CBSE, New Delhi on 27 April 2011.

Elected Member of “Faculty of Science” RTM Nagpur University, Nagpur 2011-2015.

Elected Member of “Board of Studies in Botany” RTM Nagpur University, Nagpur 2011- 2015.

Appointed Member of Disciplinary Action Committee (DAC), RTM Nagpur University, Nagpur. Meeting was conducted between 18-23 June 2015.

Attended RUSA (Rashtriya Uchha Shiksha Abhiyan) conference organized by RTM Nagpur University, Nagpur-2014.

Attended six day workshop on ‘Fungal Biology and Taxonomy’ at Dept. of Studies in Botany, University of Mysore from 25-30 March 2013.

All the staff members of Botany department participated in “one day Workshop on Curriculum Development”, organized by RTM Nagpur

University, Nagpur and Nagpur University Botany Teachers Association on 9 February 2014.

All the staff members of Botany department attended One Day Workshop on Examination Reforms in Botany on 10 January 2015 at P. G. Dept. of Botany, RTMNU, Nagpur.

**Dr. S. K. Giri:**

**Subject Experts:** Nominated by Vice-Chancellor, RTM Nagpur University, Nagpur for the post of Assistant Professor in Botany, Gondia Education Society, Gondia. Dt. 4 September 2012.

Nominated by Vice-Chancellor, SGB Amravati University, Amravati for the post of Assistant Professor in Botany, Babumiya Art, Commerce and Science College, Pimpalgaon Kale, Ta. Akot, Dist. Buldhana. 4 January 2014.

**Associate Editor** - International Journal of Researches in Biosciences, Agriculture and Technology (IJRBAT).

**National Advisory Committee Member**- International Conference, UAE, Dubai, 2015.

**Presented paper** at UGC sponsored International Conference on Biodiversity and Environment Crisis: Past, Present and Future organized by Late Karmveer Dr. P. R. Ghogrey Science College, Dhule. (M.S.) between 11-13 February 2011.

**Presented paper** at 17<sup>th</sup> National Conference of Indian Aerobiological Society, Pune entitled on 'Impact of Airborne Microbes' organized by MAEER's Arts, Commerce and Science College, Pune and MAEER's Maharashtra Institute of Pharmacy, Pune. College, Pune between 13-15 December 2012.

**Organizing Secretary** of Seminar on Environmental Pollution due to thermal Power Station. Environmental Studies of S. M. Mohota College of Science, Nagpur and National Power Training Institute, Nagpur.

Attended Workshop on Academic performance indicators and scores for performance based appraisal system under CAS on 9 October 2011 at Dhanwate National College, Congress Nagar, Nagpur.

**Dr A. M. Sawane:**

Appointed as subject expert in selection committee for appointment of Assistant Professor in the department of Botany at Hislop College, Nagpur.

**Presented paper** at UGC sponsored International Conference on Biodiversity and Environment Crisis: Past, Present and Future organized by Late Karmveer Dr. P. R. Ghogrey Science College, Dhule. (M.S.) between 11-13 February 2011.

**Presented paper** at National Conference on Mycodiversity with sustainable exploration and biotechnological application organized by Shivaji Science College and SGB Amravati University, Amravati between 6-7 February 2012.

**Presented paper** at 17<sup>th</sup> National Conference of Indian Aerobiological Society, Pune entitled on 'Impact of Airborne Microbes' organized by MAEER's Arts, Commerce and Science College, Pune and MAEER's Maharashtra Institute of Pharmacy, Pune. College, Pune between 13-15 December 2012.

Workshop on Professional Competence in Higher Education at Dr. Ambedkar College, Nagpur from 19-25 April 2012 was attended by Dr S. K. Giri, Dr. A. M. Sawane and Ms. S. D. Khalatkar.

National Symposium cum Workshop on "Prevention and Remedies of Workplace Persecution in Higher Education Institutions" organized by Somalwar's Nikalas Mahila Mahavidyalaya, Khamla, Nagpur on 9 January 2014 was attended Dr. (Mrs.) A. M. Sawane and Ms. S. D. Khalatkar.

#### **Staff members of Physics department:**

##### **Participation**

**Dr. S. G. Charalwar:** International Conference ICSET on Science, Engineering and Technology for Academicians, Ras al Khaimah, UAE, 21-23 November 2015.

International (Interdisciplinary) Conference on 'Dr. Babasaheb Ambedkar: Vision and 21<sup>st</sup> Century' on 08 March 2015 at Nagpur.

2<sup>nd</sup> World Congress for Man and Nature - 2012, Nagpur.

Workshop for Principals on Assessment, Accreditation and Reaccreditation between 1-2 March 2013.

Workshop on Performance Based Appraisal System (PBAS) for promotion under CAS on 01 February 2011.

Department of Physics organized Workshops at departmental level on newly introduced curriculum of semester pattern.

Short term programme on Nano-technology was organized with the discussion on curriculum and syllabus of M.Sc.

##### **Electronics:** Dr. N. D. Meshram

1. Attended workshop on Academic performance indicators and scores for performance based appraisal system under CAS on 9 October 2011 at Dhanwate National College, Congress Nagar, Nagpur.
2. Attended conference on "Lifelong Learning Skill Development

Programme” organized by Department of Continuing Adult Education and Extension, RTM Nagpur University, Nagpur on 27 and 28 February 2012.

3. Attended Conference on “Examination Reforms” organized by Shri. M. Mohota College of Science, Nagpur on 03 March 2012.
4. Attended International Conference on 'Dr. Babasaheb Ambedkar: Vision and 21<sup>st</sup> Century', organized by Dr. Ambedkar Teachers Welfare Association on 08 March 2015.

Faculty members who have been invited as resource persons in workshop/ seminar/ conferences organized by external agencies are as follows:

2015	Dr. S. G. Charalwar	Convener	International Conference (ICSET)	23 November 2015	Birla Institute of Technology off shore campus Ras-al-Khaimah, Dubai, UAE
		Co-convener Physics	International Symposium on Ultrasonics (ISU)	January 2015	Shri Mathuradas Mohota College of Science in collaboration with PGTD Physics, RTM Nagpur University, Nagpur
	Dr. A. A. Fulzele	Appointed as Judge for the evaluation of three days Science Exhibition	Science exhibition	22-24 December 2015	Raman Science Centre, Nagpur
		Chairperson	Technical session at National Conference	17 October 2015	Hislop College, Nagpur
		Guest Lecture	Recent trends in Fungal classification	03 September 2015	PG Department of Botany, Hislop College, Nagpur
	Dr. D. V. Nandanwar	Chairperson	International conference	November 2015	Delhi University, New Delhi
		Chairperson	International symposium on Acoustics	January 2015	RTM Nagpur University, Nagpur
	Dr. S. G.	Chairperson	International	January	PGTD Physics,

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Goswami		Symposium on Ultrasonics (ISU)	2015	RTM Nagpur University, Nagpur in collaboration with S. M. Mohota College of Science, Nagpur
Dr. S. K. Giri	Resource person	National Workshop on Aerobiology	2-4 November 2015	Bhilai Mahila Mahavidyalaya Bhilai, Raipur
	Guest Speaker	National Workshop on Aerobiology	2-4 November 2015	Bhilai Mahila Maha vidyalaya Bhilai, Raipur
	Chairperson for 2 <sup>nd</sup> Technical session	National Workshop on Aerobiology	2-4 November 2015	Bhilai Mahila Mahavidyalaya Bhilai, Raipur
Dr. A. M. Sawane	Resource person	UGC funded national Workshop on isolation and identification of aerobiomolecules	2-4 November 2015	Bhilai Mahila Mahavidyalaya Bhilai, Raipur
	Chairperson of the session	UGC funded national Workshop on isolation and identification of aerobiomolecules	2-4 November 2015	Bhilai Mahila Mahavidyalaya Bhilai, Raipur
Dr. A. A. Fulzele	Chairperson of a technical session	UGC Sponsored National Conference	17 October 2015	Hislop College, Nagpur
	Judge	Evaluation of research posters		Dept. of Botany, SGB Amravati University, Amravati
		Poster Competition at International Symposium, ISASS		
Dr. J. A. Janbandhu	Resource person	National Seminar on "Reflection of the Changing	11-12 September 2015	N. M. C. Balika Mahavidyalaya Nalbari, Assam

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			Indian Society in Indian English Fiction”		
	Dr. N. D. Meshram	Guest lecture		16 September 2015	Dr. Ambedkar College, Deekshabhoomi, Nagpur
	Dr. E. B. Raut	Judge	National Inter-disciplinary seminar Topic- Mass Media, Human Rights and politics	4 September 2015	Sevadal Mahila Mahavidyalaya and Research Academy, Nagpur
		Jury member	International Conference on “2 <sup>nd</sup> International Conference on Science and technology for Society”	19 May 2015	University of Peradeniya, Kandy, Sri Lanka Held at Hotel Galadari, Colombo, Sri Lanka, May 2015
	Dr. N. D. Meshram	Convener	One Day students Symposium- “Emerging Trends and Applications of Electronics”	03 March 2015	ETAE-15
		Chaired Session	International Symposium (ISU-15), RTM Nagpur University, Nagpur	22-24 January 2015	
	Dr. M. G. Dhonde	Resource Person (National Conference)	“Micro scale technique in Chemistry”- UGC sponsored National Conference	20 December 2014	D. B. Science College, Gondia
	Dr. J. A. Janbandhu	Resource person	Career Oriented Programme on “Communication Skill and Personality Development”	16 December 2014	S. B. City College, Umrer Road, Nagpur
2014	Dr. V. V. Soman	Resource person	Pre-departure camp (PDC) aimed toward	06-14 July 2014	HBCSE, Mumbai

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			training 5 students who would represent India in International Physics Olympiad		
		Invited Talk	What is NCIEP?	28 June 2014	Shivaji Science College, Amravati
		Resource person	Orientation cum selection camp (OCSE) aimed towards selecting 5 students who would represent India in International Physics Olympiad	10-20 April 2014	HBCSE, Mumbai
		Resource person	Resource generation camp (RGC) for IPhO - 2015	13-15 March 2014	HBCSE, Mumbai
	Dr. Mrs. R. S. Saha	Organizing committee member	Third Global Sustainable Biotech Congress 2014 in collaboration with CYTYS University, Mexico	05 December 2014	North Maharashtra University Jalgaon
		Organizing committee member and Rapporteur at International conference	1 <sup>st</sup> International Congress on Science and Technology For Society with a theme on Sustainable Biodiversity Conservation through Technological and social approaches	24 May 2014	Bangkok Palace, Thailand
	Dr. A. A.	Lecture	Short term Course in	20-25 January	Academic Staff College, SGB

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	Fulzele		'Environment Conservation' for Teachers	2014	Amravati University, Amravati
	Dr. N. D. Meshram	Chairperson	National Conference on talented issues in information Technology at Karnataka	18 January 2014	Dept. of Electronics, Sahyadri Science College, Shimoga, Karnataka
		Guest Lecture	National Conference on talented issues in information Technology	18 January 2014	Dept. of Electronics, Sahyadri Science College, Shimoga, Karnataka
		Convener	One Day students Symposium "Interactions in Fundamental Electronics-2014"	22 February 2014	IFE-14
2013	Dr. V. V. Soman	Resource person	PDC aimed toward training 5 students who would represent India in International Physics Olympiad	24-30 June 2013	HBCSE, Mumbai
		Resource person	RGC	14-19 January 2013	HBCSE, Mumbai
	Dr. Mrs. R. S. Saha	Resource Person	Hands on training workshop on "Biofertilizer production"	29 October 2013	Shri Shivaji college of Science
		Judge	State level Science Exhibition, 2013 Organized by NCERT and State Govt. Science Department, Mumbai	08-10 February 2013	Mahatma Gandhi High School and Junior College, Jaripatka, Nagpur
	Dr. A. A.	Chairperson	Workshop on	21 March	J. B. Science

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	Fulzele	and speaker	B.Sc. Semester pattern syllabus of RTM Nagpur University, Nagpur	2013	College, Wardha
		Judge	National seminar on IAAT,	29 December 2013	PGTD Botany, RTM Nagpur University, Nagpur
		Chief Guest	Biodiversity and its Conservation to mark 'Science Week'	17 December 2013	S. N. Mor College, Tumsar
	Dr. S. K. Giri	Judge	State level Science Exhibition, 2013 Organized by NCERT and State Govt. Science Department, Mumbai	08-10 February 2013	Mahatma Gandhi High School and Junior College, Jaripatka, Nagpur
2012	Dr. V. V. Soman	Resource person	Lecture on Physics Olympiad examination	16 October 2012	Raman Science Centre, Nagpur
		Resource person	Conference on the theme "An Insight into new strategies and policies of NAAC in higher education"	12-13 October 2012	Dharampeth Science College, Nagpur
		Resource person	PDC aimed toward training 5 students who would represent India in International Physics Olympiad	06-13 July 2012	HBCSE, Mumbai
	Dr. A. A. Fulzele	Resource person	workshop on Olympiad Exam	12 October 2012	Raman Science Centre, Nagpur
Judge		Science Exhibition for students of	27 December	Nagpur Municipal Corporation	

			School and Junior College	2012	
		Resource person	Workshop “Technique in Taxonomy: Classical to Molecular Approach”	30-31 March 2012	S. M. M. College of Science, Nagpur
		Judge	Poster Competition at International Symposium, ISASS.	29-30 October 2012	Dept. of Botany, SGB Amravati University, Amravati
2011	Dr. D. V. Nandanwar	Chairperson	International conference on Nano materials and Nano technology	December 2011	Delhi University, New Delhi
	Dr. A. A. Fulzele	Guest Lecture	UGC Sponsored Refresher Course in Environmental Science	17 November 2011	UGC- Academic Staff College, SGB Amravati University, Amravati

**Physical education and Sports:**

Assistant Director Dr. S. S. Bhonsale has attended:

1. One day National Seminar on 14 December 2013 organized by RTM Nagpur University, Nagpur. (Topic: Management of Physical Education and Sports),
2. National Seminar on 15-16 February 2014 on on Sports Laws organized by Dr. Ambedkar College, Dikshabhumi, Nagpur,
3. One day National Seminar on Role of Physical Education and Sports Development, organized by S. B. City College, Nagpur.

c) **(i) Percentage of faculty invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies:**

About 50%

**(ii) Percentage of Faculty attended and participation in paper presentation in external workshops / seminars /conferences recognized by national / international professional bodies**

Sr. No	Year	% of staff attended conferences (Approx.)	% of staff presented paper in conferences (Approx.)
1	2014-2015	100%	80%
2	2013-2014	100%	75 %
3	2012-2013	100%	70%
4	2011-2012	100%	70%
5	2010-2011	85%	70%

**2.4.4 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programmes industrial engagement etc.)**

The college motivates the teachers to go for major/minor research projects and innovative projects funded by UGC, DST etc.

**Study leave:**

A study leave can be granted to the teachers for higher studies and research under the Faculty Development Programme (FDP) to go for it.

**Support for research and academic publications**

The teachers are encouraged to participate/ present papers in national/ international/ seminars/ workshops/ conferences/ symposia etc.

**Teaching experience in other institutions**

Faculty members of the college are permitted to work as guest faculty elsewhere with students of the colleges in rural areas and experience with stakeholders of other institutes.

**Specialized program, industrial engagement, etc.**

Faculty members attend workshop/training/refresher /orientation and short term courses and visit the industries along with students.

- Chemistry and Physics departments are recognized by RTM Nagpur university as a Place for Higher Learning and Research.
- The college has collaboration with International Journal of Researches in Biosciences, Agriculture and Technology (IJRBAT) of Vishwashanti Multipurpose Society (Global Peace Multipurpose Society). The faculty members and research scholars of the college and other institute can publish their research work through this journal.

- **Teaching experience in other institutions**  
Faculty members of the college share their expertise with students and teachers of the colleges in rural areas at **N.S.S. Camps** and experience with stakeholders of other institutes under student-teacher exchange programme.
- **Specialized program, industrial engagement etc.**  
Faculty members attend workshop/training/refresher /orientation and short term certificate courses and visit the industries along with students.

**2.4.5 Give the number of faculty who received awards / recognition at the state, national and international level for excellence in teaching during the last four years. Enunciate how the institutional culture and environment contributed to such performance/achievement of the faculty.**

1. Principal Dr. S. G. Charalwar was awarded a Certificate of Honour as Good Academician and Excellent Administrator in International Conference on 08 March 2015 organized at Nagpur.
2. Dr. S. G. Charalwar was awarded “Eminent Researcher” at International Conference (ICSET 2015) organized on 23 November 2015, at Ras al Khaimah Dubai, UAE.
3. Dr. S. G. Charalwar has won Yogiraj Dilwara Trophy, at RGLWI, at Jabalpur on 03 October 2015 (Masonic society).
4. Dr. Mrs. R. S. Saha of Department of Zoology was awarded Distinguished Fellow award for exceptional skill devotion dedication and professionalism and Innovative ideas in science by Vishwashanti Multipurpose Society at Bangkok.
5. Dr. Mrs. R. S. Saha was also given “Rashtramata Indira Gandhi Nari-Vaibhav Award”, Maharashtra state award- 05 December 2010.
6. Dr. Mrs. R. S. Saha was awarded by “National Naturopathy and Yoga Centre” on 25 December 2010 for promoting organic farming and indigenous research.
7. Dr. S. S. Bhonsale of Physical Education and Sports department received
  - i. *Vidarbh Krida Ratna Puraskar*- 2010,
  - ii. *Vidarbh Gaurav Puraskar*- 2011,
  - iii. *Vishva Maidhan Krida Puraskar*- 2012,
  - iv. *Vidarbh Nav Ratna Krida Puraskar*- 2015.

**Other Activities:**

- Dr. S. G. Charalwar was nominated as Senate Member RTM Nagpur University, Nagpur up to 31 August 2015.
- Dr. S. G. Charalwar is nominated as Task Force member (2015-16) for Board of Studies Physics RTM Nagpur University, Nagpur.
- Dr. S. G. Charalwar was nominated as Task Force member Avishkar (University Research Festival- 2015), selection committee member.
- Dr S. G. Goswami in collaboration with District Legal Service Authority organized One Week Short term course on “Legal Literacy and Awareness” for the students and staff of college from 20-27 January 2012. Eminent speakers from Legal fraternity like Senior Civil Judge Shri Kishor Jaiswal, Adv. Rajendra Rathi and Adv. Sharmila Charalwar enlightened the students.
- For Faculty Development Programme, two faculty members of Physics Department were selected to get training in Entrepreneurship development at Maharashtra centre for Entrepreneurship development. Dr. S. G. Goswami and Dr. D. V. Nandanwar attended the course twice, from 18/02/11 to 01/03/2011 and 11/03/14 to 25/03/14.
- Poster competition for awareness of “Voters Day” was coordinated by Dr. Mrs. R. S. Saha and Dr. S. G. Goswami. A cycle rally was flagged off by Principal Dr. S. G. Charalwar, Dr. V. V. Soman and Dr. S. G. Goswami.
- Under the aegis of 'Swachhata Abhiyaan Cleanliness Awareness Drive' was taken in the college. All teaching and non-teaching staff participated actively.
- Rangoli competition was organized on the theme of “Save Girl child - Prevent female foeticide”.
- Anti-drug day was observed in collaboration with Department of Police, Sakkardara Police Station, Nagpur.

**2.4.6 Has the institution introduced evaluation of teachers by the students and external Peers? If yes, how is the evaluation used for improving the quality of the teaching-learning process?**

- The college obtains feedback from students and parents. It is then analyzed, and evaluated by the committee and corrective measures are taken for the improvement.
- College follows the self-appraisal method to evaluate the performance of Teacher.

- The departments have evolved their own method of obtaining feedback.
- The principal and teachers use informal method to obtain the feedback from stakeholder.

## **2.5 Evaluation Process and Reforms**

### **2.5.1 How does the institution ensure that the stakeholders of the institution especially students and faculty are aware of the evaluation processes?**

- The information regarding internal assessment marks, unit tests, terminal/ test examination is promptly given to the students through the teachers and the College notice board.
- Time table for the submission of assignments and the test examination/ University examination is displayed on the notice board to help the students to plan and prepare for them effectively.
- The evaluation report is made available to all stakeholders during the address of the principal to the students and also during the parent-teacher meeting.
- The valued answer sheets of test examination are returned to the students by respective teachers along with suggestions for improvement. The examination result is communicated to the parents.

### **2.5.2 What are the major evaluation reforms of the university that the institution has adopted and what are the reforms initiated by the institution on its own?**

The College has adopted the following major evaluation reforms of the University:

- Semester pattern for UG/ PG courses,
- Choice based Credit Semester pattern for PG courses,
- A scheme of marking has been framed for theory, practicals, and internal assessment,
- The University has introduced transparency in evaluation by providing photocopy of valued answer books to students.

### **2.5.3 How does the institution ensure effective implementation of the evaluation reforms of the university and those initiated by the institution on its own?**

- The College strictly follows the evaluation reforms adopted by the University.
- The University has made a provision for providing photocopies of

valued answer books to students. The office staff and teachers guide the students regarding the revaluation process.

- Evaluation reforms of the University that are received from time to time are communicated to the teachers and students. The principal ensures that all teachers follow evaluation reforms.

**2.5.4 Provide details on the formative and summative assessment approaches adopted to measure student achievement. Cite a few examples which have positively impacted the system.**

- **Formative evaluation**

As per the guidelines of university, marks are assigned for internal assessment for each paper of different subjects. The students are assessed on the basis of class test, attendance, assignments, seminar, study tour, or any other innovative practice.

- **Summative evaluation**

Test/terminal examinations as per the university pattern are conducted prior to university examinations. This helps the teachers to identify the weaker students. Contact programmes are arranged to clarify the doubts of students. Because of this practice, the students' performance has improved. A few students secured positions in the merit list of university examination and also won awards/prizes.

**2.5.5 Detail on the significant improvements made in ensuring rigor and transparency in the internal assessment during the last four years and weightages assigned for the overall development of students (weightage for behavioral aspects, independent learning, communication skills etc.**

- Significant improvements have been made in ensuring transparency in the internal assessment process by properly guiding the students to work efficiently for getting good internal assessment marks.
- Students are given incentive marks for participation in NCC/NSS/ Continuing Adult Education and Extension (CAEE) and also intercollegiate and interuniversity tournaments.
- Since the beginning of the semester system in UG courses (from session 2013-14), internal assessment has proven to be beneficial in judging behavioural aspects, independent learning and communication skills of the students.

**2.5.6 What are the graduate attributes specified by the college/affiliating university? How does the college ensure the attainment of these by the students?**

- The College Placement Cell takes care of the campus placement of UG and PG students.
- Discipline, integrity, ethical values and team work are instilled in the students through various activities conducted by NSS/NCC/Continuing Adult Education and Extension (CAEE).
- Research aptitude of students is encouraged through study tours, visit to research institutes, etc.
- Students are encouraged to speak on various occasions such as inauguration of College Societies, National Science Day, Annual College Day function, etc.
- Students are encouraged to develop problem solving skills through experimental activities.

**2.5.7 What are the mechanisms for redressal of grievances with reference to evaluation both at the college and University level?**

- Students are free to tell their grievances to the Principal and the teachers.
- Students are provided with valued answer sheets of the test examination. Any grievances regarding marking in test examination and internal assessment can be brought to the notice of the principal or respective teacher.
- The University has a mechanism for redressal of grievances with reference to evaluation. Students can opt for revaluation, if they believe that their answer sheets have not been valued properly.
- Suggestion box in the College office.

**2.6. Student performance and Learning Outcomes**

**2.6.1 Does the college have clearly stated learning outcomes? If 'yes' give details on how the students and staff are made aware of these?**

- Yes. The college has clearly stated learning outcome through vision, mission and objectives of the college in its prospectus and display boards at prominent places and College website.
- IQAC is constituted to discharge duties as per the directives of NAAC.
- The college has a printed manual of working committees to ensure smooth functioning of administration. Thus, IQAC of the college ensure quality performance in each factor of teaching learning process.

**2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/programme? Provide an analysis of the students results/**

**achievements (Programme/course wise for last four years) and explain the differences if any and patterns of achievement across the programmes/courses offered.**

- The college conducts unit/terminal tests to monitor the progress of the students. Their doubts are clarified and tips are given to them to improve the performance.
- Subject-wise and department-wise results are analyzed and discussed in the meeting of college council and LMC and corrective measures are taken.
- The names of students who brought laurels to the institutions by securing merit position in the university examination are published in the college magazine 'Prerana' and also displayed on College board.
- Students are appreciated and felicitated by College and Management in appropriate manner for their achievement in sports, NCC, NSS, Continuing Adult Education and Extension (CAEE) and cultural events.
- The pass percentage ranges from 38 % to 62 %. The college is making policies for constant improvement in the pass percentage depending on the students that are admitted.

Programme-wise details of the pass percentage of the students are as follows:

Sr. No.	Programme	Number of Students appeared					Number of students passed					Pass Percentage				
		2014-15	2013-14	2012-13	2011-12	2010-11	2014-15	2013-14	2012-13	2011-12	2010-11	2014-15	2013-14	2012-13	2011-12	2010-11
1.	B.Sc.	127	104	120	74	78	53	64	62	45	29	42.06	61.54	51.67	62.5	38.15
2.	M.Sc.	19	18	05	18	06	08	04	04	12	04	42.11	22.22	80.00	66.67	66.67

### 2.6.3 How are the teaching, learning and assessment strategies of the institution structured to facilitate the achievement of the intended learning outcomes?

For teaching, learning and assessment, the institution adopts following strategies-

- Prepares an academic calendar, calendar of events and time-table.
- Student centric approach
- Assignments / Field visits / Seminars
- Unit Tests and Prelims
- Attendance
- IQAC and working committee monitor academic and co-curricular activities.
- Academic activities such as guest lectures workshops, seminars, quiz

etc.

- Activities through various cells
- Teacher-student mentor scheme/remedial teaching, organizing study tours, field/Industrial visits etc.
- Counseling and difficulty solving sessions for slow learners
- Well equipped laboratories
- Well equipped Library
- Use of ICT for teaching
- Motivation and awards for advanced learners
- Training and Placement cell training programs and Campus interviews

**2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (student placements, entrepreneurship, innovation and research aptitude developed among students etc.) of the courses offered?**

The following activities are conducted in the College to enhance the performance of the students:

- The programs B.Sc. and M.Sc. have many subject combinations to choose from. This gives the students better job opportunities during the interviews.
- Positive thinking is nurtured through the activities of environmental awareness, cultural activities etc.
- Eminent speakers are invited to address the students so as to imbibe positive traits.
- Research aptitude is developed through projects, field visits, visit to research institutes, industrial visits etc.
- College runs short term courses to make the student self employable.
- Industry and laboratory visits are organized by the College to inculcate the spirit of entrepreneurship among the students.

**Student placements:**

The programs conducted by the college such as B.Sc., M.Sc. (Chemistry), M.Sc. (Physics), M.Sc. (Botany), M.Sc. (Mathematics) offer many subject combinations to choose from. This prepares the students to face interviews for better job opportunities.

**Entrepreneurship:**

- Industry and laboratory visits are organized by the College to inculcate the spirit of entrepreneurship, innovation and research aptitude among the students.
- National and International seminars/ conferences are organized. Assignments are given and innovative models for Arts and Science exhibition are prepared.

- Seminars, Workshops on Networking, Ethical hacking, Network security and Cloud computing, etc. are organized.
- Different Subject Societies organize programs to create awareness about the latest developments in the subject, create interest in the subject and develop a scientific temper among the students.

The following activities were conducted in the College to enhance the performance of the students:

- Positive thinking is nurtured through the activities of national integration, environmental awareness, cultural activities etc.
- Eminent speakers are invited to address the students so as to imbibe positive traits. Various functions are organized to nurture moral, ethical, religious, spiritual, social and cultural values.
- Training and Placement Cell grooms the students for different assignments in general and industry and entrepreneurship in particular.
- Research aptitude is developed through projects, field visits, visit to research institutes, industrial visits etc.
- PG students are encouraged to present research papers in conferences/workshops/seminars/symposia etc.
- Guidance for competitive examination is also made available.
- College runs COP Courses to make the student self employable.

#### **2.6.5 How does the institution collect and analyze data on student performance and learning outcomes and use it for planning and overcoming barriers of learning?**

Result analysis and feedback data are major tools for planning and overcoming barriers of learning. The result committee collects the data and analyzes it course-wise and subject-wise. The detailed report is submitted to the principal for remedial action. Many students have had their education in Marathi, Hindi and Urdu medium. These students are encouraged by teachers to communicate in English language, and read English newspapers and magazines to overcome the barriers of learning.

#### **2.6.6 How does the institution monitor and ensure the achievement of learning outcomes?**

The institution monitors and ensures the achievement of learning outcomes by constantly monitoring the academic performance of students through unit tests, test examination and lab work. Throughout the academic session, various guest lectures are invited to develop the skills and personality of students. In order to encourage students, various activities such as poster/model exhibitions are conducted. The

principal and IQAC regularly monitor the achievement of learning outcomes by analysis of the university examination results. The results are discussed in the college council meetings and corrective measures are implemented for improvement.

**2.6.7 Does the institution and individual teachers use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning? If 'yes' provide details on the process and cite a few examples.**

- Yes, the institution and individual teachers use assessment/ evaluation outcomes as an indicator for evaluating student performance, achievement of learning objectives and planning. The details of the process and some examples are as follows:
- The student with good academic performance is nominated as the representative of students on the students' council of the college.
- Incentive marks are awarded on the basis of the performance of students in NCC, NSS, Continuing Adult Education and Extension, sports and cultural activities.
- Students showing good academic performance are nominated on subject societies.

**Any other relevant information regarding Teaching-Learning and Evaluation which the college would like to include.**

**CRITERION III - RESEARCH, CONSULTANCY  
AND EXTENSION**

**3.1 Promotion of Research**

**3.1.1 Does the institution have recognized research center/s of the affiliating University or any other agency/organization?**

Yes.

The Department of Physics and Chemistry have been recognized by RTM Nagpur University, Nagpur as centres of Higher Learning and Research during session 2012 while the recognition for the departments of Mathematics, Botany and Zoology is awaited.

**3.1.2 Does the Institution have a research committee to monitor and address the issues of research? If so, what is its composition? Mention a few recommendations made by the committee for implementation and their impact.**

The College has a Research Committee for promotion of research in various disciplines. Its composition is as follows:

- Coordinator
- All HOD's as members

Recommendations of the committee and its Impact:

<b>Recommendations</b>	<b>Impact</b>
Teaching and administrative staff to pursue research.	05 Teaching staff members are pursuing doctoral research. 03 faculty have been awarded Ph.D. Faculty with PhD as highest qualification is 89%.
To take up Minor and Major research projects.	17 Minor and 03 Major UGC Research project. 02 UGC-funded Major projects ongoing. 01 Major project funded by BARC, Mumbai is ongoing. 01 Minor and 01 Major research project proposals are awaiting sanction from UGC.
To apply for recognition as Research Supervisor in R T M Nagpur University, Nagpur.	18 members have been recognized as research supervisors. 03 staff members have guided M. Phil scholars. 19 students are pursuing research under the guidance of various faculty members. 01 student has been awarded Ph.D. degree, by RTMNU, Nagpur. 63% faculties are research supervisors.

To publish research articles in national/international journals and proceedings and present posters and papers in the national and international conferences/workshops/symposia/seminars etc.	Most of the staff members have published and presented papers in various conferences/workshops / symposia etc. In all 217 papers have been published by the staff.
To Author and publish books and monographs.	Teaching staff has published 05 books and 01 monograph. 12 chapters have been contributed by the staff to various books.
To motivate students to give seminars and presentations and attempts are made to inculcate research culture.	A good number of students are presenting their work through seminars and exhibitions in college as well as outside.

### **3.1.3 What are the measures taken by the institution to facilitate smooth progress and implementation of research schemes/projects?**

The Management extends full support and encourages the teachers who strive to acquire higher qualification and competence in their field. Many teachers have completed their research after joining the institution. The principal Investigators have complete freedom in managing their projects. Soon after the receipt of grants from funding agencies, the funds are released as per their requirements. The institution has given full liberty to use ICT facilities, laboratory infrastructure and support of non-teaching and administrative staff for their research work. Time flexibility as per UGC norms and exemption from extracurricular duties is granted by the institution. Duty leave is granted to staff to attend conferences/seminar/workshop and to travel abroad to attend conferences. 'Faculty Development Program' facility is also provided as per UGC norms.

### **3.1.4 What are the efforts made by the institution in developing scientific temper and research culture and aptitude among students?**

Students of M. Sc. Chemistry, Physics and Botany have research project as a part of their curriculum. Respective faculties guide and recommend them to visit and interact with reputed scientific institutes like NEERI, IICT, NCL, CICR Nagpur, NIO Goa, etc. for their projects. Power Point presentations, Classroom Seminars, Book Review, etc. are regularly organized for students which help them in developing critical and analytical thinking. It also improves writing and presentation skills. Students visit research centers and industries which motivates them for doing research in the field of their choice. Students have visited Raman Science Centre, Exhibition on Wheels on Biodiversity, NEERI, IICT, NCL, Citrus Research Centre, Pench forest, Salburdi, Wild Life Sanctuary, Fish farm, IBM, Atomic Mineral Division Lab,

Sericulture centre, college of fisheries etc. The college takes lead in organizing seminars, conferences, workshops etc. and encourages the students to actively participate in such activities. Guest lectures by eminent scientists, educationists, alumni etc. pursuing research are arranged for the UG/PG students for pursuing research.

**3.1.5 Give details of the faculty involvement in active research (Guiding student research, leading Research Projects, engaged in individual/collaborative research activity, etc.**

All the faculty members are engaged in individual research work.

Faculty guiding student research (PhD):

S. No	Name of Faculty	Subject	Students Enrolled	Degree Awarded
1	Dr. A. A. Fulzele	Botany	03	-
2	Dr. M. G. Dhonde	Chemistry	04	01
3	Dr. C. B. Talwatkar	Chemistry	01	-
4	Dr. (Mrs) R. R. Gupta [Co-Guide]	Chemistry	02	-
5	Dr. J. N. Ramteke	Physics	03	Nil
6	Dr. D. V. Nandanwar	Physics	04	Nil
7	Dr. S. S. Bhonsale	Physical Education	02	-
	<b>Total: 07</b>		<b>19</b>	<b>01</b>

Minor Research Projects funded by UGC (2010-2015):

S. No.	Name of the Staff Member	Duration From - To	Status (completed, ongoing or proposal sent)
1	Dr. S. K. Giri	2013-15	Completed
2	Dr. J. A. Janbandhu	2010-12	Completed
3	Dr. M. G. Dhonde	2009-11	Completed
4	Dr. S. S. Sakhare	2009-11	Completed
5	Dr. C. B. Masram	2009-11	Completed
6	Mr. S. T. Rathod	2009-11	Completed
7	Dr. S. P. Joshi	2013-15	Completed
8	Dr. M. B. Bhagat	2009-11	Completed
9	Dr. E. B. Raut	2009-11	Completed
10	Dr. N. D. Meshram	2010-12	Completed
11	Dr. Mrs. U. R. Sonparote	2009-11	Completed
12	Dr. Mrs. R. S. Saha	2009-11	Completed
13	Dr. J. N. Ramteke	2009-11	Completed
14	Dr. D. V. Nandanwar	2009-11	Completed
15	Dr. M. S. Atone	2009-11	Completed

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16	Dr. V. V. Soman	2009-11	Completed
17	Dr. S. G. Goswami	2009-11	Completed

Major Research Projects funded by UGC:

S. No	Name of the Staff Member	Duration From – To	Status
01	Dr. M. G. Dhonde	2011-14	Completed
02	Dr. (Mrs) R. R. Gupta (Co-investigator)	2012-15	Ongoing
03	Dr. Mrs. R. S. Saha	2013-16	Ongoing

Major Research Project Funded by other Agencies:

S. No	Name of the Staff Member	Duration From - To	Status	Name of agency
1	Dr. A. A. Fulzele	2015-18	Ongoing	Dept. of Atomic Energy, BARC, Mumbai

Faculty engaged in doctoral research:

S. No	Name of the Faculty	Department	Research Status
1	Ms. S. D. Khalatkar	Botany	Ongoing.
2	Shri R. P. Deshpande	Geology	Thesis submitted in Nov. 2014.
3	Dr. S. P. Joshi	Geology	Ph.D. awarded in March 2014.
4	Dr. N. D. Meshram	Electronics	Ph.D. awarded in 2014.
5	Dr. N. V. Palande	Zoology	Ph.D. awarded in 2014.

E) Administrative Staff pursuing research: 01

**3.1.6 Give details of workshops/ training programs / sensitization programs conducted /organized by the institution with focus on capacity building in terms of research and imbibing research culture among the staff and students.**

S. No.	Department	Nature of Event	Date	No. of Participants
1	Mathematics	UGC Sponsored National Seminar on ‘Group Theory and Applications’ GTA-15.	14 <sup>th</sup> March 2015	80
2	Botany	UGC Funded Workshop on Techniques in Taxonomy: Classical to Molecular Approach.	30 <sup>th</sup> and 31 <sup>st</sup> March 2012	40
		UGC Sponsored National Seminar on Modern Tools. and Techniques in	14 <sup>th</sup> March 2015	148

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		Plant Sciences.		
3	Geology and Botany	National Seminar on 'Recent Trends in Bio-Geo Sciences'	14 <sup>th</sup> October 2010	154
4	Library	National Seminar.	14 <sup>th</sup> March 2015	67
5	Electronics and Physics	Workshop on Instrumentation Students' Symposium.	27 <sup>th</sup> and 28 <sup>th</sup> January 2012	150
6	Electronics	One day Students Symposium on "Interactions In Fundamental Electronics 2014" (IFE-14).	22 <sup>nd</sup> February 2014	100
		One day Students Symposium on "Emerging Trends and Applications of Electronics 2015" (ETAE-15).	03 <sup>rd</sup> March 2015	100
7	Zoology	1. Rural development and awareness workshop on Biology of <i>Parthenium</i> weed, threat and damage.	20 <sup>th</sup> February 2014 at Kuhu Mandhad District Nagpur	70
		2. <i>Gazar Gawat Jan Jagruti Abhiyan.</i>	29 <sup>th</sup> January 2014 at Saundarh District Bhandara.	40
8	Physics	Environment and Human rights.	20 <sup>th</sup> January 2011	200
		International symposium in ultrasonics.	22 <sup>nd</sup> -24 <sup>th</sup> January 2015	180
9	Physical Education	Students Training	16 <sup>th</sup> April -30 <sup>th</sup> April 2015	60
10	Chemistry	UGC Sponsored State level Seminar: Role of Chemistry in Maintaining Ecology	14 <sup>th</sup> March 2015	110
11	College	Collaborator in the 1 <sup>st</sup> International conference on Science, Engineering ICSET-2015, Dubai	21 <sup>st</sup> -23 <sup>rd</sup> November 2015	300
		Seminar on Examination Reforms.	3 <sup>rd</sup> March 2012	120

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All the subject cells and associations organize activities, which imbibe research culture among students. Some of the activities organized are:

Lecture on

<b>Department</b>	<b>Topic</b>
<b>Geology</b>	<ol style="list-style-type: none"><li>1. 'Tsunamis' by Prof. D. B. Malpe.</li><li>2. 'Antarctica' by Dr. K. R. Randive.</li><li>3. 'Remote sensing and GIS' by Dr. B. S. Manjare.</li><li>4. 'Ground Water prospecting' by Dr. S. P. Khadse.</li></ol>
<b>Electronics</b>	<ol style="list-style-type: none"><li>1. "Sensors and Ultrasonics in Research" by Dr. S. J. Sharma.</li><li>2. "Future Prospectus in B.Sc. Electronics" by Dr. C. V. Dhuley.</li><li>3. "Scope of Electronics for Industries and Research" by Prof. H. M. Paul.</li><li>4. "How to study Electronics" by Dr. V. M. Pendsey.</li><li>5. "Electronics Research and Scopes" by Dr. S. Rajagopalan.</li></ol>
<b>Zoology</b>	<ol style="list-style-type: none"><li>1. Dr. Papiya Bhattacharya: Adolescence problems and solutions.</li><li>2. Dr. Anuradha Gadkari: Sexual abuse at work places-how to deal with it.</li><li>3. Dr. Warsha Dhawale: Irregularity and problems of menstrual cycle-role of hormones.</li><li>4. Dr. Anjali Tripathi: Role of minerals and vitamins and fitness.</li><li>5. Dr. R. J. Andrew: Career opportunities in Animal Sciences.</li><li>6. Dr. (Mrs.) V. V. Baile: Neuroendocrine system of fish.</li><li>7. Dr. S. B. Zade: Conservation of biodiversity.</li><li>8. Shri. Vijay Choube: Cancer prevention and treatment.</li></ol>
<b>Physics</b>	'New Novel Materials': Dr. Prashant Gandhi. Ramdeobaba Eng. College, Nagpur
<b>Physical Education</b>	'Overall development with Yoga' Dr. Milind Guru, Yogatadnya.

<b>Guest Lecture</b>	<b>Subject</b>	<b>Resource Persons</b>
Mathematics	1. Mathematics Education	Vivek Wagh, Educationist.
	2. Isomathematics	Dr. Anil Bhalekar, Professor Emeritus, CSIR.
Physics	1. Basics of nanotechnology.	Dr. Dilip Peshwe, VNIT, Nagpur.
	2. Basics of nanoscience,	Dr. S. B. Kondawar, PGTD, Nagpur.
	3. Applications of Nanotechnology.	Dr. K. G. Rewatkar, Dr. Ambedkar College.
Electronics	1. Biomedical Instrumentation	Dr. Onkar S. Khemkar, Coordinator and Asso. Prof., Computer Dept., VMV college, Nagpur.
	2. "Circuit Maker Software"	Dr. Vyankatesh R. Vyaghra, Assistant Prof., Dept. of Electronics, Shivaji Mahavidyalaya, Udgir.
	3. "Satellite Communication"	Dr. (Mrs.) T. Sengupta, Associate Scientist, MRSAC, Nagpur.
	4. "Fuzzy Logic"	Dr. R. R. Mudholkar, Professor, Kolhapur University, Kolhapur.
	5. "Circuit Design Software"	Dr. V.M. Pendsey Asso. Prof. in Sindhu Mahavidyalaya, Nagpur.
	6. "Phosphors for Solid State Lighting".	Dr. (Mrs.) Charusheela P. Joshi, Professor in RKNEC, Nagpur.
Chemistry	1. Medicinal Chemistry and its natural sources	Dr. Chandrakant S. Bhaskar Head, Department of Chemistry, Taywade College, Koradi.
	2. Quantum Mechanics	Dr. Santosh D. Deosarkar SRTM Nanded University, Nanded.
	3. Quantum Mechanics	Dr. R. U. Khope Shivaji Science, Nagpur.
	4. Coordination Chemistry	Dr. W. B. Gurnule Kamla Nehru Mahavidyalaya, Nagpur.
College	1. Waste Recycling and its Management	Mr. Vinod D. Deotale Institute of Pesticide Formulation Technology, Department of Chemical and Petrochemical, Govt. of India, Gurgaon, Haryana, (India).
	2. Food Preservative and its consequences	Dr. M. G. Bhotmange Professor and Head, Department of Food technology, LIT, Nagpur.

Popular talks:

Subject	Name of Guest/Speaker	Designation and Institute	Title	Date
Botany	Dr. Aarti Saoji	Ex-Director, Institute of Science, Nagpur.	Warming And Sustainable Development.	13 <sup>th</sup> August 2010
	Dr. Mrs Alka Chaturvedi	Professor and Head, PG Department of Botany, RTM Nagpur University, Nagpur.	Embriology and Plant taxonomy.	22 <sup>nd</sup> September 2011
	Dr. Mrs Alka Chaturvedi	Professor and Head, PG Department of Botany, RTM Nagpur University, Nagpur.	Recent developments in plant taxonomy.	31 <sup>st</sup> March 2012
	Dr. K. J. Cherian	Head, Dept. of Botany, Hislop College, Nagpur.	Isolation of Cyanobacteria.	31 <sup>st</sup> March 2012
	Dr. (Mrs.) S. A. Kalkar	Head, Department of Botany, Institute of Science, Nagpur.	Palynology and taxonomy.	30 <sup>th</sup> March 2012
	Dr. T. Shrinivasu	Associate Professor, PGTD Botany Department, RTMNU, Nagpur.	Electronic Herbarium.	31 <sup>st</sup> March 2012
	Dr. N. M. Dongarwar	Associate Professor, PGTD Botany Department, RTMNU, Nagpur	Phytochemical Analysis.	31 <sup>st</sup> March 2012
	Dr. D. K. Kapgate	Head, Dept. of Botany, J. M. Patel College, Bhandara.	Paleobotany and Taxonomy.	31 <sup>st</sup> March 2012
	Dr. R. Badere	Assistant Professor, Dept. of Botany, Hislop College, Nagpur	DNA Finger printing.	31 <sup>st</sup> March 2012
	Dr. W. Y. Tagade	Assistant Professor, Dept. of Botany, Science College, Tiroda	Isolation of Phylloplane and Rhizosphere Mycoflora.	30 <sup>th</sup> March 2012

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Dr. K. Borkar	Scientific Officer, National Dairy Development Board, Nagpur.	Isolation of Phylloplane and Rhizosphere Mycoflora.	30 <sup>th</sup> March 2012
Mrs. V. A. Fulzele	Shivaji Science College, Nagpur	Computational Biology and Bioinformatics	31 <sup>st</sup> March 2012
Dr. M. Kawale	Assistant Professor, Dept. of Botany, Dhote Bandhu Mahavidyalaya, Gondia.	Column Chromatography.	30 <sup>th</sup> March 2012
Dr. Sandeep Hate	Assistant Professor, Dept. of Botany, Santaji Mahavidyalaya, Nagpur.	Phytochemical Analysis.	31 <sup>st</sup> March 2012
Dr. R. Khapekar	Assistant Professor, Dept. of Botany, Sindhu Mahavidyalaya, Nagpur.	Isolation of Algae.	31 <sup>st</sup> March 2012
Dr. Lalchand Dalal	Associate Professor, Department of Botany, J. B. Science College, Wardha.	Isolation of <i>Rhizobium</i> .	30 <sup>th</sup> March 2012
Dr. S. K. Singh	Scientist and Coordinator, National Facility for Culture Collection of Fungi Agharkar Research Institute, Pune.	Recent Developments in Fungal Taxonomy.	30 <sup>th</sup> March 2012
Dr. N. Naqvi	Head, Dept. of Botany, S.F.S. College, Nagpur.	Isolation of Mycorrhiza.	30 <sup>th</sup> March 2012
Dr. Vinod Dongre	Associate Professor, Department of Botany, Seva Dal Mahavidyalaya, Nagpur.	Karyotyping.	30 <sup>th</sup> March 2012
Dr. (Mrs.) S. A. Kalkar	Head, Department of Botany, Institute	Hazardous Biopollutants.	13 <sup>th</sup> September

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		of Science, Nagpur.		2012
Dr. D. P. Gogle	Associate Professor, PG Department of Botany, RTMNU, Nagpur.		Judge for Science Model Competition.	2011-12
Dr. Vinod Dongre	Associate Professor, Department of Botany, Seva Dal Mahavidyalaya, Nagpur.		Judge.	30 <sup>th</sup> August 2013
Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur.		Inter-collegiate Seminar Competition in collaboration with ISCA.	26 <sup>th</sup> February 2013
Dr. S. B. Nandeshwar	Senior Scientist and Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur.		<i>Agrobacterium</i> -mediated Gene Transfer in Plants.	30 <sup>th</sup> August 2013
Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur.		Conservation of Orchids.	22 <sup>nd</sup> August 2014
Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur.		Judge for Poster Competition organized for B. Sc. Semester I students.	22 <sup>nd</sup> August 2014
Dr. Satish Wate	Director, CSIR-NEERI.		Biogeochemical Processes In The Near Subsurface.	14 <sup>th</sup> March 2015
Dr. Keshav Kranthi	Director, CICR, Nagpur.		New Advances in Plant Sciences.	14 <sup>th</sup> March 2015
Dr. Hemant Purohit	Principal Scientist and Head, Environmental Genomics Division, CSIR-NEERI.		Genomic tools: Sequencing to Barcoding.	14 <sup>th</sup> March 2015
Dr. Surekha Kalkar	Head, Department of Botany, Institute		Chitale Herbarium Technique.	14 <sup>th</sup> March 2015

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		of Science, Nagpur.		
	Dr. P. S. Jakhi	Associate Professor, Department of Botany, Institute of Science, Nagpur.	Chitale Herbarium Technique.	14 <sup>th</sup> March 2015
	Dr. Sushma U. Borkar	Associate Professor, Department of Botany, Institute of Science, Nagpur.	Judge for Poster Session in UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences.	14 <sup>th</sup> March 2015
	Dr. S. B. Nandeshwar	Senior Scientist and Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur.	Judge for Poster Session in UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences.	14 <sup>th</sup> March 2015
	Mr. Kaustav Chatterjee	Green Vigil Foundation.	Environmental Threats at Global and Local Level.	15 <sup>th</sup> September 2015
Electronics	Dr. Nilesh D. Meshram	Head, Dept. of Electronics, S. M. Mohota College of Science, Nagpur.	Divergent Thinking.	16 <sup>th</sup> December 2013
	Prof. Dr. S. S. Bhoga	Ex-Head, Dept. of Physics, RTM Nagpur University, Nagpur.	Research in Electronics IFE-2014.	22 <sup>nd</sup> Febuary 2014
	Mr. Mahendra Kamble	Pra. Jagero, Motivational Guru, Yoga Expert and Meditation specialist, Nagpur.	Yoga and Meditation.	17 <sup>th</sup> October 2014
	Dr. Mrs. Jayamala Dumre	Director, Continuing Adult Education and Extension, RTM Nagpur University, Nagpur.	Guest of Honor Lecture on "Presentation of different schemes for the students of graduation".	20 <sup>th</sup> September 2013
	Mrs. Yashshree Nandanwar	Corporator, Nagpur Municipal Corporation, Nagpur.	Popular Talk on "Social awareness of science students".	20 <sup>th</sup> September 2013
	Shri Madhukar	Mauli satsang	A talk on	07 <sup>th</sup>

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	Khode	mandal, Digras, Yavatmal.	“Literacy of Non-Addiction”.	October 2013
	Dr. Mrs. M. Niyazi	Principal, Shri. Binzani Mahavidyalaya, Nagpur.	Chief Guest, Popular Talk on “Co-Curricular activities” at IFE-2014.	22 <sup>nd</sup> February 2014
Electronics	Dr. Sridevi Darisi	Asso. Prof. in LAD College Nagpur.	Activities in Science at IFE-2014.	22 <sup>nd</sup> February 2014
	Dr. Mrs. Rina Saha	Vice-Principal, Shri. M. Mohota College of science, Nagpur.	Organ Donation.	17 <sup>th</sup> October 2014
	Dr. Nilesh Meshram	Head, Dept. of Electronics, S. M. Mohota College of Science, Nagpur.	Divergent Thinking.	11 <sup>th</sup> February 2015
	Dr. S. J. Sharma	Head, Department of Electronics, RTM Nagpur University, Nagpur.	Electronics Research in ETAE	3 <sup>rd</sup> March 2015
Physics	Dr. Kishore Ghormare	Chairman, Board of Studies, RTM Nagpur University, Nagpur	Fascination in Physics.	29 <sup>th</sup> August 2012
	Dr. S. G. Charalwar	Principal, S. M. M. College of Science, Nagpur.	White Cane Day.	15 <sup>th</sup> October 2015
Mathematics	Vivek Wagh	Educationist, Director, Centre for Scientific Learning.	Mathematics Education.	24 <sup>th</sup> August 2015
	Dr. Anil Bhalekar	Professor Emeritus, CSIR.	Isomathematics.	14 <sup>th</sup> March 2015
Chemistry	Dr. Sunil Ganatra	Head, Department of Environmental Chemistry, Institute of Science, Nagpur.	Rational Drugs Design.	21 <sup>st</sup> February 2014
	Dr. Hemant Pande	Head, Department of Chemistry, Hislop College, Nagpur.	Chemo-secrets of Advertisement.	20 <sup>th</sup> September 2014
College	Dr. Surendra Gole	Principal, NIT.	Motivational Seminar.	
	Dr. B. N. Raghavendra	Senior Scientist at BARC	Nuclear Reactors and fission	21 <sup>st</sup> August 2015

**3.1.7 Provide details of prioritized research areas and the expertise available with the institution.**

Most of the faculty members are involved in active research. The table below gives faculty-wise specialization.

S No	Name of the Faculty	Prioritized research area
1	Dr. A. S. Muktibodh	Abstract Algebra.
2	Shri S. T. Rathod	Relativity.
3	Dr. A. A. Fulzele	Mycology, Forest Leaf Litter Fungi.
4	Dr. S. K. Giri	Aerobiology- Aeromycology.
5	Dr. (Mrs.) A. M. Sawane	Aerobiology and Palynology.
6	Ms. S. D. Khalatkar	Mycology.
7	Shri R. P. Deshpande	Sedimentology.
8	Dr. S. P. Joshi	Hydrogeology.
9	Dr. M. B. Bhagat	Micropalaeontology.
10	Dr. N. D. Meshram	Biomedical Instrumentation and Sensors.
11	Dr. Mrs. U. R. Sonparote	Fisheries, Endocrinology.
12	Dr. P. U. Gajbe	Entomology.
13	Dr. Mrs. R. S. Saha	Entomology, Agriculture, Environmental toxicology.
14	Dr. N. V. Palande	Neurobiology, Neuroendocrinology, Neurotoxicology.
15	Dr. S. G. Charalwar	Ultrasonics.
16	Dr. M. S. Atone	Material science.
17	Dr. J. N. Ramteke	Ultrasonics.
18	Dr. V. V. Soman	Polymer.
19	Dr. D. V. Nandanwar	Material science and Ultrasonics.
20	Dr. S. G. Goswami	Ultrasonics.
21	Dr. M. G. Dhonde	Heterocyclic, drugs and catalytic synthesis in Organic Chemistry.
22	Dr. I. M. Sarin	Physical Chemistry.
23	Dr. S. S. Sakhare	Physical Chemistry.
24	Dr. R. R. Gupta	Inorganic Chemistry.
25	Dr. C. B. Talwatkar	Inorganic Chemistry.
26	Dr. J. A. Janbandhu	Jewish American Literature.
27	Dr. E. B. Raut	Library and Information Science.
28	Dr. S. S. Bhonsale	Physical Education.

**3.1.8 Enumerate the efforts of the institution in attracting researchers of eminence to visit the campus and interact with teachers and students?**

Our institute always tries to inculcate research culture and research aptitude among the students by way of encouraging them to actively participate in various research oriented programmes like conferences, seminars, workshops and symposia. In this regard, several eminent speakers/ researchers/ scientists have visited our college for various academic activities and shared their knowledge with the students and staff. Prominent activities are as follows:

Department of Chemistry organized UGC sponsored state level seminar, which brought together eminent scientists, academicians, research scholars from India. Faculty and PG students of the institution got the opportunity to interact with more than 20 eminent scientists or researchers.

Department of Botany hosted two national seminars and one workshop which brought together eminent scientists, academicians, research scholars from India. Total of 300 faculty members and students of the institution got the opportunity to interact with national level eminent scientists. Proceedings of this seminar are released in the form of a CD/manual.

Department of Botany organized interaction of students and teachers with Dr. R. P. Thakre, Rtd. Professor, PGTD, RTM Nagpur University, Dr. Nag, Principal, Sindhu Mahavidyalaya, Dr. S. K. Singh, Agharkar Research Institute, Pune, Dr. Alka Chaturvedi, Professor, PGTD, RTM Nagpur University, Dr. Keshav Kranthi, Director, CICR.

Department of Mathematics organized a UGC-sponsored National Seminar 'Group Theory and Applications' on 14<sup>th</sup> March 2015. Eminent scientist professor Emeritus Dr. Anil Bhalekar delivered two lectures on 'Applications of Isomathematics'. Prof. Ruggero Maria Santilli, USA, was available for discussion through Skype. DVDs of Professor Santilli were screened to have first hand information about 'Isomathematics'.

Department of Geology invited eminent researchers Dr. D. B. Malpe from PGTD, RTM Nagpur University and Dr. K. R. Randive for interaction with the students and staff.

Department of Electronics invited Dr. Charushila Joshi, Prof. RKNEC, Nagpur, Professor R. R. Mudholkar, Kolhapur University, Professor Vyankatesh Vyagra, Asst. Prof. Udgir, Dr. S. Rajgopalan, Rtd. Professor and HOD, RTM, Nagpur Univ..

Department of Physics invited Dr. S. V. Moharil, PGTD, Nagpur University, Nagpur.

Dr. V. B. Sapre, Rtd. Professor PGTD Nagpur, Dr. S. B. Kondawar, Dr. K.G. Rewatkar, Dr. Ambedkar College, Nagpur.

Department of Zoology organized interaction of students and teachers with Dr. Mrs. V. V. Baile, PGTD Nagpur Univ. Dr. Suresh Zade, PGTD Nagpur University, Dr. Kaustav Chaterjee, Dr. R. J. Andrew, Hislop College, Nagpur Dr. Vijay Choube, RST Cancer Hospital, Nagpur and Dr. C. B. Powar, Ex-Principal, Sindhu Mahavidyalaya, Nagpur.

List of eminent personalities who visited/interacted with staff and students during above mentioned events:

<b>S. No.</b>	<b>Name of the Eminent Personality</b>	<b>Name of the Institution</b>
1	Dr. Anil Bhalekar	Ex-HOD Chemistry, Professor emeritus CSIR.
2	Shri Vivek Wagh	Mathematician and Educationist. Director: Centre for Scientific Learning.
3	Dr. Alka Chaturvedi	Professor and Head, PGTD Botany, RTMNU, Nagpur.
4	Dr. A. A. Saoji	Ex-Director, Institute of Science, Nagpur.
5	Dr. S. A. Kalkar	Head, PGTD Botany, Government Institute of Science, Nagpur.
6	Dr. S. K. Singh	Scientist and Coordinator, National Facility for Culture Collection of Fungi Agharkar Research Institute, Pune.
7	Dr. Satish Wate	Director, NEERI, Nagpur.
8	Dr. S. B. Nandeshwar	Senior Scientist and Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur.
9	Dr. R. P. Thakare	Retd. Professor, PGTD Botany, RTMNU, Nagpur.
10	Dr. T. Srinivasu	Professor, PGTD Botany, RTMNU, Nagpur.
11	Dr. Keshav Kranthi	Director, CICR, Nagpur.
12	Prof. D. B. Malpe	PGTD Geology, RTM Nagpur University, Nagpur.
13	Dr. K. R. Randive	PGTD Geology, RTM Nagpur University, Nagpur.
14	Dr. Y. A. Murkute	PGTD Geology, RTM Nagpur University, Nagpur.
15	Dr. (Mrs.) T. Sengupta	Associate Scientist, MRSAC, Nagpur.
16	Dr. S. Rajagopalan	Retired Professor, RTM Nagpur University, Nagpur.
17	Dr. S. J. Sharma	Head, Department of Electronics RTM Nagpur University, Nagpur.
18	Dr. R. R. Mudholkar	Professor, Kolhapur University, Kolhapur.
19	Dr. (Mrs.) Charusheela P. Joshi	Professor in RKNEC, Nagpur.
20	Dr. V. B. Sapre	Retired Head, Department of Physics, Nagpur University, Nagpur.
21	Dr. R. J. Andrew	Vice-Principal, Hislop College, Nagpur.
22	Dr. Mrs. V. V. Baile	PGTD Zoology, RTM Nagpur University, Nagpur.

23	Shri Vijay Choube	RST Cancer Hospital, Nagpur.
24	Dr. Dilip Peshwe	VNIT, Nagpur.
25	Dr. S. B. Kondawar	RTM Nagpur University, Nagpur.
26	Dr. Kishor Ghormare	Chairman, BoS, RTM Nagpur University, Nagpur.
27	Dr. C. V. Dhuley	Chairman, BoS, Electronics, RTM Nagpur University, Nagpur.
28	Prof. H. M. Paul	Head, Dept. of Electronics, SFS college, Nagpur.
29	Dr. V. M. Pendsey	Asso. Prof., Sindhu Mahavidyalaya, Nagpur.
30	Dr. Mrs. Jayamala Dumre	Director, Continuing Adult Education and Extension, RTM Nagpur University, Nagpur.
31	Mrs. Yashshree Nandanwar	Corporator, Nagpur Municipal Corporation, Nagpur.
32	Shri Madhukar Khode	Mauli satsang mandal, Digras, Yavatmal.
33	Dr. (Mrs.) T. Sengupta	Associate Scientist, MRSAC, Nagpur.
34	Dr. Vyankatesh R. Vyaghra	Assistant Prof., Dept. of Electronics, Shivaji Mahavidyalaya, Udgir.
35	Prof. Dr. S. S. Bhoga	Ex-Head, Dept. of Physics, RTM Nagpur University, Nagpur.
36	Dr. S. Rajagopalan	Retired Professor, RTM Nagpur University, Nagpur.
37	Mr. Mahendra Kamble	Pra. Jagero, Motivational Guru, Yoga Expert and Meditation specialist, Nagpur
38	Dr. R. R. Mudholkar	Professor, Kolhapur University, Kolhapur
39	Dr. Jayprakash Duple	Deputy Director, Youth and Sports Govt. of Maharashtra.
40	Prof. Rajesh Bawankule	Head, Department of Physical Education, Arts and Commerce college, Nagpur.

**3.1.9 What percentage of the faculty has utilized Sabbatical Leave for research activities? How has the provision contributed to improve the quality of research and imbibe research culture on the campus?**

The College is committed to grant Sabbatical Leave as per UGC norms. So far no faculty has applied for this leave during this period.

**3.1.10 Provide details of the initiatives taken up by the institution in creating awareness/advocating/transfer of relative findings of research of the institution and elsewhere to students and community (lab to land)**

Faculty members present their research papers in the national and international conferences and also impart knowledge and skills acquired by them to other students by delivering guest lectures in various colleges. Teachers publish

their work in reputed journals and magazines. In this way, our college encourages transfer of research awareness and research findings directly or indirectly to the students and outside world.

### **3.2 Resource Mobilization for Research**

#### **3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization.**

There is no separate allocation of funds for research activities in the college budget. However, staff members are encouraged to apply for research projects under UGC, CSIR, DST and other funding agencies.

#### **3.2.2 Is there a provision in the institution to provide seed money to the faculty for research? If so, specify the amount disbursed and the percentage of the faculty that has availed the facility in the last four years?**

No. However, teachers apply for assistance to the funding agencies like UGC, CSIR, DST or private Foundations.

Although the seed money is not given directly to the faculty, institution gives full liberty to the staff to use ICT facilities, laboratory infrastructure and support of non-teaching and administrative staff for their research work.

#### **3.2.3 What are the financial provisions made available to support student research projects by students?**

In-house research projects of PG students are supported by the institution through provision of chemicals and other lab infrastructure. They are also provided with faculty guidance, non-teaching staff support, ICT and other learning resources through library. Faculty also devotes extra time to guide these students.

#### **3.2.4 How does the various departments/units/staff of the institute interact in undertaking inter-disciplinary research? Cite examples of successful endeavors and challenges faced in organizing interdisciplinary research.**

At departmental level interdisciplinary research has not been taken up yet. However, at individual level, staff members have undertaken UGC funded Minor Research Projects and also have supervised research which involves interdisciplinary study. Following works are interdisciplinary in nature.

Name of the Faculty	Nature of Research	Title of the Study	Disciplines involved
Dr. A. S. Muktibodh	Basic	'A study on Santilli Isomathematics'	Mathematics, Physics and Chemistry
Dr. E. B. Raut	Sample Study	The impact of reading habits on slum dwellers: a critical study of Nagpur Municipal Corporation region	Library Science, Social Science, Humanities, Educational field
Dr. V. V. Soman	Minor Research Project	Effect-----polymer	Physics and Chemistry

**3.2.5 How does the institution ensure optimal use of various equipment and research facilities of the institution by its staff and students?**

- Staff members who have undertaken research projects or who are pursuing research for Ph.D. or post doc are encouraged to make optimal use of the facilities available in various departments.
- Laboratory equipments which are of common use are all the time available for the researchers.
- Students prepare seminar presentations using computer facilities available in the department as well as library.
- Students are provided with laboratory facilities while preparing science projects or models.
- Library is kept open throughout the working hours including lunch hour so as to facilitate full time access to books as well as Internet Resource Centre.

**3.2.6 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facility? If 'yes' give details.**

No.

**3.2.7 Enumerate the support provided to the faculty in securing research funds from various funding agencies, industry and other organisations. Provide details of ongoing and completed projects and grants received during the last four years.**

Research Committee of the institution offers support to the faculty members, by providing various documents and information for projects and by way of making them apply for the minor and major projects.

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Name of the Staff Member	Duration Year From To	Title of the project	Total grant in Rs.		
			Sanctioned	Received	Grant Received till date
Dr. A. A. Fulzele	2015-2018 U.G.C. Major	'Enhancement of Lovastatin Production using induced mutations in <i>Aspergillus terreus</i> '	24,75,000/-	12,00,000/-	12,00,000/-
Dr. S. K. Giri	2013-15 U.G.C. Minor	'Detection and Identification of culturable and Non-culturable airborne fungi in Intramural environments of College Laboratories and Library in relation to students health'	1,00,000/-	65,000/-	65,000/-
Dr. J. A. Janbandhu	2010-2012 U.G.C. Minor	UGC sponsored Minor Research Project on "Bernard Malamud: The Representation of Moral Values in his Fictive World"	60,000/-	55,000/-	55,000/-
Dr. S. P. Joshi	2013-2015 U.G.C. Minor	'Integrated geological investigations for groundwater potential and water resource management of Panchdhara watershed of Seloo taluqa , Wardha district using RS and GIS techniques'	1,35,000/	1,02,500/	1,02,500/-
Dr. M. B. Bhagat	2009-2011 U.G.C. Minor	'Calcareous algae from Wadhwan Formation of Surendranagar district'.	1,30,000/	80,000/	80,000/-
Dr. E. B. Raut	2010-2012	'The impact of reading habits on slum dwellers: a critical study of	60,000/-	51,171/-	51,171/-

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		Nagpur' Municipal corporation region			
Dr. N. D. Meshram	2010-2012 U.G.C. Minor	'EMR: An Approach to Health Informatics using A.T.M.R. facility'	1,30,000 /-	1,30,055 /-	1,30,055 /-
Dr. Mrs. U. R. Sonparote	2009-2011 U.G.C. Minor	Investigation of enzyme $\beta$ -glucuronidase in the reproductive cycle of female catfish, <i>Heteropneustes fossilis</i> (Bloch)	30,000/-	15,000/-	15,000/-
Dr. Mrs. R. S. Saha	2009-2011 U.G.C. Minor	Study of Bio-efficacy of <i>Paecilomyces lilacinus</i> for the management of Root Knot Nematode in Brinjal	1,45,000/-	1,25,000/-	7,23,800/-
	2013-2016 U.G.C. (Ongoing)	Biological Based integrated <i>Parthenium</i> management to save environment, health and biodiversity in Nagpur	9,52,800/-	5,98,800/-	
Dr. M. S. Atone	2009-2011	Effect--Phosphor	1,50,000/-	1,25,000/-	1,25,000/-
Dr. J. N. Ramteke	2009-2011 U.G.C. Minor	Ultrasonic-- Mixtures	1,00,000/-	75,000/-	75,000/-
Dr. V. V. Soman	2009-2011	Effect--Polymer	1,35,000/-	1,07,500/-	1,07,500/-
Dr. D. V. Nandanwar	2009-2011 U.G.C. Minor	Synthesis-- materials	1,10,000/-	87,500/-	87,500/-
Dr. S. G. Goswami	2009-11 U.G.C. Minor	Molecular-- Techniques	1,25,000/-	97,500/-	97,500/-
Dr. M. G. Dhonde	2011-2014 U.G.C. Major	Microwave Assisted Synthesis and Biological studies of Barbituric acid and Thiobarbituric acid.	12,82,867/-	11,89,460/-	11,89,460/-
Dr. Madhukar G. Dhonde	2009-2011 U.G.C. Minor	Synthesis and Characterization of different	2,00,000/-	1,05,000/-	1,05,000/-

		photocatalyst materials and its Environmental applications.			
Mr. S. T. Rathod	2009-2011 U.G.C.	Smaradachae notions in Mathematics	30,000/-	20,000/-	20,000/-
Dr. Suresh S. Sakhare	2009-2011 U.G.C. Minor	Economic Viability of Recycling and Bi-products economy from Textile Industries in Nagpur and other cities.	1,05,000/-	57,500/-	57,500/-
Dr. Chetan B. Masram	2009-2011 U.G.C. Minor	Analytical studies some organic systems	1,20,000/-	85,000/-	85,000/-
<b>Total</b>			<b>65,75,667/-</b>	<b>43,71,986/-</b>	<b>43,71,986/-</b>

### **3.3 Infrastructure for Research**

#### **3.3.1 What are the research facilities available to the students and research scholars within the campus?**

All the laboratories have adequate infrastructure with sophisticated instruments essential for student centric projects. Basic research facility is available to M. Sc. students for their dissertation/project work.

Each department has a small departmental library and internet connectivity for use by the staff and the students. Central library is also used for referrals, and Internet.

#### **3.3.2 What are the institutional strategies for planning, upgrading and creating infrastructural facilities to meet the needs of researchers especially in the new and emerging areas of research?**

The institution applies special strategies for planning by taking in to consideration the suggestions from Research Committee to upgrade the infrastructure for research. In this regard, the institute encourages the individual faculty members, and departments are given full freedom to explore the new and emerging areas of research. They are encouraged to get funding from various government agencies for their research work. Under various merged schemes, equipments and Books/Journals have been procured. Under UGC schemes run by the College, Rs. 6,61,557/- have been spent on books, journals and reading materials. The equipments worth Rs. 24,98,878/- (Additional Assistance Grant) have been purchased under UGC scheme which are also available for research purpose.

**3.3.3 Has the institution received any special grants or finances from the industry or other beneficiary agency for developing research facilities? If 'yes', what are the instruments/ facilities created during the last four years?**

No.

**3.3.4 What are the research facilities made available to the students and research scholars outside the campus / other research laboratories?**

Facilities such as laboratories, library etc. are used by the research students from outside who are working under the teachers of this institution.

**3.3.5 Provide details on the library/ information resource centre or any other facilities available specifically for the researchers?**

There is no separate research centre as such for the research scholars. However, all the facilities of the institution such as Instrumentation Facility (in various departments), Network Resource Centers, Reprography and Printing facility (situated in the Library) are made available to the researchers. Faculty members who have completed Minor Research Projects have submitted equipments, Books and Journals to the Institution.

**3.3.6 What are the collaborative research facilities developed / created by the research institutes in the College. For ex. Laboratories, library, instruments, computers, new technology etc.**

Nil.

**3.4 Research Publications and Awards**

**3.4.1 Highlight the major research achievements of the staff and students in terms of Patents obtained and filed (process and product) : Nil.**

**Original research contributing to product improvement:** Dr. A. A. Fulzele from Botany Department is working on improvement of a drug used in lowering cholesterol level.

**Research studies or surveys benefitting the community or improving the services:**

Geology	The artificial recharge structures suggested by Dr. S. P. Joshi are beneficial to the local farmers of Seloo taluka, Wardha district.
Library	This Research work by Dr. E. B. Raut deals with social problems, slum dwellers, decline reading habits etc. This collected and processed data, information, suggestions, and conclusions may help to further research work. It may also help the policy makers of Govt. and Non Govt. Organizations

**3.4.2 Does the Institute publish or partner in publication of research journal(s)? If 'yes', indicate the composition of the editorial board, publication policies and whether such publication is listed in any international database?**

Nil.

**3.4.3 Give details of publications by the faculty and students:\*  
Publication per faculty**

S No	Name of the Staff Member	Journal Publication		Publication in Proceedings		Total
		N	I	N	I	
1.	Dr. A. S. Muktibodh	01	10	-	-	11
2.	Dr. J. A. Janbandhu	01	04	-	-	05
3	Dr. M. G. Dhonde	02	12	-	-	14
4	Dr. I. M. Sarin	-	01	-	01	02
5	Dr. S. S. Sakhare	-	-	-	-	-
6	Dr. (Mrs). R. R. Gupta	04	01	-	-	05
7	Dr. C. B. Talwatkar	02	03	-	01	06
8	Dr. S. P. Joshi	01	02	03	-	06
9	Dr. M. B. Bhagat	02	-	-	-	02
10	Dr. E. B. Raut	02	02	02	-	06
11	Dr. N. D. Meshram	-	06	16	05	27
12	Dr. Mrs. U. R. Sonparote	09	-	06	03	18
13	Dr. P. U. Gajbe	01	-	-	-	01
14	Dr. Mrs. R. S. Saha	03	03	02	04	12
15	Dr. N. V. Palande	-	04	01	-	05
16	Dr. S. G. Charalwar	-	01	-	01	02
17	Dr. J. N. Ramteke	05	12	12	02	31
18	Dr. D. V. Nandanwar	-	15	02	02	19
19	Dr. M. S. Atone	-	02	-	01	03
20	Dr. V. V. Soman	-	03	-	03	06

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21	Dr. S. G. Goswami	-	04	02	01	07
22	Dr. A. A. Fulzele	05	04	01	-	10
23	Dr. S. K. Giri	04	03	03	-	10
24	Dr. (Mrs.) A. M. Sawane	04	02	01	-	07
<b>Total</b>		<b>43</b>	<b>99</b>	<b>51</b>	<b>24</b>	<b>217</b>

(N-National, I-International)

Number of papers published by faculty and students in peer reviewed journals  
(national / international)

**National journals:** 43

**International Journals:** 99

Number of publications listed in International Database (for Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) :

S No	Name of the Staff Member	No. of listed publications
1	Dr. N.V. Palande	04

**Monographs:** Dr. A. S. Muktibodh

‘Camina (Con-Cos) Groups’: A monograph on Camina Groups.

Lap-Lambert Academic Publishers, Germany. First Edition: 2012

ISBN: 978-3-8484-3400-8.

**Chapters in Books:**

S No	Name of Author	Title of the book/chapter	Publication Details
1	Dr. A. A. Fulzele Dr. S. K. Giri Dr. (Mrs.) A. M. Sawane	Manual of Workshop-Techniques in taxonomy: Classical to Molecular Approach, organized by Department of Botany, S.M.M. College of Science, Nagpur on 30 <sup>th</sup> and 31 <sup>st</sup> March 2012	Department of Botany, S.M.M. College of Science, Nagpur
2	Dr. J. A. Janbandhu	Srimant Manacha Bhikari (ED)	2013, BSPK Pub. Nagpur ISBN-978-81-9224-44-8-8
		Bernard Malamud: Perception of Love, Order	2015, Creative Books, New Delhi

		and Values	ISBN-978-81-8043-114-2
3	Dr. J. N. Ramteke	PHYSICS semester-II	GC Pub. ISBN 9789382962-26-7
4	Dr. D. V. Nandanwar	Geometrical and Physical optics	GC Pub. ISBN 9789382962 Pub-26-7
		PHYSICS Semester-II 3 PHP and my SQL	Central Techno Publication, Nagpur ISBN: 9788189178901
5	Dr. S. G. Goswami	1. PHYSICS semester-III Paper-I	Rajani Prakashan ISBN 978-93-83619-25-2
		2. PHYSICS semester-I Paper-II	Rajani Prakashan ISBN 978-93-83619-29-4
		3. PHYSICS semester-IV Paper-II	Rajani Prakashan ISBN 978-93-83619-47-4
		4. PHYSICS semester-IV Paper-I	Rajani Prakashan ISBN 978-93-83619-40-5

**Books Edited:**

**Books with ISBN/ISSN numbers with details of publishers:**

S No	Name of Author	Title of the chapter/Book	Publication Details
1	Dr. S. K. Giri	1. Text Book of Elementary Plant Physiology B. Sc. III (third year) RTM Nagpur University, Nagpur	GC Publication, Nagpur ISSN / ISBN No. 978-81-926159-6-7
		2. Text Book of Botany, Biochemistry and Plant physiology (I)' For B.Sc. III	GC Publication, Nagpur ISSN / ISBN No 978-93-82962-86-1
2	Dr. (Mrs). R. R. Gupta	1. Physical Chemistry B.Sc.Sem.I	Sai-Jyoti Publication. ISBN 978-93-81432-79-2
		2. Text Book of Chemistry Sem.IV	ISBN 978-93-81432-48-2
3	Dr. A. S. Muktibodh	Camina (Con-Cos) Groups: A monograph on Camina Groups. First Edition: 2012	Publisher: LAP-LAMBERT Academic Publishers, Germany ISBN: 978-3-8484-3400-8

4	Dr. (Mrs.) R. S. Saha	1. Cell Biology for Zoology Semester II, Paper-IV.	Central Techno Publication. ISBN-978-81-89178-15-4
		2. Life and Diversity of Animals Chordata	Central Techno Publication. ISBN-978-81-89178-72-4

### Citations and h-index

S No	Department	Name of the Staff	Citations	h-index
1	Mathematics	Dr. A. S. Muktibodh	59	04
2	Botany	Dr. (Mrs.) A. M. Sawane	10	02
		Dr. S. K. Giri	09	02
3	Electronics	Dr. N. D. Meshram	00	00
4	Zoology	Dr. U. R. Sonparote	00	00
		Dr. P. U. Gajbe	86	04
		Dr. R. S. Saha	00	00
		Dr. N. V. Palande	13	03
5	Physics	Dr. M. S. Atone	06	01
		Dr. J. N. Ramteke	39	03
		Dr. V. V. Soman	05	02
		Dr. D. V. Nandanwar	02	02
		Dr. S. G. Goswami	00	00
6	Chemistry	Dr. I. M. Sarin	00	00
		Dr. M. G. Dhonde	24	03
		Dr. C. B. Talwatkar	02	01

Many publication are recent, hence their citation and h-index is unavailable as of now.

### SNIP, SJR

S. No.	Name of the Faculty	Title of the Paper	Name of Journal / Proceedings	SNIP	SJR
1.	Dr. N. V. Palande	1. Short-term exposure to L-type calcium channel blocker, verapamil, alters the expression pattern of calcium-binding proteins in the brain of goldfish, <i>Carassius auratus</i> . 176-177, 31-43, 2015.	Comparative Biochemistry and Physiology – Part C: Toxicology and Pharmacology	1.067	0.817
		2. Neuroanatomical localization	International	0.862	1.147

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		of nitric oxide synthase (nNOS) in the central nervous system of carp, <i>Labeo rohita</i> during post-embryonic development. 46, 14-26, 2015	Journal of Developmental Neuroscience		
		3. GnIH and GnRH expressions in the central nervous system and pituitary of Indian major carp, <i>Labeo rohita</i> during ontogeny: An immunocytochemical study. 220, 88-92, 2015	General and Comparative Endocrinology	0.902	0.954
		4. Role of catecholamines and nitric oxide on pigment displacement of the chromatophores of freshwater snakehead teleost fish, <i>Channa punctatus</i> . 40(2), 457-467, 2014	Fish Physiology and Biochemistry	0.830	0.584
2	Dr. M. S. Atone	Effect----Phosphor 134, 640-648, 2013	Journal of Luminescence	1.347	0.770

**Impact factor:**

Publications by the faculty with Journal Impact Factor is as under

S No	Name of The Faculty	Title of The Paper	Name of Journal/ Proceedings	Impact factor
1	Dr. A. A. Fulzele	First Report of <i>Cercospora apii</i> causing leaf spot on <i>Spigelia anthelmia</i> L. (Spigeliaceae) from India	Indian Journal of Mycology and Plant Pathology. Vol 42 (3). pp. 391-393	1.04
2	Dr. J. A. Janbandhu	Myth as a Mode of Spiritual Conquest in Tagore's <i>The Ascetic</i>	IJSSIR, Vol. 3 (12) Dec. 2014, pp.163-167	3.050 (SJIF)
		ELT: Encountering Classroom Challenges	Indian Scholar Vol. I, Issue III, March 2015, pp. 59-63	0.998 (IIFS)
		Salvation Through Love, Sin, and Suffering in Bernard	IJSSIR, Vol. 4 (4) April 2015, pp. 01-08	3.050 (SJIF)

		Malamud's <i>The Assistant</i>		
		Vihang Naik's Poetry: Reflection of Love and Urban Angst	The Context Vol. 2, Issue 2, April – 2015, pp. 270-278	
3	Dr. M. G. Dhonde	Synthesis and antimicrobial activities of unsymmetrical mannopyranosyl thiocarbamides by addition reaction of mannopyranosyl isothiocyanate and free amines	J. Chem. Pharm Res., Vol. 2(4), pp 518-522, 2010.	0.467
		Synthesis and antimicrobial activities of Tetra-O-benzoyl-b-D-glucopyranosyl-arylidine thiosemicarbazones	J. Ind. Chem. Soc. Vol. 88, PP 289-291, 2011.	0.301
		Synthesis and characterization of Bis-N and S-protected Mannosyl Isothiobiurets.	American J. Pharm Tech Res., 2(4), 982-990, 2012.	0.9852
		Visible light activity of Nitrogen doped TiO <sub>2</sub> Synthesis using Titanium Trichloride as a precursor	Bionano Frontior, 5 (2-III), 77-79 2012.	0.2334
		Removal of Organic Pollutant From Water by Heterogenous Photocatalysis: A Review	Int. J. Chem and Envir., 17(1), 84-94, 2013.	0.636
		Use of Transesterification 1,3-diketoesters in the synthesis of Trisubstituted Pyrazoles and their Biological screening.	Bull. Chem. Soc. Ethiopia, 27(1), 85-94, 2013.	0.491
		Synthesis and antimicrobial activities of some new pyrazoles, oxadiazoles and	South Afr. J. Chem., 66, 248-253. 2013.	0.567

	isoxazole bearing benzofuran moiety.		
	C-S Bond-forming reactions of barbiturylbromide with isothiocarbamides in aqueous media.	Syn. Commun., 44, 03, 340 – 345, 2014.	1.060
	Visible Light induced Photoreductive Dehalogenation Using Carbon Doped ZnS Nanocrystallite	Chem. Sci. Trans. 3(1), 332-340, 2014.	0.4589
	H <sub>2</sub> O-Mediated an Efficient Tandem Synthesis of Barbituryl Thiocarbamides using Amberlyst-15 as a Heterogeneous Solid catalyst.	Am. J. PharmTech Res., 4(1), 698-709 2014.	0.9832
	Convenient route for studying reactivity of Isothiocyanates towards barbituryl Isothiocarbamide	Eur. Chem. Bull., 3(4), 372-376, 2014	2.14
	An Efficient, green synthesis of sulfonamidino-thiocarb-amide in absence of catalyst and their biological studies	Am. J. PharmTech Res., 4(2), 434-446, 2014.	0.9832
	Amberlyst-15 as a highly efficient and reusable catalyst for direct C-S bond formation: synthesis of barbituryl carbamodithioates	Lett. Org. Chem., 12(2), 115-121, 2015	0.65
	Carbohydrazides as Precursors for the Synthesis of Heterocycles having Pyrazole Benzofuran Moiety and their Biological Evaluation.	Am. J. PharmTech Res., 5(1), 290-300, 2015.	0.9832

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	Dr. M. G. Dhonde	Synthesis of novel bridge headhetrocycles via cyclization of 4-Amino-1,2,4-trizole-3(4H) -thions and their antimicrobial screening	Des. Chemica Sinica, 2015, 6(11), 49-54	0.676
4	Dr. I. M. Sarin	Oxovanadium (IV) complexes with O-O donor's ligands: Efficient synthesis, spectral characterization, antimicrobial activity and thermal degradation.	J. Chinese Adv. Mat. Soc., 1-13, 2015	0.467
5	Dr. (Mrs.) R. R. Gupta	Assessment of Wellwater Quality for drinking purpose. A case study in Nari Area, Nagpur, M.S.(I)	J Environ. Sciand Engg., Vol 54(3),page 420-423, 2012.	0.667
		Bioaccumulation of Heavy metal toxicity in vegetables of Mahalgoan, Nagpur, M.S. (India).	Current World Environment, vol8(3)Page 463-468	00
		Metal accumulation and translocation in vegetable crops grown on soils irrigated with Nag river.	IJBAT, Vol. II, ,Page 265-267, May 2015.	0.34
6	Dr. C. B. Talwatkar	Solution combustion synthesis of CaZrO <sub>3</sub> using mixed fuel.	International journal of Modern Physics B.Vol.24 no.31, p.p.6107-6113, 2010.	0.94
		Heterogeneous catalysis on combustion synthesized SrZrO <sub>3</sub>	Indian Journal Of Chemical Technology Vol.19.Mar. 2012, p.p124-127	0.513
		Combustion synthesis of BaAl <sub>2</sub> O <sub>4</sub> spinel for its application as catalyst in heterogeneous catalysis.	Bionano-Frontier,ISSN No.0974-0678,p.p.128-130, Vol.5 Nov.2012	0.2334

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		Photocatalytic degradation of Indigo carmine dye in water on combustion synthesized Fe <sub>2</sub> O <sub>3</sub> .	Bionano-Frontier,ISSN No.0974-0678p.p.135-138,Vol.5 Nov.2012	0.2334
		Heterogeneous catalysis on combustion synthesized MgAl <sub>2</sub> O <sub>4</sub> .	International journal of Researches in Biosciences, Vol.1 Sept.2013, p.p. 174-181ISSN No.2347-517x	0.34
7	Dr. S. P. Joshi	Early Permian Barakar Formation from Umrer Coal field, Nagpur district	Journal of Geosciences, Osaka University,Japan	1.28
		Neoproterozoic siliciclastic sedimentation around Kampa –Tenpa area(PGG)	Journal of Geological society of India,Bangalore	0.87
8	Dr. U. R. Sonparote	1. Spider Diversity of Visvesvaraya National Institute of Technology Campus, Nagpur	Internatonal Journal of Researches in Biosciences, Agriculture and Technology	0.34
		2. Study of variation of hepatic $\beta$ -glucuronidase in the reproductive cycle of <i>Heteropneustes fossilis</i> (Bloch)	Indian streams research Journal	0.2105 (GISI)
		3. Histoarchitecture of Olfactory rosette of <i>Heteropneustes fossilis</i> (Bloch)	Indian streams research Journal	0.2105 (GISI)
		4. Pathological investigations of Indian Major carp <i>Labeo rohita</i> (Ham.) following bacterial infection	Indian streams research Journal	0.2105 (GISI)
		5. Seasonal histochemical changes in the ovary of <i>Ophiocephalus striatus</i> (Bloch)	Indian streams research Journal	0.2105 (GISI)
		6. Functional	Bionano Frontier	0.2

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		significance of olfactory cells of snakehead <i>Ophiocephalus striatus</i> (Bloch).		
		7. Seasonal variation of $\beta$ - glucuronidase in the reproductive cycle of <i>Heteropneustes fossilis</i> (Bloch).	Bionano Frontier	0.2
		8. Microbial flora from infected murrel <i>Ophiocephalus striatus</i> (Bloch) in Nagpur region.	Bionano Frontier	0.2
		9. Castration and Testosterone replacement induced changes in NPY immunoreactivity in the Neuronal groups of olfactory bulb and forebrain of <i>Heteropneustes fossilis</i> (Bloch).	Bionano Frontier	0.2
9	Dr. N. V. Palande	1. Short-term exposure to L-type calcium channel blocker, verapamil, alters the expression pattern of calcium-binding proteins in the brain of goldfish, <i>Carassius auratus</i> .	Comparative Biochemistry and Physiology – Part C: Toxicology and Pharmacology	2.301
		2. Neuroanatomical localization of nitric oxide synthase (nNOS) in the central nervous system of carp, <i>Labeo rohita</i> during post-embryonic development.	International Journal of Developmental Neuroscience	2.580

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		3. GnIH and GnRH expressions in the central nervous system and pituitary of Indian major carp, <i>Labeo rohita</i> during ontogeny: An immunocytochemical study.	General and Comparative Endocrinology	2.470
		4. Role of catecholamines and nitric oxide on pigment displacement of the chromatophores of freshwater snakehead teleost fish, <i>Channa punctatus</i> .	Fish Physiology and Biochemistry	1.622
10	Dr. S. G. Charalwar	Investigation--- Cyclohexane	International J of Res. Engg. and Tech	4.438
		Molecular--- Methyl cyclo hexane	International J of Res. Engg. and Tech	4.438
11	Dr. V. V. Soman	D C Electrical--- system	Macromol. Symp.	0.913
		Study of Structural--- and their blends	Radiation effects and defects in Solids 167(2)(2012),120-130	0.51
12	Dr. S. G. Goswami	Thermodynamic .... Cylohexenol	International J of Res. Engg. and Tech eISSN No. 2319-1163/PISSN 23217308	2.375
		Ultrasonic studies--- temperature	International J of Res. Engg. and Tech ISSN 2319-7064	4.438
		Intermolecular interaction of Benzene in --- methylcyclohexane ( IJSR)	ISSN 2319-7064	4.438
		Investigation of Comparative behavior ----- Cyclohexane	International J of Res. Engg. and Tech ISSN 2319-7064	4.438
13	Dr. N. D.	One Step Combustion	International	3.7

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	Meshram	Synthesis Of Compounds In Eu <sup>3+</sup> Activated Y <sub>2</sub> O <sub>3</sub> -Al <sub>2</sub> O <sub>3</sub> System Using Mixed Fuel	Journal of Chemical and Physical Sciences/2/2013	
		Microcontroller Based Instrument for Semi-Invasive Blood Glucose Measurement	International Journal of Science and Research (IJSR)/1/2013	4.438
		Application of optical lens of a CD writer for detecting the blood glucose semi invasively	American Institute of Physics/1620/2015	3.2
		Manipulating Diabetes by Mooting Blood Clott Time Parameter	IJIRCCE/2/2014 ISSN: 2320-9801	5.618
14	Dr. D. V. Nandanwar	Dielectric properties of ultrasonicated fyl ash and polyaniline composites	International Journal of Science and Research (IJSR)	4.438
		Ultrasonic characterization of some nitrogenous Bases in Aqueous Solutions	International Journal of Science and Research (IJSR)	4.438
15	Dr. J. N. Ramteke	Effect of temperature on on molecular Dynamics of Binary liquid Mixture by ultrasonic method	Journal of Science and Research (IJSR)	4.438
		Ultrasonic study of Acoustical parameters in Binary liquid Mixture at 301.15 K	Journal of Science and Research (IJSR)	4.438

**3.4.4 Provide details (if any) of Research awards received by the faculty.**

Name of Faculty	Event	Year	Award/ Recognition
Dr. S. P. Joshi (Geology)	Awarded Ph.D. by RTM Nagpur University, Nagpur	2014	Felicitation for the award of Ph.D.
Dr. J. N. Ramteke	National seminar, New Delhi-2012	2012	Best Research Paper Award -

			2012
Dr. N. D. Meshram	National conference (NCRTP-2014) Raipur, Chhattisgarh	2014	Best Poster Presentation
	International Symposium (ISU-15) Nagpur University, Nagpur	2015	Best Poster Presentation
	Emerging Trends in Electronics and Computer Science, ETECS-2015, Shivaji University, Kolhapur	2015	Best oral presentation
	International Conference on Dr. Babasaheb Ambedkar: Vision and 21 <sup>st</sup> Century, 2015	2015	Felicitation for the award of Ph.D.
Dr. R. S. Saha	National Naturopathy and Yoga Centre for promoting Organic Farming	2010	Indigenous Research
	Rashtra Mata Indira Gandhi Nari Vaibhav award	2010	State award
	Distinguished fellow award by Vishwashanti Multipurpose Society at Bankok	2014	For exceptional skill devotion and dedication.
Dr. S. G. Charalwar	1 <sup>st</sup> International Conference on Science, Engineering and Technology for Academicians ICSET-2015	2015	Eminent Researcher
Dr. N. V. Palande	Awarded Ph.D. by RTM Nagpur University, Nagpur	2014	Felicitation for the award of Ph.D.

- **Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally**  
Nil

**3.5 Consultancy:**

**3.5.1 Give details of the systems and strategies for establishing institute-industry interface?**

Nil.

**3.5.2 What is the stated policy of the institution to promote consultancy? How is the available expertise advocated and publicized?**

Nil.

**3.5.3 How does the institution encourage the staff to utilize their expertise and available facilities for consultancy services?**

Nil.

**3.5.4 List the broad areas and major consultancy services provided by the institution and the revenue generated during the last four years.**

Nil.

**3.5.5 What is the policy of the institution in sharing the income generated through consultancy (staff involved: Institution) and its use for institutional development?**

Nil.

**3.6 Extension Activities and Institutional Social Responsibility (ISR)**

**3.6.1 How does the institution promote institution-neighbourhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?**

Learning activities have a visible element for developing sensitivities towards community issues, gender disparities, social inequity etc. and in inculcating values and commitment to society. Women's Cell, Environmental Cell and subject associations conduct number of activities for the holistic development of students.

- Many programmes under the aegis of "*Jagar Janivancha*" were undertaken related to training of self defense and safety of girls students at college.
- Students of college are enrolled with **YIN- Young Inspirators of Nagpur** an initiative by Marathi daily Newspaper Sakal which involves students for many interactive projects like discussion with Union Minister Shri Nitin Gadkari with the theme "Participation of young generation in development of nation"; with Municipal commissioner in smart city project etc. Students are encouraged to teach and guide children in slum area on Sunday and holidays.
- Guest lectures on social issues for staff and students ,about environmental issues, Conservation of environment, Conservation of biodiversity, Waste recycling and its management have been organized
- The College strives to instill civic responsibility in the young minds through extension programs so that they develop into refined, socially responsible citizens. Visit to social organizations like *Panchavati* Old Age Home conducted by CAEE where students celebrated

*Rakshabandhan* and Cleanliness Program in their premises was undertaken.

- Units such as NSS, NCC, Women's Cell, Environmental Cell and subject associations conduct number of activities for the holistic development of students. Inculcation of leadership traits, patriotism and community services form the integral part of their activity with stress on making the citizens of India socially and morally responsible.
- To inculcate the importance of National integrity and patriotism, the college in collaboration with its sister concern organize various cultural and co- curricular activities for the students and staff on national festivals
- The qualities of team work, social responsibility, and national integrity are nurtured in students by way of their participation in annual NSS camp conducted in selected villages which create a healthy rapport between the College and the community.
- The College encourages the neighbourhood community network through a number of activities. The use of the College playground is allowed by the local community for conducting Yoga and Meditation, various games and sports event daily.
- The staff members of the College contribute for sponsoring costumes and hiring choreographer during college day celebration. Fund is used to support the underprivileged members of the student for participation in intercollegiate competitions and cultural program.
- Health awareness programmes are organized on varied subjects like Women's reproductive health and hygiene, fitness and role of minerals in our body, Yoga and Meditation etc.

### **3.6.2 What is the Institutional mechanism to track students' involvement in various social movements / activities which promote citizenship roles?**

Students are motivated to become NSS, CAEE and NCC volunteers at the orientation program conducted every year at the beginning of session along with Principal's address for new entrants.

Apart from NSS, CAEE and NCC, Women Cell also ensures that students from all branches are involved in the extension activities.

#### **NSS Activities:**

##### **2010-2011**

1. 28-08-2010 Shramdaan.
2. 02-09-2010 Tree Plantation.
3. 23-27/02/2011 Special Village camp at Tirkhura Umrer, Nagpur.

**2011-2012**

1. 26-06-2011 Participation in “International Day Against Drug Abuse and Illicit Trafficking”.
2. 28-06-2011 Fresher’s Orientation.
3. 13-08-2011 Tree Plantation in College Campus.
4. 20-08-2011 Environmental Trip to Ramdegi.
5. 23-29/08/2011 Participation in Female Anti-Foeticide National Movement held at Pune.
6. 16-09-2011 Inauguration of Social Service Society and Informal Group Discussion.
7. 23-09-2011 “Democracy in India” informal Group Discussion.
8. 24-09-2011 Participation in Dharma Bharti Mission.
9. 24-09-2011 Group Discussion on “Saving Water and Electricity”.
10. 29-30/09/2011 Gram Jan Sanwaad Camp at Soundad Village.
11. 01-10-2011 Participation in Dance Competition at Nikalas College, Nagpur (2<sup>nd</sup> Prize).
12. 11-10-2011 Inauguration of *Chhatrasamvaad* college Wall magazine (English Edition).
13. 19-10-2011 Guest Lecture on “Major causes of Osteoporosis” by Dr. Sanjiv Choudhari.
14. 28-11-2011 Jyotiba Fule Death Anniversary Celebration.
15. 22-12-2011 Participation in “Workshop on Corruption” held at Gurunanak Bhavan, Nagpur by NSS Dept. (RTMNU).
16. 28-12-2011 Participation in “Workshop on Attitude Development, WAD” at Smt. Binzani College, Nagpur.
17. 03-01-2012 College Day Celebration Guest: Dr. Narendra Arekar, Kurkheda.
18. 21-22/01/2012 Participation of NSS volunteers in NMC Elections.

**2012-2013**

1. 21-07-2012 Guest Lecture: Importance of NSS by Pranoti Chikhale.
2. 26-07-2012 Shramdaan.
3. 01-08-2012 Tree Plantation.
4. 01-08-2012 Save Female Child Rally by NSS Volunteers.
5. 20-08-2012 A Debate on Environment Awareness.
6. 28-08-2012 Elocution on Role of Youth in India’s Progress.
7. 05-09-2012 Teachers Day Celebration.

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8. 24-09-2012 Group Discussion Corruption: A Fatal Disease in Society.
9. 29-09-2012 Participation in Seminar at Legal Aid Service, Civil Court, Nagpur.
10. 03-07/12/2012 Special Village Camp at Satgaon, Tah. Hingna Dist. Nagpur.
11. 09-12-2012 Participation in “Organ Plantation” at Instt. Of Engg. Hall, North Ambazari, Road, Nagpur.
12. 08-13/02/2013 NSS Special Village Camp at Banor (Hingna) Ta. Mouda Dist Nagpur.
13. 18-02-2013 Blood Donation Camp.
14. 14-04-2013 NSS Volunteers participated in “Save Nag River Campaign”.

**2013-2014**

1. 26-07-2013 Shramadaan.
2. 11-09-2013 Participation in Vishwabandhutva Din.
3. 02-10-2013 Street Play on Dangers of Drugs/Alcohol.
4. 03-10-2013 Participation in Essay Competition in Anti Drug Abuse Gathering held at V. Deshpande Hall, Nagpur.
5. 02-03/10/2013 Participation in 2<sup>nd</sup> National Anti Narcotic Gathering held at V. Deshpande Hall, Nagpur.
8. 25-31/01/2014 Special Village Camp at Soundad Dist. Gondia.

**2014-2015**

1. On 13<sup>th</sup> September 2014 the NSS unit of the college organized Blood Donation Camp sponsored by Jeeven Jyoti Blood Bank, Nagpur. Forty volunteers donated blood.
2. On 26<sup>th</sup> September 2014 NSS volunteers participated in 100<sup>th</sup> Convocation of RTM Nagpur University.
3. On 30<sup>th</sup> September 2014 the NSS unit organized Save Environment Trip to Ramdegi, Dist. Chandrapur.
4. On 13<sup>th</sup> October 2014, NSS unit organized Clean India Drive (Rally) and Voter’s Awareness Rally in Reshimbagh Zone, Nagpur.
5. On 26<sup>th</sup> November 2014, NSS volunteers participated in Sanvidhaan Diwas Rally organized by RTM Nagpur University.
6. On 6<sup>th</sup> February 2015, NSS volunteers participated and had Interaction with Shri Nitin Gadkari, Minister, Govt. of India at Scientific Sabhagrih, Laxminagar, Nagpur.
7. From 21<sup>st</sup> February to 27<sup>th</sup> February 2015, the NSS Unit of the college organized Seven Day’s Special Village Camp at Karhandla (Tirkhura, Sev, Thana), Tah. Umrer Dist. Nagpur.

8. On 13<sup>th</sup> March 2015, NSS Volunteers participated in One Day Workshop on “Clean India Movement: Youth Power with Scientific Approach” at Institute of Science, Nagpur.
9. On 30<sup>th</sup> August 2015, NSS volunteers organized Save Environment trip to Ramdegi Dist Chandrapur.
10. On 16<sup>th</sup> October 2015, NSS volunteers organized a campaign against Malaria/Fileria with pledge to eradicate Malaria in collaboration with NMC, Health Dept.

**Women cell Activities:**

1. 10<sup>th</sup> March 2015, Celebration of International Women’s Day and Felicitation of girl students excelling in sports by Social Worker Mrs. Chhaya Sawarkar. Invited Talk on “Belief and Misbelieve”.
2. 21<sup>st</sup> December 2013, Dr. Asha Bhate interacted with students under *Jagar Janivancha Abhiyan*. Delivered a talk on “How Woman is made Different from Man”.
3. 8<sup>th</sup> March 2014, Dr. Mrs. Madhavi Mardikar, Head, Department of physical education, Govt. Institute of Science, Nagpur conducted workshop on “stress management”.
4. 11<sup>th</sup> March 2013, Workshop on Cardiopulmonary resuscitation by Dr. Anjali Bhure, Prof. and Head, Dept. of Anesthesia, NKP Salve Medical College and Lata Mangeshkar Hospital.
5. 13<sup>th</sup> September 2012, Invited talk on Hazardous Biopollutants by Dr. (Mrs.) S. A. Kalkar, Head, Dept. of Botany, Govt. Inst. of Science, Nagpur
6. 21<sup>st</sup> December 2012. *Jagar Janivancha Abhiyan*. Suggestions on women security in society were invited from students.
7. 28<sup>th</sup> December 2012, *Jagar Janivancha Abhiyan*. Ms. Rupali Bawankar, Police sub-inspector, Sakkardara Police station, Nagpur interacted with the students.
8. 16<sup>th</sup> and 17<sup>th</sup> September 2011, Girl students and Dr. A. A. Sawane participated in National Conference on Career prospects for Women Empowerment at Dr. Ambedkar College, Nagpur.
9. 22<sup>nd</sup> September 2011, Guest Lecture on Role of Women in Society by Dr. (Mrs.) A. A. Chaturvedi, Head, PGTD Botany, RTMNU, Nagpur.
10. 4<sup>th</sup> February 2012, Guest Lecture on Cyber Crimes by Dr. Aruna Namballa.
11. 16<sup>th</sup> March 2012, Cardiac Health Check up Camp in collaboration with Wockhardt Hospitals, Nagpur.
12. 8<sup>th</sup> March 2011, Wellness Evaluation Camp (Body Mass Index, Visceral fat, trunk fat, BMR, Body age) by health consultants of Herbalife International.

13. 13<sup>th</sup> August 2010, Guest Lecture by Dr. (Mrs.) A. A. Saoji, Ex-Director, Inst. Of Science, Nagpur on Global Warming and Sustainable Development.

### **Department of Continuing Adult Education and Extension (CAEE)**

#### **Activities 2011-12**

Total no. of Students Enrolled: - Under Graduate: - 25  
Visit to Aanandvan, Warora on 16<sup>th</sup> December 2011

#### **Activities 2013-14**

**Total no. of Students Enrolled: - Under Graduate: - 30**

1. **Raksha Bandhan Program at Old age home: - 21<sup>st</sup> August 2013.**
2. **Swachata Abhiyan at Panchavati Old Age Home: - 21<sup>st</sup> August 2013.**
3. **Inauguration of the body: - 20<sup>th</sup> September 2013**
4. **No-Addiction program by Shri Madhukar Khode: - 07<sup>th</sup> October 2013**

#### **Activities 2014-15**

**Total no. of Students Enrolled: - Under Graduate: - 83; Post Graduate: - 17**

1. **World Population Day:- 11<sup>th</sup> July 2014**
2. **Blood Donation: - 13<sup>th</sup> September 2014. Jeevan Jyoti Blood Bank and components**
3. **Rakshabandhan at Panchavati Old Age Home:- 22<sup>nd</sup> August 2014**
4. **Swachata Abhiyan at Panchavati Old Age Home: - 22<sup>nd</sup> August 2014.**
5. **Talk on Divergent Thinking :- A talk on “Divergent Thinking” 11<sup>th</sup> February 2014**
6. **Tree plantation at department :- 01<sup>st</sup> October 2014**
7. **Workshop on Meditation and yoga :- 17<sup>th</sup> October 2014**
8. **White cane day and organ donation awareness program: - 17<sup>th</sup> October 2014**

#### **Activities 2015-16**

**Under Graduate: - 76; Post Graduate: - 14**

1. **Blood Donation: - 17 July 2015. Jeevan Jyoti Blood Bank and components**
2. **International Literacy Day: - 08<sup>th</sup> September 2015**
3. **Environment conservation and safety at Panchavati Old Age Home: - 09<sup>th</sup> October 2015**
4. **Swachata Abhiyan at Panchavati Old Age Home: - 09<sup>th</sup> October 2015**

**3.6.3 How does the institution solicit stakeholder perception on the overall performance and quality of the institution?**

The stakeholders' perception on the performance and quality of the overall performance of the institution is acquired through students', teachers' and non-teaching staffs' feedback from time to time. Management representatives through IQAC meetings often provide positive suggestions regarding academic growth of the institution.

Apart from this, staff and the principal informally interact with local community, educationists and take feedback from them.

**3.6.4 How does the institution plan and organize its extension and outreach programmes? Providing the budgetary details for last four years, list the major extension and outreach programmes and their impact on the overall development of students.**

The College organizes extension and outreach activities through its NSS unit, various Cells and subject associations. Most of the activities are planned well in advance. Tentative program of the activities is published in the College calendar. There is an allocation of funds for NSS activities. However, the Cells and subject associations carry out expenditure out of the funds collected as membership fees or voluntary donations along with some assistance from College.

Following is the amount spent by the institution on NSS activities:

Year	Grant in Rs.	Expenditure in Rs.
2011-12	60,750/-	66,942/-
2012-13	47,775/-	67,819/-
2013-14	44,775/-	81,445/-
2014-15	61,800/-	1,02,148/-

**Extension and Outreach activities:**

The Department of CAEE conducts monthly exposure programs to the nearby slums, orphanages, old-age homes and provides wide ranging service to the community.

**Blood donation camps:** Volunteers donate blood as a social responsibility.

18<sup>th</sup> February 2013 forty units of blood donated

13<sup>th</sup> September 2014 forty units of blood donated

**Impact on Overall Development of Students**

By working together with other individuals, students learn to negotiate, communicate, manage conflict, and lead others. These programs sensitize the

student volunteers to the social issues and challenges of the lesser privileged sections of society. Training equips them for real life situations and makes them more responsible citizens. By taking part in these extension and outreach activities, students understand the importance of critical thinking skills and time management. Involvement in activities helps students mature socially. Working outside the classroom with diverse groups of individuals allows students to gain more self confidence, autonomy and appreciation. These activities help them to become good leaders.

**3.6.5 How does the institution promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**

The College calendar has a mention of all the institutional provisions, its aims and objectives. Names of the in-charges of every activity are also published. NSS conducts Orientation Program for the students to motivate them to become NSS volunteers. Every year for inaugural function of NSS, social activists, renowned persons are invited as guest speakers. Such lectures motivate the students to take part in NSS.

When NSS conducts its activities like Blood Donation, Shramdan etc, program officer propagates the information at institutional level for participation of staff and students.

**3.6.6 Give details on social surveys, research or extension work (if any) undertaken by the college to ensure social justice and empower students from under-privileged and vulnerable sections of society?**

Dr. E. B. Raut from Library Science carried out research work which deals with social problems, slum dwellers, declining reading habits etc. This collected and processed data, information, suggestions, and conclusions may help to further research work. It may also help the policy makers of Govt. and Non Govt. Organizations.

NSS unit surveys villages during Special Village Camps. Students conduct awareness program on health and hygiene, superstition, illiteracy, water conservation, savings, govt. schemes, de-addiction etc. These activities have a positive impact on the students from under-privileged and vulnerable sections of the society.

**3.6.7 Reflecting on objectives and expected outcomes of the extension activities organized by the institution, comment on how they complement students' academic learning experience and specify the values and skills inculcated.**

- Extension activities teach the students to see beyond their curriculum for the betterment of the society as a whole.
- It gives purpose to the knowledge acquired by them.

Following values and skills are inculcated by the above extension activities:

- Teamwork.
- Time Management.
- Leadership.
- Emotional development.
- Understanding the challenges faced by the underprivileged sections of our society.
- Effective decision making.
- Learning through real-life situations.

**3.6.8 How does the institution ensure the involvement of the community in its reach out activities and contribute to the community development? Detail on the initiatives of the institution that encourage community participation in its activities?**

All the villagers selected for the camps, by the NSS Unit, actively and enthusiastically participate in the activities conducted by the volunteers of our College. Various activities like cleanliness drive, environmental awareness rally, anti-narcotics programme, orientation speech by eminent guests etc, are carried out during this camp. Villagers and social activists are involved for creating awareness among the people.

**3.6.9 Give details on the constructive relationships forged (if any) with other institutions of the locality for working on various outreach and extension activities.**

Nil.

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

International

Session	Date	Event	Rank
2014-15	16 <sup>th</sup> to 20 <sup>th</sup> September 2014	Group Dance competition at International Theatre Festival organized by Eastern Zonal Cultural Centre (E.Z.C.C.) at Cuttack	1 <sup>st</sup>

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2015-16	7 <sup>th</sup> October 2015	<i>Rangyatra</i> - International Kiran Sangeet va Nrutya Samaroh	1 <sup>st</sup>
	7 <sup>th</sup> October 2015	Folk Dance- International Kiran Sangeet va Nrutya Samaroh	3 <sup>rd</sup>

National

Session	Date	Event	Rank
2014-15	5 <sup>th</sup> to 9 <sup>th</sup> November 2014	Participated in Folk Dance competition at All India Inter-University ' <i>Indradhanushya-2014</i> ', organized by SGBAU, Amravati	Represented RTM Nagpur University

State

Session	Date	Event	Rank
2014-15	21 <sup>st</sup> November 2014	Folk Dance Competition organized by Maharashtra Kamgar Kalyan Mandal	1 <sup>st</sup> and 3 <sup>rd</sup>

Inter-University

Session	Date	Event	Rank
2014-15	25 <sup>th</sup> to 29 <sup>th</sup> November 2014	Participated in Dance Competition at Inter-University Youth Festival, Berhampur University, Orissa	Represented RTM Nagpur University

Intra-University

Session	Date	Event	Rank
2012-13	17 <sup>th</sup> December 2012	Scientific Rangoli Competition- Ms. Rupali Charlewar	3 <sup>rd</sup>
2013-14	25 <sup>th</sup> – 28 <sup>th</sup> February 2014	Group Singing competition in RTMNU Inter-collegiate ' <i>Yuvarang- 2015</i> '	2 <sup>nd</sup> prize
2014-15	9 <sup>th</sup> March 2015	Group Song Competition- <i>Yuvarang- 2015</i>	2 <sup>nd</sup>

	9 <sup>th</sup> March 2015	Folk Dance Competition- <i>Yuvarang- 2015</i>	2 <sup>nd</sup>
	9 <sup>th</sup> March 2015	One Act Play- <i>Yuvarang- 2015</i>	3 <sup>rd</sup>
	9 <sup>th</sup> March 2015	<i>Muknatya- Yuvarang- 2015</i>	1 <sup>st</sup>
	23 <sup>rd</sup> December 2014	Intercollegiate PowerPoint Presentation Competition organized by Dharampeth M. P. Deo Memorial Science College, Nagpur- Nurussuba Sheikh	2 <sup>nd</sup>
2015-16	14 <sup>th</sup> August 2015	Patriotic Song Competition organized by Lokmat Yuva Next	1 <sup>st</sup>
	20 <sup>th</sup> October 2015	Folk dance competition organized by Lokmat Yuva Next and Somalwar Mahila Mahavidyalaya, Nagpur	1 <sup>st</sup>
	16 <sup>th</sup> October 2015	Poster Competition, Kamla Nehru Mahavidyalaya, Nagpur- Ruchika Ramtekkar and Sayali Muley	2 <sup>nd</sup>

### 3.7 Collaboration

#### 3.7.1 How does the institution collaborate and interact with research laboratories, institutes and industry for research activities. Cite examples and benefits accrued of the initiatives - collaborative research, staff exchange, sharing facilities and equipment, research scholarships etc.

One UGC-sponsored Major Research project by Dr. Mrs. R. R. Gupta (on collaborative basis) is underway.

#### 3.7.2 Provide details on the MoUs/collaborative arrangements (if any) with institutions of national importance/other universities/industries/Corporate (Corporate entities) etc. and how they have contributed to the development of the institution.

Nil.

#### 3.7.3 Give details (if any) on the industry-institution-community interactions that have contributed to the establishment / creation/up-gradation of academic facilities, student and staff support, infrastructure facilities of the institution viz. laboratories / library/ new technology /placement services etc.

Nil.

**3.7.4 Highlighting the names of eminent scientists/participants who contributed to the events, provide details of national and international conferences organized by the college during the last four years.**

- International conference on "Ultrasonics" was co-hosted by Department of Physics from 22<sup>nd</sup>-24<sup>th</sup> January 2015. Eminent physicists who contributed to the event were:
  1. Dr. Mannel Zakaria from French Embassy
  2. Dr. Vladimir Petrov from Russia
  3. Dr. Vilas Tabhane, P. G. Department of Physics, SP Pune University, Pune.
- 1<sup>st</sup> International Conference on Science, Engineering and Technology for Academicians, 'ICSET-2015' was co-hosted by our college on 21<sup>st</sup>, 22<sup>nd</sup> and 23<sup>rd</sup> November 2015 in BITS Dubai Campus UAE.

**3.7.5 How many of the linkages/collaborations have actually resulted in formal MoUs and agreements? List out the activities and beneficiaries and cite examples (if any) of the established linkages that enhanced and/or facilitated -**

- a) Curriculum development/enrichment.
- b) Internship/ On-the-job training.
- c) Summer placement.
- d) Faculty exchange and professional development
- e) Research
- f) Consultancy
- g) Extension
- h) Publication
- i) Student Placement
- j) Twinning programmes
- k) Introduction of new courses
- l) Student exchange
- m) Any other

Two MoUs have been signed recently.

**3.7.6 Detail on the systemic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.**

Nil.

**Any other relevant information regarding Research, Consultancy and Extension which the college would like to include.**

- Identification of Fungi on informal level is done by Department of Botany.
- One-Day College level Symposium (mini conference) for the students of Electronics.

## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

#### **4.1.1 What is the policy of the Institution for creation and enhancement of infrastructure that facilitate effective teaching and learning?**

To make effective teaching and learning campus environment, the policy for creation and enhancement of infrastructure is framed accordingly with the growing need of the college. The requirements from all the departments are invited for creation, innovation and enhancement of infrastructure and learning resources. In pursuance with this matter we discuss in the meeting with all heads of the department and conclusions are kept before LMC for approval. Thereafter the committee finalizes a proposal on priority basis to inform the management. The management discusses with the committee to provide funds as per requirements for the execution of infrastructural and learning resources enhancement.

#### **4.1.2 Detail the facilities available for**

- a) **Curricular and co-curricular activities – classrooms, technology enabled learning spaces, seminar halls, tutorial spaces, laboratories, botanical garden, specialized facilities and equipment for teaching, learning, research etc.**
- b) **Extra –curricular activities – sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skills development, yoga, health etc.**

College has well equipped class rooms, laboratories, computer facilities and e-learning sources, Botanical garden, auditorium, computer laboratory, etc.

#### **a) Curricular and co-curricular facility:**

College has well equipped spacious classrooms with well-ventilated and natural lights. Laboratories to all departments, computer laboratory, e-learning facilities and resources, Botanical garden, auditorium, fully automated library with the best collection of print and digitalize material, well equipped Physical Education and Sport Department etc.

#### **b) Extra- curricular activities:**

Sports (swimming pool, indoor facilities, gymnasium etc.): We support students for swimming competitions with the collaboration of outside swimming pool club, table tennis, carom board, chess, gymnasium, yoga club, fencing, volleyball, football, kabaddi, cricket, badminton etc.

College has NSS, NCC unit, Continuing Adult Education and Extension (CAEE) and Physical Education and Sports Department. In addition, the

college has Women Cell, Training and Placement Cell, Anti-ragging cell, Counseling and Guidance Cell, Research Guidance Cell. Several activities like blood donation, book exhibition, tree plantation, medical check- up camps, guest lectures, seminars, workshops, etc. Various competitions such as essay, elocution, debate, book reading, book review, quiz competitions, group discussion etc. are carried out. For social and cultural development college organizes cultural activities, personality development programme. Besides, the college celebrates Gandhi Jayanti, Teachers' day, Science day, National days, Dr. Ambedkar Jayanti, Annual social gathering etc.

**4.1.3 How does the institution plan and ensure that the available infrastructure is in line with its academic growth and is optimally utilized? Give specific examples of the facilities developed/augmented and the amount spent during the last four years (Enclose the Master Plan of the Institution/campus and indicate the existing physical infrastructure and the future planned expansions if any).**

The college has excellent physical infrastructure to give its best and support the teaching-learning process. One of the biggest campus areas among the city-based colleges is over 5.79 Acres of land with built up area of 4174.65 square meters. In addition to this, ladies hostel construction has been recently completed.

College has centrally located separate administrative block which is centre of the college premises. The principal's cabin, other administrative staff, students' related counters, common room for girls (on first floor) and store rooms are included in the administrative building. It provides effective ambience for administrative activities.

College has a rectangular multistory building in the view of safety and future expansions. At the entrance, there are two separate cabins for Junior and Senior College Vice-Principals. Along with class rooms, there are two auditoriums (convertible).

The college has Department of Physics, Computer Science, Electronics, Mathematics, Chemistry, Industrial Chemistry, Languages, Zoology, Geology, and Botany. Aside from meeting room, staff room, audio visual room, examination control room, CAEE, Women Cell, Counseling Cell, Training and Placement Cell, Career Guidance Cell, library, reading rooms, store rooms etc. are available. Outside the main building is a separate building for Physical education and Sports Department, NSS and NCC units. College has ample parking space for staff and students' vehicles.

**Details of the College Infrastructure:**

Separate administrative block at the centre of the college building premises including the principal's cabin, provides effective ambience for administrative activities.

<b>Sr. No.</b>	<b>Description</b>	<b>Details</b>
1	Department of Chemistry	Laboratories for UG Laboratory for PG Instrumentation room cum Research Laboratory Recognized by RTMNU, Nagpur Staff room Store room
2	Department of Physics	Laboratories for UG Laboratory for PG Instrumentation room cum Research Laboratory Recognized by RTMNU, Nagpur Staff room Store room
3	Department of Zoology	Laboratories for UG Research Laboratory Zoology Museum Staff room Store room
4	Department of Botany	Laboratories for UG Research Laboratory Botany Museum Staff room Environmental study room Store room
5	Department of Geology	Laboratory Geology Museum Staff room
6	Department of Electronics	Laboratory including staff room and HOD's room
7	Department of Computer Science	Laboratory including staff room and HOD's room
8	Department of Mathematics	Staff room
9	Department of Languages	Staff room

**Augmentations of facility:** - College aspires to keep pace with its academic growth by providing modern facilities such as smart board, projectors, e-learning resources, digital educational sources, Internet facility etc.

- i) The whole infrastructure is optimally used by college from 7.15 am to 5.45 pm during working days. External agencies like UPSC, MPSC, GATE, IIT, NET, SET, Railways, Banks, University, and State Board are allowed to use these facilities on Sundays and other holidays for examination on rent basis.
- ii) College has a beautiful Botanical garden maintained by Department of Botany. College has large open space with stage which is used for cultural programmes and some co-curricular and extra-curricular activities.

**4.1.4 How does the institution ensure that the infrastructure facilities meet the requirements of students with physical disabilities?**

College has a ramp and wheel chair facility for physically disabled students. The college staff takes good care of such students.

**4.1.5 Give details on the residential facility and various provisions available within them**

**Hostel Facility:**

UGC funded girl students hostel has been recently completed. No Objection Certificate is yet to be received from UGC.

**4.1.6 What are the provisions made available to students and staff in terms of health care on the campus and off the campus?**

- The college provides insurance facility for staff.
- The group insurance facility has been made available for faculty and staff members.
- The first aid and medical care is available for the staff and students in the campus and in nearby hospital in case of emergency.
- Medical reimbursement facility is available for staff as per government rules.
- Listed doctors provide emergency services for students and staff.
- First aid box is available in the office and Physical education and sports department.
- College organizes Medical camps where expert consultants address and guide in the camps such as bone density, Eye checkup, blood pressure checkup, body mass checkup, ECG checkup, dietary problems etc. both for students and staff.

- College follows Indian government rules and regulations for all schemes regarding health and accidental insurance of the staff.

**4.1.7 Give details of the Common Facilities available on the campus – spaces for special units like IQAC, Grievance Redressal unit, Women’s Cell, Counseling and Career Guidance, Placement Unit, Health Centre, Canteen, recreational spaces for staff and students, safe drinking water facility, auditorium, etc.**

- The college has spacious common rooms, washroom for girl students and staff. Drinking water to all staff and students is available with the facility of aqua guard water purifier and water cooler.
- The college has a spacious, clean and hygienic canteen for staff, students and parents.
- A big auditorium (capacity 400 persons) is separated by a partition. Normally it is used as two classrooms. Various functions are organized for co-curricular and extracurricular activities here. In addition to auditorium, the college has one more classroom cum auditorium with the capacity of 150 persons.
- College has a space for special units of Grievance Redressal Cell, Womens’ cell, Counseling and Career Guidance Cell, Job Placement Cell, Legal Aid Cell etc.

**4.2 Library as a Learning Resource:**

**4.2.1 Does the Library have an Advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the committee to render the Library, student/user friendly?**

Yes, the Library has an Advisory Committee. The principal is a chairperson, Librarian is a secretary and all Head of Departments, coordinators are its advisory members. Library Committee advises the Librarian for smooth and effective functioning of the Library. It acts as a liaison between the faculty, students and administration.

The Library Committee has been formed with the following members.

1. Dr. S. G. Charalwar, Principal	Chairman
2. Dr. E. B. Raut, Librarian	Secretary
3. Dr. V. V. Soman, Associate Prof. (Physics)	Member
4. Dr. Mrs. R. R. Gupta, Associate Prof. (Chemistry)	Member
5. Mrs. R. S. Lonarkar, Lecturer (Physics)	Member

Library committee meets regularly to discuss and decide the matters to provide better and effective library services to the staff, scholars, researchers and students of the institution.

**Library Committee helps to organize following activities:**

- Books selection,
- Recommends suitable budgetary provision,
- Review library rules and formulate new rules,
- Recommend for proper functioning of the library,
- Regular display of front covers of new books,
- Exhibition of new books,
- Book reading competition,
- Additional book ticket for general books reading,
- Essay competition,
- Book review competition,
- Discussion on new and existing books with teachers,
- Informing the teachers regarding interest in specific subject books.

**4.2.2 Provide details of the following:**

- **Total area of the Library (in Sq. Mts.).**
- **Total seating capacity**
- **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**
- **Layout of the Library (individual reading carrels, lounge area for browsing and relaxed reading, IT zone for accessing e-resources)**

**LIBRARY LAYOUT**

Sr. No.	Headings	Description	Remarks
A	Total library area and layout	Total area	2520 sq ft.
		<ul style="list-style-type: none"> <li>▪ Stack room: 600 sq ft.</li> <li>▪ Lending section: 300</li> <li>▪ Librarian room: 100</li> <li>▪ Students : 700</li> <li>▪ Teaching Staff and P.G. Students: 300</li> <li>▪ IT zone/Computers: 150</li> <li>▪ Reference section: 200</li> <li>▪ Binding room</li> </ul>	Binding work is given on Contract basis

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B	Seating capacity of the library	<ul style="list-style-type: none"> <li>▪ Total seating capacity</li> </ul>	111
C	Working hours of the library	<ul style="list-style-type: none"> <li>▪ On working days</li> <li>▪ On examination days</li> <li>▪ On holidays</li> </ul>	8 hours 8 hours Library is accessible during winter and summer holidays
D	Seating capacity of the library	<ul style="list-style-type: none"> <li>▪ Total seating capacity</li> <li>▪ For students</li> <li>▪ For staff</li> <li>▪ For library staff</li> </ul>	111  90 15 06

**4.2.3 How does the Library ensure purchase and use of current titles, print and E-journals and other reading materials? Specify the amount spent on procuring new books, journals and e-resources during the last four years.**

The principal circulates a notice to the head of all departments. The HODs and faculty members recommend the titles of books/journals to be purchased. After approval from the principal, the librarian initiates the process to purchase recommended books. The books are selected from publisher's catalogues, internet, book shops and exhibitions through local and outer book supply agencies.

	2010-2011		2011-2012		2012-2013		2013-2014		2014-2015	
	Total books	Total cost	Total books	Total cost	Total books	Total cost	Total books	Total cost	Total books	Total cost
Text book	930	2,13,701/-	280	92,239/-	197	49,801/-	264	41,171/-	263	49,855/-
General books	231	16,315/-	216	56,695/-	32	16,531/-	12	3,257/-	30	7,321/-
Reference Books	57	9,056/-	30	70,614/-	19	16,739/-	02	885/-	02	3,785/-
Journals	135	8,530/-	133	8,305/-	140	8,820/-	150	10,675/-	144	12,390/-
Periodicals	182	5,277/-	172	6,384/-	178	7,064/-	175	8,663/-	180	8,869/-
Any other	-	-	-	-	-	-	-	-	-	-

**4.2.4 Provide details on the ICT and other tools deployed to provide maximum access to the Library collection.**

Details on the ICT and other tools deployed:

<b>Sr. No.</b>	<b>Heads</b>	<b>Descriptions</b>	<b>Numbers</b>
1	OPAC	Online Public Access Catalogue	Yes it is open for staff and students
2	E-Resources	Electronic resource management package for e-journals	INFLIBNET package and other open sources available on internet
3	Searching tools	Federated searching tools to search articles in multiple databases	Free and open software tools can be used
4	Library Website	There is no separate college library website	No
5	E-publications	In-house/remote access to e-publications	Yes
6	Library Automation	Library automization has been done through LIB-MAN software and Bar-Coding.	Yes
7	Computers	Total For Public Access	13 07
8	Printers	Total For Public Access	02 02
9	Internet	Internet band width/ speed : 2 mbps, 10 mbps, 1 Gb	One Broadband Connection with speed of 2-10 mbps
10	Institutional Repository	Institutional Repository	Yes
11	E-Learning	Content management system for e-learning	Yes
12	Resource Sharing	Participation in Resource sharing networks/consortia (like INFLIBNET)	Yes through INFLIBNET (N-List)

**4.2.5 Provide details on the following items:**

Sr. No.	Headings	Description	Numbers
1.	Average number of walk-ins	Faculties, students and other users	155
2.	Average number of books issued/ returned	Faculties, students and other users	162
3.	Ratio of library books to students enrolled	33 books per student	33:1
4.	Average number of books added during last three year		425
5.	Average number of login to OPAC		25
6.	Average number of login to e-resources		14
7.	Average number of e-resources downloaded/ printed		20
8.	Number of information literacy trainings organized	Every year Information of Literacy programme is organized by library	4
9.	Details of “weeding out” of books and other materials	The outdated books or inappropriate volumes are identified for removal. During this process, faculty members work directly in the stacks handling all the books in their subject area. The selected volumes that are no longer useful in supporting the curriculum are removed.	Old books, important magazines and journals are bound timely. Old newspapers are sold twice a year.

**4.2.6 Give details of the specialized services provided by the Library**

Sr. No.	Headings	Descriptions
1.	Manuscripts	10 hand written, pictorial old college magazines signed by eminent persons like A. B. Vajpayee, Madhok etc. are available in the library.
2.	Reference : We have a good collection of reference resources	Yes, to all Library users

3.	Reprography	Yes, to all Library users with nominal charges
4.	ILL (Inter Library loan Service)	Yes, we provide this service on users demand
5.	Information deployment and notification	Yes, display board, racks, orally and through talks.
6.	Download	Yes, through internet from various sites
7.	Printing	Yes, all users can avail the printing facility on their demand
8.	Reading List/bibliography compilation	Yes, through the library software or from the internet
9.	In-house/remote access to e-resources	Yes
10.	User orientation and awareness	Yes, every year we organize the user orientation programme for freshers.
11.	Assistance in searching database	Yes, as on users demand
12.	INFLIBNET/ IUC facilities	Yes, we subscribe INFLIBNET service

**4.2.7 Enumerate on the support provided by the Library staff to the students and teachers of the college.**

- Library staff helps the students and teachers for easy accessing the books. Peaceful, airy, natural light and cool atmosphere attract users to sit comfortably for a long time in the reading room.
- UG and PG students can borrow two books at a time for a week. The teachers can borrow twenty books for each academic session.
- Journals, periodicals, magazines and other reading materials are available for teachers and students.
- We have open access for all this facility and motivate the users to handle more books other than specific books.
- Personal attention with users makes them feel friendly and encourages for utilizing the recent updated library facilities.
- Listening to students problems and guiding them properly.
- Guidance and counseling to students for personality and career development.

**4.2.8 What are the special facilities offered by the Library to the visually/physically challenged persons? Give details.**

- Presently the library has no facilities for visually impaired students.
- The physically challenged students are given top priority while issuing books.

**4.2.9 Does the Library get the feedback from its users? If yes, how is it analyzed and used for improving the Library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed and used for further improvement of the Library services?)**

- Feedback is obtained through personal discussions with library users.
- Feedback is also received in prescribed formats from the users.
- Feedback and suggestions are invited from library users through the suggestion box.
- The librarian and library committee members discuss frequently on collected advices, suggestions and feedback forms from the users. After discussion we put forward good suggestions to the principal and LMC for its implementation as early as possible.
- We also take follow-up to implement our demands by the management for betterment of college library and its services.

**4.3 ICT Infrastructure:**

**4.3.1. Give details on the computing facility available (hardware and software) at the institution.**

- **Number of computers with Configuration (provide actual number with exact configuration of each available system)**

**Total no of computers:**

Sr. No.	Headings	Details
1	Total Number of computers with actual configuration (provide actual number with exact configuration of each available system)	<b>60</b> Microsoft Windows 7, Windows 7 Home, Windows 7 Ultimate, Windows XP (2002), Windows XP Professional.
2	Computer-Student ratio	20:1
3	Stand alone facility	4
4	LAN facility	Yes
5	Wi-Fi facility	Yes
6	Licensed software	<ul style="list-style-type: none"> <li>▪ <i>Windows XP Pro</i></li> <li>▪ <i>Windows Svr 2003</i></li> <li>▪ <i>Windows Svr Cal 2003</i></li> <li>▪ <i>Windows SL 8</i></li> <li>▪ <i>Microsoft Office Pro 2003</i></li> <li>▪ <i>V. Studio Net Pro 2003</i></li> <li>▪ <i>CMS 8.0</i></li> <li>▪ <i>CMS 10.0</i></li> <li>▪ <i>Library Automation Software (LIBMAN)</i></li> </ul>

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		<ul style="list-style-type: none"> <li>▪ <i>Quick Heal Antivirus</i></li> <li>▪ <i>Visual Basic 6.0</i></li> <li>▪ <i>Microsoft Windows7</i></li> </ul>
7	Number of nodes/ computers with internet facility	26
8	Any other : Laptops	07

**Total Number of computers with their configurations and Location**

Sr. No	Location	Number of computers	Configuration
1	Principal's and Vice-Principals' Cabin	02	Dell Pentium (R) Dual Core CPU E 5200, 2.50 GHz, 800 MHz, DDR, 1.99GB RAM, Microsoft Windows 7
2	Office administration	07	<p><b>4 Nos.-</b> M-serbaer 15" Monitor, Intel (R) Pentium (R) CPU E 5200 GHz, 1.99GB RAM, Microsoft Windows XP Professional</p> <p><b>2 Nos. -</b> Acer, 15" Monitor, Intel (R) Core (TM), B-3240 CPU 3.40 GHz, 2 GB RAM. 32 bit Operating System, Microsoft Windows XP Professional (SP2) and Windows 7 Professional (SP1)</p> <p><b>1 No-</b> Lenovo 15" Monitor, Intel (R) Pentium (R), CPU 4630 @ 2.70 GHz, 4 GB RAM, 32 bit Operating System, Microsoft Windows 7 Ultimate.</p>
3	Library and Information centre	13	<p><b>4 Nos. : One Server, Two on Book Circulation Counter, One on Librarian Desktop :</b> Assembled 1+2 GB RAM, Pentium dual core 32 bits 2.50GHz, Window 7 professional, 500 GB hard disc, 19" Lenovo monitor, With Power backup system.</p> <p><b>6 Nos. : For Faculties and Students :</b> Assembled 1 GB RAM, Pentium dual core 32 bits 2.50GHz, Window 7 professional, 15" Dell monitor, With UPS</p> <p><b>2 Nos. : OPAC For Faculties and Students:</b> Assembled 1 GB RAM, Pentium dual core 32 bits 2.50GHz, Window 7 professional, 15" Dell monitor ,</p> <p><b>1 No. : For Learners</b> Celeron 32 bits, 256 MB RAM, 80 GB hard disc, 15" color Monitor</p>
4	Computer Science	20	<p><b>10 Nos.-</b> Intel (R) Pentium Dual Core, CPU E5700, 3GHz, 896 MB RAM, Microsoft Windows XP Professional 2002</p> <p><b>10 Nos.-</b> Intel (R) Pentium Dual Core, CPU E5700, 2.4Hz, 1.99 GB RAM, Microsoft</p>

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			Windows XP Professional 2002
5	Chemistry	02  1 laptop	Lenovo, Intel (R), Pentium (R), CPU G 2.70ghz, 32 bit  Dell, Windows XP (2002), Pentium (R) 1-Dual Core, CPU E400 GHz, 2.69 GHz, 0.99 GB of RAM HP PC Intel (R),Intel (TM) i3-2310M CPU@ 2.10 GHz, 32 bit Operating System
6	Physics	03	Lenovo, Intel (R),Pentium (R), CPU 630 @2.70 GHz, 4 GB RAM, 32 bit Operating System Intel Core i3, 4GB RAM,500GB HDD, 18.5" TFT Color Monitor, Keyboard, DVD Writer
7	Mathematics	01  01 laptop	Windows 7, Intel (R),Pentium (R),4 CPU 3.00GHz, 2.99 GHz, 1.50 GB RAM, 32 bit Operating System  Win. 7, Intel (R) Core (TM) i3-2310 M CPU@ 2.10 GHz, 4.00 GB RAM, 32 bit Operating System
8	Language	01  01 laptop	HP Paveilion, Windows 7 Ultimate, AMD Athlon (1.5Hz) 2 GB DDR2, RAM 320 HDD, DL DVD Writer, Web Cam, Wireless, LAN, 18.5" TFT Color Monitor, Media Card Reader, Keyboard, Mouse, Free Dos, 64 bit Operating System  Samsung RV 520 Notebook Windows 7 Home Basic SP 1, Intel (R),Core (TM) i3-2310 M 2.10 GHz, 3 GB RAM, 64 bit Operating System
9	Electronics	07          01 laptop	<b>02 Nos.</b> – Intel (R) Pentium (R) CPU, RAM, 460 GB HD, Windows7 XP Professional 2002. <b>02 Nos.</b> – Pentium (R) Dual Core CPU E5200, 1GB RAM, 300GB Hard Disk, Windows7 Enterprise. <b>02 Nos.</b> – Pentium III,10GBHard Disk,64 MB RAM (both under repair) <b>01 No-</b> Pentium (R), 4CPU,3 GHz,960 MB RAM, 70 GB Hard Disk, Winndows7 XP.  Intel (R) Core (TM) i3-2310, 3GB RAM,460GB Hard Disk, 3.3 Windows7 Ultimate

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10	Botany	01 PC 01 laptop	<b>1- Lenovo B560</b> , Intel Core i5, 2 GB DDR, 500GB Hard Disk, Finger Print reader, DOS <b>1- Pentium IV</b> , 1.7GHz, Main Board 845, 128MB RAM, 1.44MB FDD, 15" LG Monitor, 40GB HDD, 105 Keyboard, 56.6kbps int. modem, 52x cd writer, I-ball email mouse, 700VA ups.
11	Geology	01 01 laptop	Intel P4, 3.06 GHz, 512 MB RAM, 80GB HDD, 144 MB FDD, CD-RW, 15" Samsung Color Monitor, Keyboard, Mouse HP Laptop Probook (4400)
12	Zoology	02 01 laptop	1-Lenovo, Intel (R) Pentium (R) CPU G 2.90 GHz 2 GB RAM (1.89 GB Usable), 32 bit Operating System. 1-Assembled, P IV, 3.0 GHz, Dual Core, 80GB HDD, 512 MB DDR2, 945 RAM HP Presario CQ62 Notebook Intel (R) Core (TM) i3 CPU M330 2.13 GHz, 3.00 GB RAM (2.86 GB Usable), 32 bit Operating System, Windows 7 Home Premium.
13	Physical Education and Sports	Nil	-
14.	Other IT facilities: <b>Printers:</b> Color LaserJet  Dot Matrix  Copier Bar code printer Barcode scanner All in one Printers Scanners  External Hard disc External CD/DVD writer Smart board Projectors (Overhead projectors)		<b>01</b> HP Officejet K 7100 Series <b>16</b> HP M113PMKP, HP 1000, M1136, Canon LSB 2900, HP1007, 1106, 1050, 1002, HP P-1108, 1106, Monochrome ML-1666 <b>02</b> Epson LX-300+, Canon FCMC 42830/P1000 <b>01</b> Workcentre 5060 <b>01</b> Argox <b>02</b> AS 8250 (CE) <b>03</b> 2 Nos. - M 1136, 01 No.- M1005 <b>02</b> Microtech USB-380, Ben Q WEP/UPS VA 1 <b>01</b> 560 GB  <b>01</b> <b>01</b> SHIP GP, e-b cam Edge- (Luidia) <b>10</b> <b>03</b> MET-2806, MK III, Photophone <b>01</b> Liberty A – 30

	Slide projectors LCD)		<b>06</b> Sanyo DSU-30 DLP, Sharp PGD-27400, (2) Epson EB-X02, Epson M-511, NEC NP 100G)
15.	Any other Digital Cameras		<b>10</b> Canon A- 2000 IS, Nikon powershot 14 MP, Yashika FX – 7, Nikon LM, Kodak 4 MP, Fuji A500, Sony DSCW5, Nikon P 300, Olympus SP610 UZ, Olympus Palm 14 MP,
	Refrigerators		<b>09</b> Whirlpool 165L (2), Samsung 165L (02), Godrej 165L (02), Panasonic 190L (01) /165 L (02)
	AC's		<b>03</b> 01 Window AC 1.5 T (LG) 02 Split AC 1.5 T (Panasonic)
	TV's		<b>03</b> Uptron 20" Black and White TV, 32" LCD TV, Skyworth 40" LED TV
	i- Ball Tab		<b>01</b>
	Digital Storage Oscilloscope		<b>01</b>
	Functional Generator		<b>01</b>
	Digital Electrical Experiment Kit		<b>05</b>
	Fax Machine		<b>01</b> Panasonic KX-FT983

**4.3.2 Detail on the computer and internet facility made available to the faculty and students on the campus and off-campus?**

- Internet, Wi-Fi and Video conferencing facility is available in the college for faculty and students.
- All the Computers are supported with internet facility.
- The stakeholders have a free access to the college website, mohotasci.edu.in

**4.3.3 What are the institutional plans and strategies for deploying and upgrading the IT infrastructure and associated facilities?**

- The college regularly upgrades the IT infrastructure as per the advanced technology and intends to upgrade the computers with latest configurations.
- The Institution has a plan to purchase new hardware and software wherever necessary.

**4.3.4 Provide details on the provision made in the annual budget for procurement, up-gradation, deployment and maintenance of the computers and their accessories in the institution (Year wise for last four years)**

- In the annual budget, the college makes provision for procurement /Up-gradation / maintenance of computers and their accessories. The budget allocation during the last four years is shown below:

Sr. No.	Annual budget for computers and their maintenance	2011-12 Rs.	2012-13 Rs.	2013-14 Rs.	2014-15 Rs.
1.	Procurement	1,20,000/-	1,20,000/-	1,20,000/-	1,20,000/-
2.	Up-gradation	43,153/-	1,00,648/-	92,471/-	52,845/-
3.	Deployment	11,100/-	--	24,307/-	49,360/-
4.	Maintenance	43,650/-	11,135/-	46,938/-	12,252/-

**4.3.5 How does the institution facilitate extensive use of I C T resources including development and use of computer-aided teaching/ learning materials by its staff and students?**

- All departments are well equipped with computers, laptop, printer, scanner, LCD projector and smart board with internet facility for effective teaching/ learning.
- Overhead Projector (OHP) is available in conference room with all equipments.
- Faculties prepare teaching, learning materials and their projects by using ICT.
- ICT facility is available in the library with e-resources and N-List through INFLIBNET.

**4.3.6 Elaborate giving suitable examples on how the learning activities and technologies deployed (access to on-line teaching - learning resources, independent learning, ICT enabled classrooms/learning spaces etc.) by the institution place the student at the centre of teaching-learning process and render the role of a facilitator for the teacher.**

- The institute has started ICT teaching and learning devices with a moderate and sufficient use.
- We are trying our best to deploy it as widely as possible.

- As the students are at the core of teaching-learning process, college ensures that the teachers become acquainted with ICT to cope-up with increasing demand from the students.
- Computer department and in-house experts help to train the teaching and non-teaching staff in use of ICT. Faculties are enabling to teach through LCD projector, smart board, computers and audio-visual facilities.
- Teachers also use INFLIBNET facilities in the library to supplement their teaching.

**4.3.7 Does the Institution avail of the National Knowledge Network connectivity directly or through the affiliating university? If so, what are the services availed of?**

At present college does not avail this connectivity of National Knowledge Network but the college plans to have connectivity in future.

**4.4 Maintenance of Campus Facilities:**

**4.4.1 How does the institution ensure optimal allocation and utilization of the available financial resources for maintenance and upkeep of the following facilities (substantiate your statements by providing details of budget allocated during last four years)?**

- The budget allocated during the last four years for maintenance and upkeep of the facilities:

**Budget Allocation for Maintenance**

Sr. No.	Heads of Expenditure	2011-12	2012-13	2013-14	2014-15
a.	Building	49,06,000/-	21,08,540/-	21,11,540/-	1,00,000/-
b.	Furniture	2,08,000/-	53,000/-	53,000/-	20,000/-
c.	Equipments	2,96,350/-	12,10,000/-	6,70,000/-	20,000/-
d.	Computers	25,000/-	20,000/-	40,000/-	25,000/-
e.	Vehicles (Transport)	-	-	-	-
f.	Any other	45,78,700/-	16,99,762/-	14,02,320/-	2,25,000/-
	Total	1,00,14,050/-	50,91,302/-	42,76,860/-	3,90,000/-

**Actual Budget Utilization**

Sr. No.	Heads of Expenditure	2011-12	2012-13	2013-14	2014-15
a.	Building	1,58,841/-	11,23,215/-	1,13,937/-	77,858/-
b.	Furniture	8,251/-	25,772/-	44,179/-	78,058/-

c.	Equipments	5,47,987/-	3,67,216/-	1,55,483/-	76,605/-
d.	Computers	16,500/-	1,11,513/-	46,938/-	1,12,013/-
e.	Vehicles	-	-	-	-
f.	Any other	47,04,938/-	19,81,416/-	2,92,618/-	10,86,465/-
	Total	54,36,517/-	36,09,132/-	6,53,155/-	14,30,999/-

**4.4.2 What are the institutional mechanisms for maintenance and upkeep of the infrastructure, facilities and equipment of the college?**

- The major maintaining and repairing work of Electronic equipments/instruments either the college pays an AMC or per visit fee of the technicians for maintenance of computers, networking facilities, AC's, water purifier, generator etc.
- The college has appointed 5 persons on a daily wages basis for cleanliness and upkeep of the building, garden and grounds and 3 security guards including one lady guard.
- The electronic equipments, instruments, physical infrastructure maintenance and repairing works are carried out by outsourcing as per requirement.
- The minor maintenance and repairing work of electronic equipments, instruments, physical infrastructure and general work is carried out by competent teaching and non-teaching staff voluntarily.
- College is well equipped with CCTV surveillance for security purpose.

**4.4.3 How and with what frequency does the institute take up calibration and other precision measures for the equipment/instruments?**

The staff members of the respective departments take due care of the instruments and equipments. Calibration and other precision measures for the equipment/ instruments work carried out by the expert staff of our college or by outsourcing as per requirements.

**4.4.4 What are the major steps taken for location, upkeep and maintenance of sensitive equipment (voltage fluctuations, constant supply of water etc.)?**

- Most of the equipments are with built-in voltage stabilizers. Laboratories and Instrumentation Centers have a constant water supply. Few of the equipments have solar inverter back up.
- A two level supply of electricity is provided through a silent generator of 25 kVA.

- UPS/ stabilizers are available for computers to avoid data corruption or damaging instruments during power failure and voltage fluctuations.
- The constant supply of drinking water is provided through overhead and under-ground tanks with corporation water connection. We also provide purified cool water at prominent places.
- Water from dug well is pumped to the overhead tanks and from there it is constantly supplied for other utilities.
- Cleanliness of well and water tanks are carried out with ultra modern cleaning process periodically by outsourcing.

**Any other relevant information regarding curricular aspects which the institution would like to include.**

**Best Practices:**

- **Use of playground:** The college playground is a sprawling open space, which is one of the biggest playgrounds available nearby this locality. It attracts many health-minded joggers, walkers and senior citizens into the premises in the morning and evening. They perform exercises, yoga, meditation, etc. on the playground and walk or jog on it. The college permits to use play ground by citizens, other college students and sport clubs etc.
- As a gesture of social responsibility, the college has ensured that there are no charges for those who use college play ground.
- The citizens appreciate the use of college space and realize the unspoken social contribution of the college.
- **Infrastructure:** The infrastructure of the college is available to other agencies for conducting competitive examinations such as IIT, PMT, SSEE, AIEEE, GATE, TOEFEL, NET, SET, UPSC, MPSC, Banking, Staff selection etc.
- Library also provides its services to ex- students, retired staff, other college students and those who genuinely aspire to achieve success.
- College conducts many Short Term Certificate courses at minimum fees for students, which will help them in their career development and enhancement.
- **Laboratories:** We have two recognized laboratories by RTM Nagpur University, Nagpur. Many faculties are recognized guides of RTM Nagpur University, Nagpur. For the purpose of research, the research scholars use these laboratories for their research work.

## **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

### **5.1 STUDENT MENTORING AND SUPPORT**

#### **5.1.1 Does the institution publish its updated prospectus/handbook annually? If 'yes', what is the information provided to students through these documents and how does the institution ensure its commitment and accountability?**

Yes, the college publishes its prospectus. Prospectus includes details of the following:

- Reopening of the session
- Admission procedure
- Courses of studies for B.Sc. and M.Sc.
- Details of Short Term Courses
- Qualification for admission
- Mode of admission
- Payment of fees
- Rules regarding refund of other fees to all candidates
- Refund of deposits
- Fees for college leaving and other certificates
- Freeship and financial aid
- Scholarships
- Prizes awarded by college
- Attendance
- Identity card
- Medical inspection
- Physical education and recreation of students
- Other facilities for students which includes library, reading room, college magazine, cycle stand
- General discipline
- List of teaching staff
- List of non teaching staff
- Antiragging committee

Each department prepares its academic calendar which is submitted to office. College publishes “*Prerana*” magazine annually. The college is fully committed to provide good teaching and various cocurricular and extra-curricular facilities to develop the innate capacities of students.

The academic calendar of every department provides information on:

- Plan of academic, co-curricular and extra-curricular activities.
- Holidays and working days.
- It also includes dates of college tests and prelims, list of teaching and non-teaching staff.

The institution follows all the programs and activities listed in the prospectus and academic calendar of RTM. Nagpur University, Nagpur.

**5.1.2 Specify the type, number and amount of institutional scholarships / free ships given to the students during the last four years and whether the financial aid was available and disbursed on time?**

Scholarship of Rs. 900/-, every year, is given to toppers by the college. Teachers in the college voluntarily and regularly help needy and economically weak students by giving monetary support for admission, books and uniform.

**5.1.3 What percentage of students receives financial assistance from state government, central government and other national agencies?**

The percentage of students (B.Sc./ M.Sc.) who received financial assistance from state Government, central government and other national agencies is given below:

<b>Year</b>	<b>Total students admitted</b>	<b>Total number of students benefitted</b>	<b>Percentage of students benefitted</b>	<b>Total amount availed by students (Rs.)</b>
2010-11	507	302	<b>59.57</b>	12,48,605/-
2011-12	604	344	<b>57.0</b>	12,78,192/-
2012-13	672	353	<b>52.5</b>	10,94,819/-
2013-14	756	448	<b>59.3</b>	29,06,027/-
2014-15	839	443	<b>52.8</b>	18,32,713/-

*Student Support and Progression*

Year	Category /caste	No. of students availing freeship		No. of students availing scholarship		No. of students availing primary teacher concession/ SSC DEd	No. of students availing Ex-servicemen	No. of students availing EBC	No. of students availing minority scholarship	Total Number of students benefitted	Total students admitted	Percentage of students benefitted
		Grant-in-aid seats	Non-grant seats	Grant-in-aid seats	Non-grant seats							
2010-2011	SC	12	1	50	8	1	--	6	--	302	507	59.57
	OBC	44	12	94	29							
	ST	2	--	10	1							
	NT	7	--	19	4							
	SBC	2	--									
		<b>67</b>	<b>13</b>	<b>173</b>	<b>42</b>							
2011-2012	SC	13	--	46	9	1	1	3	4	344	604	57.0
	OBC	47	16	115	33							
	ST	1	1	13								
	NT	7	1	19	9							
	SBC	5	--									
		<b>73</b>	<b>18</b>	<b>193</b>	<b>51</b>							
2012-2013	SC	17	2	48	13	3	--	3	--	353	672	52.5
	OBC	35	15	145	14							
	ST	3	--	17	2							
	NT	5	2	22	4							
	SBC	3	--									
		<b>63</b>	<b>19</b>	<b>232</b>	<b>33</b>							

*Student Support and Progression*

2013-2014	SC	10	2	50	19	--	--	15	2	448	756	59.3
	OBC	25	15	191	51							
	ST	1	--	12	1							
	NT	3	1	36	11							
	SBC	2	1									
		<b>41</b>	<b>19</b>	<b>289</b>	<b>82</b>							
2014 -2015	SC	7	--	47	10	1	--	14	--	443	839	52.8
	OBC	0	--	217	82							
	ST	1	--	16	2							
	NT	3	--	35	5							
	SBC	3	--									
		<b>14</b>	<b>--</b>	<b>315</b>	<b>99</b>							

*Student Support and Progression*

Year	Category /caste	Amount disbursed for freeship (Rs.)		Amount disbursed for scholarship (Rs.)		Amount disbursed for primary teacher concession/ SSC D.Ed. (Rs.)	Amount disbursed for Ex-servicemen (Rs.)	Amount disbursed for EBC (Rs.)	Amount disbursed for minority scholarship (Rs.)	Total amount disbursed (Rs.)
		Grant-in-aid seats	Non-grant seats	Grant-in-aid seats	Non-grant seats					
2010-2011	SC	22,648/-	15,793/-	2,11,150/-	88,208/-	494/-	--	1,020/-	--	12,48,605/-
	OBC	82,384/-	1,08,964/-	36,653/-	7,944/-					
	ST	3,688/-	-	2,53,626/-	3,10,582/-					
	NT	13,116/-	-							
	SBC	3,792/-	-	60,997/-	27,546/-					
		<b>1,25,628/-</b>	<b>1,24,757/-</b>	<b>5,62,426/-</b>	<b>4,34,280/-</b>					
2011-2012	SC	30,217/-	-	1,28,432/-	1,01,558/-	536/-	520/-	510/-	19,400/-	12,78,192/-
	OBC	1,09,819/-	1,55,052/-	69,230/-	2,43,839/-					
	ST	2,048/-	6,066/-	2,70,680/-	-					
	NT	16,664/-	16,279/-							
	SBC	11,680/-	-	44,593/-	51,069/-					
		<b>1,70,428/-</b>	<b>1,77,397/-</b>	<b>5,12,935/-</b>	<b>3,96,466/-</b>					
2012-2013	SC	37,294/-	31,928/-	1,06,536/-	1,17,586/-	1,608/-	--	510/-	--	10,94,819/-
	OBC	77,270/-	1,51,153/-	3,21,072/-	1,87,786/-					
	ST	6,546/-	--	37,197/-	12,314/-					
	NT	11,210/-	22,131/-							
	SBC	6,746/-	--	48,404/-	24,668/-					
		<b>1,39,066/-</b>	<b>205212/-</b>	<b>4,06,673/-</b>	<b>3,42,354/-</b>					

*Student Support and Progression*

<b>2013-2014</b>	SC	23,000/-	40,126/-	1,59,800/-	4,01,149/-	-	-	<b>2,550/-</b>	<b>6,000/-</b>	<b>29,06,027/-</b>
	OBC	79,472/-	2,33,213/-	6,10,008/-	8,75,175/-					
	ST	2,768/-	-	37,924/-	9,263/-					
	NT	9,588/-	8,601/-							
	SBC	17,934/-	15,563/-	1,15,056/-	2,58,837/-					
		<b>1,32,762/-</b>	<b>2,97,503/-</b>	<b>9,22,788/-</b>	<b>15,44,424/-</b>					
<b>2014-15</b>	SC	19,963/-	-	1,39,263/-	1,63,036/-	<b>536/-</b>	-	<b>2,380/-</b>	-	<b>18,32,713/-</b>
	OBC	-	-	6,16,957/-	6,40,479/-					
	ST	2,897/-	-	45,098/-	18,128/-					
	NT	8,375/-	-							
	SBC	5,478/-	-	1,00,447/-	69,676/-					
		<b>36,713/-</b>	-	<b>9,01,765/-</b>	<b>8,91,319/-</b>					

**5.1.4 What are the specific support services/facilities available for:**

**Students from SC/ST, OBC and economically weaker sections:**

- Reservations in the admission as per government rules.
- GOI scholarship / freeship.
- Remedial coaching.
- Student medical aid fund, university student medical aid fund.

**Students with physical disabilities-**

- The provision of ramp, wheel chair and supportive staff is available for physically disabled students.

**Overseas students-** No application of overseas student has been received for admission in college.

**Students to participate in various competitions/National and International:**

- College provides financial assistance to participate in various competitions/ national and international event.
- Sports kit, track suit, financial support for travelling is given to the participants.

**Medical assistance to students: health centre, health insurance etc.:**

- Student medical aid fund, university student medical aid fund is available to the students.
- First aid medical facilities by renowned practitioners especially for health check up of girl students are available as and when required.
- Free medical checkup of students is a regular practice.

**Organizing coaching classes for competitive exams**

- Guidance is given to students by the experienced and qualified staff of our college as and when required by students. College library has good books for these examinations.

**Skill development (spoken English, computer literacy, etc.)**

- Institute has started various short term courses through which students develop their skills. Few are listed below:
  1. Vocabulary building
  2. Effective communication
  3. Instrumentation for B.Sc. Students
  4. Circuit design, printing and implementation
  5. Measuring instruments, testing, fault finding and repairs
  6. Personality development
  7. Human resource management
- The library staff regularly conducts computer literacy programmes.

### **Support for “slow learners”**

- Slow learners are given due attention and appropriate support by providing extra classes, remedial coaching, study material, question bank, assignments specially for diagrams. Poster competition is held based on important topics for examination.
- Mentor teachers also provide special attention to slow learners and help to solve their difficulties.

### **Exposures of students to other institution of higher learning/ corporate/ business house etc.**

- Visit to research centers and renowned institutes such as Maharashtra Remote Sensing Application Centre, VNIT Campus, Nagpur, Indorama Synthetic Private limited, Agmark laboratories, Raman Science center, Government Institute of Science, Government Institute of Forensic Sciences, Nagpur, National Chemical Laboratory (NCL), Pune, National Thermal Power Corporation (NTPC), Nagpur is a regular feature.
- Study/ educational tours are essential and integral part of their curriculum and are regularly organized.

### **Publication of student magazines-**

- College magazine “*Prerana*” and wall magazine “*Chhatrasamvaad*” publish articles and poems written by students.
- Daily ‘*Sakal*’ in association with college has organized various activities like Nagpur Smart City Interactive session, ‘*Chala Desh Ghadavu ya*’, etc. under “Young Inspirators Network”.

### **5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.**

Some of the short term courses initiated by the institute are useful to facilitate entrepreneurial skills. Experts are invited to deliver lectures on entrepreneurial skills and industrial training.

- Study tours, excursions, visits to exhibitions and reputed training centers are undertaken regularly.
- Mehendi and rangoli competition, flower arrangement competitions are also held regularly as a part of annual gathering so as to motivate the students to take up as a profession to begin with.
- Placement Cell has organized 100 hours ‘TCS training program’ in which special trainer by Tata Consultancy Services was deputed.
- Pre-placement counseling sessions and lectures for personality development of students are organized.

Impact of these efforts:

- Students have become more aware about placement opportunities and self-employment.
- Entrepreneurial skill is developed among the students.

**5.1.6 Enumerate the policies and strategies of the institution which promote participation of students in extracurricular and co-curricular activities such as sports, games, Quiz competitions, debate and discussions, cultural activities etc.**

- **Additional academic support, flexibility in examinations**
- **Special dietary requirements, sports uniform and materials**
- **Any other**

To develop a ‘person into personality’, institute has initiated and started short term courses and subject associations/societies.

A committee is constituted to conduct the extracurricular and co-curricular activities. The schedule is displayed for the various competitions. The students are always encouraged and motivated to participate in quiz competitions, debate, discussions and cultural activities help them to develop their innate capacities.

**The policies and strategies of the college regarding additional academic support-**

- Flexibility in examinations at college level.
- Reservations in admissions through management without accepting any donation.
- Felicitation of students by awarding certificates, medals, cash prizes, mementoes during annual gathering and as a part of celebrations of National festivals by college management.
- Extra classes for practical are conducted for student participants.
- Extra guidance is provided to the students as and when required.
- Financial support is provided to students when they represent college in various cultural and sports events.
- Reference books are made available to the students by teachers.

**Special dietary requirements**

- Outside experts as well as teachers advise students for their health, hygiene and diet.
- Energy food is provided at the time of matches and during practice.
- Dietary experts regularly visit the college for consultation of students.

### **Cultural activities**

Students get full support by teaching and non teaching staff of the institution for organizing and participating in various cultural competitions. They have participated and won awards at national as well as international level.

#### **5.1.7 Enumerate on the support and guidance provided to the students in preparing for the competitive exams, give details on the number of students appeared and qualified in various competitive exams such as UGC-CSIR- NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central /State services, Defense, Civil Services, etc.**

There is no formal training centre in the college. However, we conduct:

- Seminars / guest lectures for personal development. Qualified and experienced staff is always cooperative to guide students for these competitive exams.
- Library and Language Departments help students to improve writing ability and communication skills.
- Basically being an undergraduate institution, most of the students go for their post graduation or higher studies elsewhere.
- Books for competitive examinations donated by staff members are made available through library to the students.
- Many students from Department of Geology have cleared UPSC exam and are placed as Class I officers.

#### **5.1.8 What type of counseling services are made available to the students (Academic, personal, career, psycho-social etc.)**

##### **Academic counseling**

- Necessary guidance is provided to students by the admission committee on a wide range of academic flexibilities and choosing their group depending on their interest and choice.
- The college organizes workshops/seminars for academic counseling to the students.

##### **Personal counseling**

- Teacher mentor system is implemented in which a teacher is allotted one batch and he / she gives attention to their problems in all respects.
- The principal and vice-principals interact with the students from time to time for discussing their problems.

- Health check-up camps are regularly organized.

#### **Career counseling**

- Career counseling is provided to the students by the Counseling / Placement Cell. Seminars are also organized for dissemination of information about career options.
- Various subject societies also arrange lectures on their prospects and opportunities.
- For career guidance, students are encouraged to attend seminars and conferences organized by other colleges also.

#### **Psycho-Social counseling**

- Programmes on stress management are organized.
- Guests are invited to communicate with students on sensitive issues like cybercrimes, dangers of drugs and alcohol, legal awareness, traffic and road safety, etc
- '*Jagar Janivancha Abhiyan*' of Government of Maharashtra is conducted regularly for gender sensitization by Women cell.
- Resource persons from various fields are invited for psychological counseling.
- Teachers are mentors of group of students from related subject. Teacher helps students not only in academics but tries to solve their personal, emotional or social problems also that might otherwise adversely affect their lives.

#### **5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes', detail on the services provided to help students identify job opportunities and prepare themselves for interview and the percentage of students selected during campus interviews by different employers (list the employers and the programmes).**

- Yes, the college has Training and Placement Cell.
- Companies like ACC cement, ICICI bank, INFOSYS, TCS (Tata Consultancy Services), WIPRO have conducted interviews.

#### **5.1.10 Does the institution have a student grievance redressal cell? If yes, list (if any) the grievances reported and redressed during the last four years.**

- The college has a student grievance redressal cell.
- Regular counseling of the students is held regarding discipline.
- Suggestion boxes are available at prominent places.
- No significant grievances were reported during last four years.

**5.1.11 What are the institutional provisions for resolving issues pertaining to sexual harassment?**

- The college has a Permanent Cell against Sexual Harassment and Gender Violation. This cell resolves the issues regarding sexual harassment. The details of this cell are displayed at prominent places.
- An Internal Complaint Committee (ICC) has been constituted under “The sexual harassment of women at work place (Prevention, Prohibition and Redressal Act, 2013) which deals with the complaints regarding sexual harassment. The details of the ICC are displayed at prominent places.
- Complaint/ suggestion boxes are accessible to students.
- Permanent Cell against Sexual Harassment and Gender Violation along with Women cell organizes lectures/ workshops/ seminars by inviting experts from the legal profession.

**5.1.12 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

- Yes, anti-ragging committee is in place.
- Its banners are displayed at some prominent places in the college campus.
- Ragging in any form is forbidden on and off the campus and the college takes stern action if this rule is violated. An undertaking is taken from the students and parents after confirmation of admission.
- So far no such incidences have occurred.

**5.1.13 Enumerate the welfare schemes made available to students by the institution.**

- Free medical checkup by medical officer and first-aid facility is available.
- Payment in installment for admission fee, book bank scheme and guidance are provided to needy student.
- Free internet and subsidized reprography facility is made available.
- Various cash prizes for students and for the wards of non-teaching staff for their academic achievements are regularly given.

- Winners of departmental poster competitions, PowerPoint competitions and for other curricular and extracurricular activities (particularly girl students) are awarded with prizes.
- Stress management programmes are organized.
- Conducive atmosphere is provided for the girl students.

**5.1.14 Does the institution have a registered Alumni Association? If ‘yes’, what are its activities and major contributions for institutional, academic and infrastructure development?**

The Alumni Association is in place in the college though it is not registered. Many eminent alumni visit our college for invited talks.

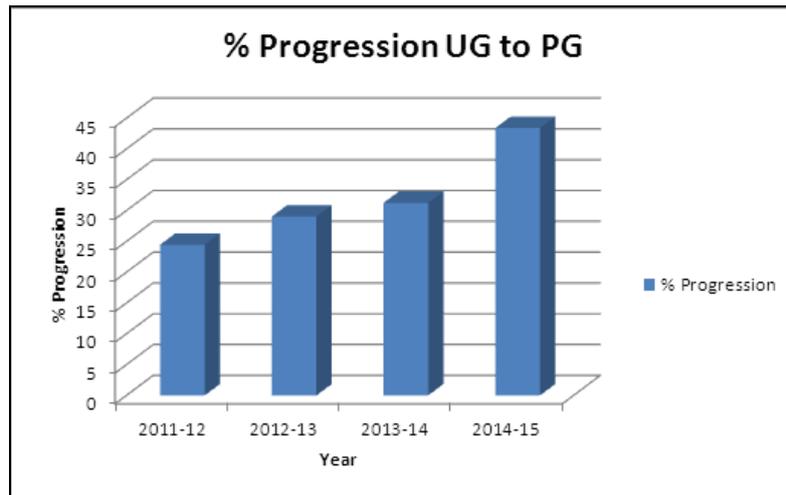
**5.2 STUDENT PROGRESSION**

**5.2.1 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlight the trends observed.**

Approximate data of students progressing to higher education (out of passed students) is as under:

Student progression	%			
	2014-15	2013-14	2012-13	2011-12
UG to PG	43.39%	31.25	29.03%	24.44%
PG to M.Phil.	-	-	-	-
PG to Ph.D.	-	-	-	-
Employed				
▪ Campus selection	01	-	-	-
▪ Other than campus recruitment	NA	NA	NA	NA

NA: Not available



- We have started with post graduation in four subjects. Physics and Chemistry departments have also been recognized as Place for Higher Learning and Research in year 2012-13.
- Students graduating from our college and after post graduation in Geology are placed in Geological Survey of India (GSI), Indian Bureau of Mines (IBM), Groundwater Survey and Development Agency (GSDA), Directorate of Geology and Mining (DGM), etc.

**5.2.2 Provide details of the programme wise pass percentage and completion rate for the last four years (cohort wise/batch wise as stipulated by the university)? Furnish programme-wise details in comparison with that of the previous performance of the same institution and that of the Colleges of the affiliating university within the city/district.**

The programme wise pass percentage, completion rate and comparison with some colleges affiliated to R.T.M. Nagpur University for the last four years is:

Year	Programme	S.M.M. College of Science, Nagpur		Passing % of other colleges			
		Passing %	% Completion Rate	Shivaji Science College, Nagpur	Hislop College, Nagpur	S. K. Porwal College, Kamptee	R.T.M. Nagpur University, Nagpur
2014-15	B.Sc.	36.5	14.51	NA	61.29	NA	56.72
	M.Sc. Chemistry	50.00	14.28	NA	50.00	NA	40.72
	M.Sc. Physics	00	00	-	-	-	NA
	M.Sc. Mathematics	58.33	31.81	-	-	-	NA
2013-14	B. Sc.	61.54	22.77	71.50	65.30	84.00	62.58
	M.Sc. Chemistry	27.00	20.00	62.50	35.00	57.10	47.98
	M.Sc. Physics	00	00	-	-	-	23.46
	M.Sc. Mathematics	11.11	31.81	-	-	-	45.38
2012 -13	B.Sc.	51.67	23.66	72.00	76.00	52.4	58.51
	M.Sc. Chemistry	80.00	28.57	77.77	64.28	57.9	73.78
	M.Sc. Physics	Not Applicable					
	M.Sc. Mathematics	Not Applicable					
2011-12	B.Sc.	62.50	25.56	72.00	61.19	64.4	57.83
	M.Sc. Chemistry	66.67	66.66	76.47	76.47	80.0	63.27
	M.Sc. Physics	Not Applicable					
	M.Sc. Mathematics	Not Applicable					

NA- Not available

### 5.2.3 How does the institution facilitate student progression to higher level of education and /or towards employment?

- Post-graduation in Chemistry, Mathematics, Physics and Botany is offered to students.
- Departments of Physics and Chemistry have been as recognized as Place for Higher Learning and Research by RTM Nagpur University, Nagpur since 2012-13.

- The Placement Cell guides the students on career options and helps them to prepare for higher studies and campus interviews.
- Subject societies organize guest lectures by eminent academicians and scientists which motivate the students towards pursuing higher research.
- Library is well equipped with resource material on various competitive examination like Banking, UPSC, MPSC, NET, SLET, GATE and entrance examinations for higher education, etc.
- Subscription to 'Employment News' and display of advertisements on notice board throughout the year by library staff.
- Some departments organize guest lecture series, workshops and symposia aiming specifically at advances in the subject which create interest in students for pursuing higher studies. Also entrepreneurial skills are developed by short term courses which can help the students.

**5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?**

- Remedial classes are conducted for weaker students.
- Teacher mentor scheme is in practice in the college.
- Extra classes are conducted by faculty members to deal with difficulties faced by students.
- Assignments, previous question papers of RTM Nagpur University, Nagpur and college, study notes, etc. are given to the students.
- The principal addresses the students immediately after their admission along with the Heads of the departments.
- The principal interacts with the students and parents to identify and discuss their problems received through suggestion box, feedback and also at personal level.
- Teachers maintain a good rapport and communication with the student.
- Teachers provide support to students who remain absent due to genuine reason by providing study material and extra time for submission of assignments or maximum course completion etc.
- Book Bank Scheme is available for the economically weaker students.
- Read and Grow programme has been initiated by the library staff.
- The students' performance is constantly monitored through regular assessments like unit tests, class tests and assignments.

- Facility of part payment of admission fee is available for U.G. and P.G. students.
- Special counseling for the students and parents of weaker section is undertaken.

### **5.3 Student Participation and Activities**

#### **5.3.1 List the range of sports, games, cultural and other extracurricular activities available to students. Provide details of participation and program calendar.**

- A number of sports, games, cultural and other extracurricular activities are available for the students under different heads and associations like NSS, NCC, Sports Department, Library and Women Cell.
- Various sports, debate and elocution competitions, Annual Social Gathering where students participate in singing, dancing, personality contest, ethnic dress competition, flower show, science poster exhibition etc. are organized. This annual cultural event and sports day are mega events of the college. Faculty members, non-teaching staff members and students not only participate but are actively involved in organizing the events.
- The college calendar provides the program schedule of the activities to be held in the ensuing session.
- Plan of the curricular/extracurricular activities to be conducted by various cells/associations/societies are mentioned in the calendar. The Annual Social Gathering and Sports Day is held every year usually in the first week of January.
- Sports activities in association with R.T.M. Nagpur University, Nagpur are also organized on a regular basis.

The following games and sports are available to the students:

Sports and games indoor	Chess, Table Tennis, Wrestling, <i>Yoga</i>
Sports and games outdoor	Athletics, Badminton, Basketball, Cricket, Football, Handball, Swimming, Throwball, Volleyball, Water polo, <i>Kho-kho, Kabaddi, Mallakhamb, Gymnastics.</i>
Cultural	Dance, Fancy Dress, Mimicry, Mono acting, One Act Play, Singing, Traditional dress, etc.
Extracurricular activities	Cleanliness drive, Debate, Elocution, Health awareness activities, Road safety etc.

### Sports and Games (2010-11 to December 2015)

#### A. International

Session	Date	Event	Name of student
2014-15	11-14/11/2014	Asian International <i>Yoga</i> Competition at South Korea	Ms. Dhanshree Lekurwale

#### B. National

Session	Date	Event	Name of student
2014-15	17/11/2014	All India Naval sea swimming Competition held at Mumbai	Ms. Samiksha Landge
			Ms. Shreya Thakare
2013-14	17/11/2013	All India Naval sea swimming Competition held at Mumbai	Ms. Shreya Thakare
2012-13	23/12/2013	All India long distance 14 km Swimming Competition held at Kolkata	Ms. Shreya Thakare
	10/02/2013	Marine swimming from rock to Gateway of India, Mumbai	Ms. Shreya Thakare

#### C. Intra-University

Session	Date	Event	Name of student
2015-16	14-16/09/2015	Intercollegiate Swimming competition, organized by RTM Nagpur University, Nagpur	Ms. Shreya Thakare
			Ms. Ujali Deshmukh
	26-30/10/2015	Intercollegiate Annual Athletic Tournament, organized by RTM Nagpur University, Nagpur	Ms. Nikita Raut
2014-15	5-7/10/2014	Intercollegiate Swimming competition, organized by RTM Nagpur University, Nagpur	Ms. Shreya Thakare
			Ms. Ujali Deshmukh
	11-14/10/2014	Intercollegiate Gymnastic Tournament organized by RTM Nagpur University	Mr. Rajat Munde Mr. Sarang Satpute
	26-27/12/2014	Intercollegiate <i>Yogasan</i> Tournament Nagpur	Ms. Dhanshree Lekurwale
2013-14	30/10/2013	Intercollegiate Swimming competition, organized by RTM Nagpur University, Nagpur	Ms. Ujali Deshmukh
	10/12/2013	Intercollegiate <i>Kabaddi</i> Tournament, Organized by RTM Nagpur University, Nagpur	Ms. Apeksha Nagose
	19/12/2013	Intercollegiate <i>Yogasan</i> Tournament,	Ms. Dhanshree

		Nagpur	Lekurwale
2012-13	19/08/2012	Intercollegiate Swimming competition, organized by RTM Nagpur University, Nagpur	Ms. Ujali Deshmukh
2011-12	16-18/08/2011	Intercollegiate Swimming competition, organized by RTM Nagpur University, Nagpur	Ms. Ujali Deshmukh
	16/01/2012	Intercollegiate <i>Yogasan</i> Tournament Nagpur	Ms. Dhanashree Lekurwale

### **Cultural Activities (2010-11 to December 2015)**

- The students have participated in various cultural activities like group dance, singing, one act plays, drama, muknatya, etc. at international, national and intercollegiate levels. They have also received various awards and accolades.

### **Extra-curricular Activities (2010-11 to December 2015)**

#### **NCC**

- Ms. Lavina Dhanjani and Ms. Madhura Patki attended NCC Camp in 2013-14.
- Mr. Rupendra Nagpure, Mr. Akshay Bhojar and Mr. Roshan Borkar attended NCC Camps in 2013-14.

#### **NSS**

- 2015-16: NSS volunteers organized Save Environment trip to Ramdegi Dist Chandrapur on 30 August 2015.

### **2014-15**

<b>Sr. No.</b>	<b>Date</b>	<b>Name of Activity</b>	<b>No. of Participants</b>
1.	13/09/2014	Blood Donation Camp sponsored by Jeeven Jyoti Blood Bank, Nagpur	40
2.	26/09/2014	Participated in 100th Convocation of RTM Nagpur University.	15
3.	30/09/2014	Save Environment Trip to Ramdegi, Dist. Chandrapur.	90
4.	13/10/2014	Clean India Drive (Rally) and Voter's Awareness Rally in Reshimbagh Zone, Nagpur	264
5.	26/11/2014	Participated in <i>Sanvidhaan Diwas</i> Rally organized by RTM Nagpur University	35
6.	06/02/2015	Participated and Interacted with Shri Nitin Gadkari, Minister, Govt. of India at Scientific Sabhagrih, Laxminagar, Nagpur	300

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7.	21-27/02/2015	Seven Day's Special Village Camp at Karhandla (Tirkhura, Sev, Thana), Tah. Umrer Dist. Nagpur	100
8.	13/03/2015	Participated in One Day Workshop on "Clean India Movement: Youth Power with Scientific Approach" at Institute of Science, Nagpur	50

**2013-14**

<b>Sr. No.</b>	<b>Date</b>	<b>Name of Activity</b>	<b>No. of Participants</b>
1.	26/07/2013	Shramadaan	100
2.	11/09/2013	Participation in Vishwabandhutva Din	75
3.	02/10/2013	Street Play on Dangers of Drugs/ Alcohol	15
4.	02-03/10/2013	Participation in 2 <sup>nd</sup> Anti-Drug Abuse Gathering held at V. Deshpande Hall, Nagpur	100
5.	03/10/2013	Participation in Essay Competition in Anti Drug Abuse Gathering held at V. Deshpande Hall, Nagpur	20
6.	25-31/01/2014	Special Village Camp at Soundad Dist. Gondia	75

**2012-13**

<b>Sr. No.</b>	<b>Date</b>	<b>Name of Activity</b>	<b>No. of Participants</b>
1.	21/07/2012	Guest Lecture: Importance of NSS	150
2.	26/07/2012	Shramdaan	150
3.	01/08/2012	Tree Plantation	75
4.	01/08/2012	Save Female Child Rally by NSS Volunteers	150
5.	20/08/2012	Debate on Environment Awareness	50
6.	28/08/2012	Elocution on Role of Youth in India's Progress	140
7.	05/09/2012	Teachers Day Celebration	350
8.	10/09/2012	Essay Competition Role of Teacher in Making Society	50
9.	24/09/2012	Group Discussion Corruption: A Fatal Disease in Society	35
10.	29/09/2012	Participation in Seminar at Legal Aid Service, Civil Court, Nagpur	10
11.	03-07/12/2012	Special Village Camp at Satgaon, Tah. Hingna Dist. Nagpur	90
12.	09/12/2012	Participation in "Organ Plantation" at Instt. Of Engg. Hall, North Ambazari Road, Nagpur	12
13.	14/12/2012	Participation in Adv. Rajendra Rathi Intercollegiate Essay Competition held at Smt. Binzani Mahila Mahavidyalaya, Mahal, Nagpur	02
14.	30/01/2013	Guest Lecture on Gandhiji and Modern India	150

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15.	08-13/02/2013	NSS Special Village Camp at Banor (Hingna) Ta. Mouda Dist Nagpur	75
16.	18/02/2013	Blood Donation Camp	100
17.	14/04/2013	NSS Volunteers participated in "Save Nag River Campaign"	60

**2011-12**

<b>Sr. No.</b>	<b>Date</b>	<b>Name of Activity</b>	<b>No. of Participants</b>
1.	06/06/2011	Participation in "International Day Against Drug Abuse and Illicit Trafficking"	200
2.	28/06/2011	Fresher's Orientation	150
3.	30/06/2011	Essay Writing Competition (I Love India)	25
4.	07/07/2011	Queries and Quandaries	100
5.	18/07/2011	College Foundation Day Celebration	350
6.	23/07/2011	Bokare Collegiate Elocution Competition	75
7.	01/08/2011	Inauguration of <i>Chhatrasamvaad</i> College Wall Magazine and Debate on "Corruption and Lokpal"	100
8.	13/08/2011	Tree Plantation in College Campus	100
9.	20/08/2011	Environmental Trip to Ramdegi	40
10.	23-29/08/2011	Participation in Female Anti-Foeticide National Movement held at Pune	100
11.	06/09/2011	Article Writing (On Teacher's Day)	40
12.	07/09/2011	Rapid Writing Competition	100
13.	08/09/2011	Guest Lecture on "Importance of Ayurveda"	100
14.	10/09/2011	Teacher's Day Celebration	100
15.	16/09/2011	Inauguration of Social Service Society and Informal Group Discussion	400
16.	23/09/2011	"Democracy in India" informal Group Discussion	200
17.	24/09/2011	Participation in Dharma Bharti Mission	75
18.	24/09/2011	Group Discussion on "Saving Water and Electricity"	100
19.	29-30/09/2011	Gram Jan Sanwaad Camp at Soundad Village	100
20.	01/10/2011	Participation in Dance Competition at Nikalas College, Nagpur (2 <sup>nd</sup> Prize)	100
21.	11/10/2011	Inauguration of <i>Chhatrasamvaad</i> college Wall magazine (English Edition)	15
22.	19/10/2011	Guest Lecture on "Major causes of Osteoporosis"	100
23.	28/11/2011	Jyotiba Fule Death Anniversary Celebration	300
24.	22/12/2011	Participation in "Workshop on Corruption" held	200

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		at Gurunanak Bhavan, Nagpur by NSS Dept., RTMNU, Nagpur	
25.	28/12/2011	Participation in “Workshop on Attitude Development, WAD” at Smt. Binzani College, Mahal, Nagpur	10
26.	03/01/2012	College Day Celebration	400
27.	21-22/01/2012	Participation in NMC Elections	80
28.	30/01/2012	Guest Lecture on “Gandhiji and 21 <sup>st</sup> Century”	200

**2010-11**

Sr. No.	Date	Name of Activity	No. of Participants
1.	28/08/2010	Shramdaan	100
2.	02/09/2010	Tree Plantation	50
3.	23-27/02/2011	Special Village camp at Tirkhura Ta: Umrer Dist. Nagpur	75

**Continuing Adult Education and Extension**

Sr. No.	Session	Date	Name of Activity
1.	2015-16	17/07/2015	Blood Donation Camp
		08/09/2015	International Literacy Day
		09/10/2015	Environment conservation and <i>Swachata</i> Abhiyan at <i>Panchavati</i> Old Age Home.
2.	2014-15	01/10/2014	Tree plantation at department
		11/07/2014	World Population Day
		13/09/2014	Blood donation camp
		22/08/2014	<i>Rakshabandhan</i> at <i>Panchavati</i> Old Age Home
		22/08/2014	<i>Swachata</i> Abhiyan at <i>Panchavati</i> Old Age Home
		17/10/2014	Workshop on Meditation and yoga
3.	2013-14	17/10/2014	White cane day and organ donation awareness program
		11/02/2014	A talk on “Divergent Thinking”
		21/08/2013	<i>Rakshabandhan</i> Program at old age home
4.	2011-12	07/10/2013	Talk on Literacy of Non-Addiction
		16/12/2011	Visit to <i>Aanandvan</i> , Warora

**Women Cell**

Sr. No.	Session	Date	Name of Activity
1.	2014-15	10/03/2015	Celebration of International Women’s Day and Felicitation of girl students excelling in sports. Invited Talk on “Belief and Misbelief”

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2.	2013-14	21/12/2013	<i>Jagar Janivancha Abhiyan</i>
3.		08/03/2014	Workshop on “stress management”
4.	2012-13	13/09/2012	Invited talk on Hazardous Biopollutants
5.		21/12/2012	<i>Jagar Janivancha Abhiyan</i> . Suggestion on women security in society were invited from students
6.		28/12/2012	<i>Jagar Janivancha Abhiyan</i> . Interaction with Police Sub-Inspector
7.		11/03/2013	Workshop on Cardiopulmonary resuscitation
8.	2011-12	16-17/09/2011	Participated in National Conference on Career prospects for Women Empowerment
9.		22/09/2011	Guest Lecture on Role of Women in Society
10.		04/02/2012	Guest Lecture on Cyber Crimes
11.		16/03/2012	Cardiac Health Check up Camp in collaboration with Wockhardt Hospitals, Nagpur
12.	2010-11	13/08/2010	Guest Lecture on Global Warming and Sustainable Development
13.		08/03/2011	Wellness Evaluation Camp (Body Mass Index, Visceral fat, trunk fat, BMR, Body age) by health consultants of Herbalife International

**Department of Library and Information Centre**

Sr. No.	Session	Date	Name of Activity
1.	2014-15	14-19/07/2014	One week Internet literacy programme
2.		04/09/2014	Book Exhibition
3.		10/10/2014	Handwriting competition
4.		12/10/2014	Essay competition on, “Dr. (Babasaheb) Bhimrao R. Ambedkar his life and work on social reformation in India”
5.	2013-14	02-07/09/2013	How to use Internet
6.		23/09/2013	Book Exhibition
7.		07/10/2013	Essay Competition. Topic- To Save Environment: my view and my contribution
8.		NA	Poems writing competition
9.	2012-13	07/08/2012	Read and Grow programme
10.		18/09/2012	Book Exhibition
11.		03/10/2012	Writing skill competition
12.		03-15/10/2012	How to use Internet
13.		03-15/10/2012	Computer Operating and PPT slide Making
14.		05/10/2012	Reading skill competition
15.	2011-12	16/09/2011	Book Exhibition
16.		23/09/2011	Writing skill competition
17.		27/09/2011	Book Review Writing competition
18.		01/10/2011	Reading skill competition
19.		15/01/2012	Book Reading Competition

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20.	2010-11	13/08/2010	Book Exhibition
21.		December 2010	General Knowledge test examination
22.		January 2011	Book reading competition
23.		NA	One week computer literacy programme
24.		NA	Internet literacy programme

NA= Not Available

**Others**

Session	Date	Event	Name of student	Class	Rank
2015-16	16/10/2015	Poster Competition, Kamla Nehru Mahavidyalaya, Nagpur	Ms. Sayali Muley	B.Sc. Semester I	Second
			Ms. Ruchika Ramtekkar		
2014-15	14/02/2015	Attended a Workshop On Soil-Less, Organic Terrace Gardening organized by Shivaji Science College, Nagpur	Mr. Khushbu Gawhane	B.Sc. Semester IV	-
			Ms. Snehal Lenghe		
			Ms. Bhavana Gandait		
			Ms. Diksha Wanjari		
			Ms. Kanchan Bangade		
2014-15	02/02/2015	Participated in Poster Competition organized by Dr. Ambedkar College, Nagpur	Ms. Lavina Dhanjani	B.Sc. Semester IV	-
			Ms. Aafreen Sheikh		
			Ms. Madhura Patki		
			Mr. Yogesh Mudliar		
2014-15	23/12/2014	Intercollegiate PowerPoint Presentation Competition organized by Dharampeth M. P. Deo Memorial Science College, Nagpur	Ms. Nurussuba Sheikh	B.Sc. Part III	Second

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Session	Date	Event	Name of student	Class	Rank
	08/01/2015	Participated in Avishkar Stage II	Ms. Payal Kale	B.Sc.	Selected for Stage III
			Ms. Nikita Thakur		

2013-14	29/10/2013	Attended a one day workshop on 'Biofertilizers' in Shivaji Science College, Nagpur	Mr. Brahmacharan Mishra	B.Sc. Part II	-
			Ms. Aashita Jaiswal		
2012-13	2012-13	Participated in Avishkar	Ms. Shraddha Deshpande	B.Sc. Part III	-
	24/10/2012	Presentation Competition organized by Shivaji Science College, Nagpur	Ms. Jyotsna Bajare	B.Sc. Part III	-
			Ms. Diksha Dabrase	B.Sc. Part II	
	09/12/2012	State-level Drawing Competition and Exhibition- 2012 organized by Consumer Service and Research Association	Mr. Ankit Maraskole	B.Sc. Part I	Consolation
			Mr. Brahmacharan Mishra	B.Sc. Part I	-
			Ms. Neha Lati	B.Sc. Part I	
			Ms. Roshni Kanoje	B.Sc. Part I	
			Ms. Rupali Charlewar	B.Sc. Part I	
			Ms. Nayana Bhandarkar	B.Sc. Part I	
			Ms. Neha Chaware	B.Sc. Part I	
			Ms. Payal Shewatkar	B.Sc. Part III	
			Ms. Vibhuti Upasani	B.Sc. Part III	
			Ms. Priyanka Meshram	B.Sc. Part III	
		Ms. Kartiki Kawale	B.Sc. Part III	Consolation	
12/12/2012	Intercollegiate Quiz competition "Electro-Quest – 2012" organized by the	Mr. Roshan Borkar	B.Sc. Part I	-	
		Ms. Ashwini Burile			

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		Department of Electronics, Jankidevi Bajaj college of Science, Wardha	Ms. Ashwini Korpe Mr. Aniket Markhande Mr. Rajat Chikankar Ms. Priyanka Chaudhari	B.Sc. Part II  B.Sc. Part III	
	17/12/2012	Scientific Rangoli Competition, MICROCOSM, organized by M.P.Deo Memorial Dharampeth Science College, Nagpur	Ms. Rupali Charlewar Ms. Nayana Bhandarkar	B.Sc. Part I	Third -
	29/12/2012	Attended seminar competition on Electronics organized by Department of Electronics, Dr. Ambedkar college, Nagpur, in collaboration with Dept. of Electronics, RTM Nagpur university, Nagpur And SPEED	Ms. Ashwini Burile Ms. Ashwini Korpe Ms. Kajal Chikankar	B.Sc. Part I B.Sc. Part II B.Sc. Part III	
	26/02/2013	Intercollegiate Seminar competition organized by S. M. Mohota College of Science, Nagpur	Ms. Jyotsna Bajare Ms. Shraddha Kale	B.Sc. Part III B.Sc. Part II	-
2010-11	18/01/2011	One day Seminar on “Environmental Pollution due to thermal Power Stations” organized by S. M. M. College of Science, Nagpur in association with National Power Training Institute Western Region, Nagpur	94 students registered		

**5.3.2 Furnish the details of major student achievements in co-curricular, extracurricular and cultural activities at different levels: University/State/Zonal/National/International, etc. for the previous four years.**

**Achievements in Cultural/ co-curricular/ extracurricular activities**

**International**

Session	Date	Event	Rank
2015-16	07/10/2015	Rangyatra- International Kiran Sangeet va Nrutya Samaroh	First
		Folk Dance- International Kiran Sangeet va Nrutya Samaroh	Third
2014-15	16-20/09/2014	Group Dance competition at International Theatre Festival organized by Eastern Zonal Cultural Centre (E.Z.C.C.) at Cuttack	First

**National**

Session	Date	Event	Rank
2014-15	05-09/11/2014	Participated in Folk Dance competition at All India Inter-University 'Indradhanushya-2014', organized by SGBAU, Amravati	Represented RTM Nagpur University

**State**

Session	Date	Event	Rank
2014-15	21/11/2014	Folk Dance Competition organized by Maharashtra Kamgar Kalyan Mandal	First and Third

**Inter-University**

Session	Date	Event	Rank
2014-15	25-29/11/2014	Participated in Dance Competition at Inter-University Youth Festival, Berhumpur University, Orissa	Represented RTM Nagpur University

**Intra-University**

Session	Date	Event	Rank / Award
2015-16	14/08/2015	Patriotic Song Competition organized by Lokmat Yuva Next	First
	20/10/2015	Folk dance competition organized by	First

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		Lokmat Yuva Next and Somalwar Mahila Mahavidyalaya, Nagpur	
	16/10/2015	Poster Competition, Kamla Nehru Mahavidyalaya, Nagpur- Ruchika Ramtekkar and Sayali Muley	Second
2014-15	09/03/2015	Group Song Competition- <i>Yuvarang-2015</i>	Second
		Folk Dance Competition- <i>Yuvarang-2015</i>	Second
		One Act Play- <i>Yuvarang- 2015</i>	Third
		<i>Muknatya- Yuvarang- 2015</i>	First
	23/02/2015	National Conference at Dr. Ambedkar College, Nagpur- Mr. Mangesh N. Zade	Best paper presentation
	23/12/2014	Intercollegiate PowerPoint Presentation Competition organized by Dharampeth M. P. Deo Memorial Science College, Nagpur- Nurussuba Sheikh	Second
2013-14	25-28/02/2014	Group Singing competition in RTMNU Inter-collegiate ' <i>Yuvarang- 2015</i> '	Second
2012-13	25/09/2012	UG-Poster competition at Shri Shivaji Science College, Nagpur- Ms. Payal Dongre	Third
		PG-Poster competition at Shri Shivaji Science College, Nagpur- Ms. Mausamee Tarane and Ms. Roshani Pakhare	Third
	17/12/2012	Scientific Rangoli Competition- Ms. Rupali Charlewar	Third
	2012	Inter-collegiate seminar at LAD College, Nagpur- Ms. Neha Goyal	First
	2012	Inter-collegiate seminar at LAD College, Nagpur- Ms. Payal Bhatt	Third
	2012	Seminar Competition at Bhawbhuti Mahavidyalaya, Amgaon- Mr. Rajat Chikankar	First
	2012	Seminar Competition at Bhawbhuti Mahavidyalaya, Amgaon- Ms. Prachi Padole	Consolation
2011-12	10/12/2011	Intercollegiate seminar in collaboration with RTMNUCTA- Ms. Sonu Kshirsagar	Third
	29/12/2011	Intercollegiate Seminar at Kamla Nehru Mahavidyalaya, Nagpur- Mr. Swapnil Sayare	First
	29/12/2011	Intercollegiate Poster competition at Sevadal Mahavidyalaya, Nagpur- Ms. Payal Dongre	Second

**Sports and games**

**A. International**

Session	Date	Event	Name of student	Rank / Medal
2014-15	11-14/11/2014	Asian International Yoga Competition at South Korea	Ms. Dhanshree Lekurwale	First; 1 Gold, 1 Silver and 1 Bronze

**B. National**

Session	Date	Event	Name of student	Rank / Medal
2014-15	17/11/2014	All India Naval sea swimming Competition held at Mumbai	Ku. Samiksha Landge	Third
			Ku. Shreya Thakare	Third
2013-14	17/11/2013	All India Naval sea swimming Competition held at Mumbai	Ku. Shreya Thakare	Eighth
2012-13	23/12/2012	All India long distance 14 km Swimming Competition held at Kolkata	Ms. Shreya Thakare	Fourth
	10/02/2013	Marine swimming from rock to Gate way of India, Mumbai	Ms. Shreya Thakare	Third

**C. Intra-University**

Session	Date	Event	Name of student	Rank/ Medals
2015-16	14-16/09/2015	Intercollegiate swimming competition, organized by RTM Nagpur University, Nagpur	Ku. Shreya Thakare	First; 2 Gold and 1 Silver
			Ku. Ujali Deshmukh	Second; 1 Silver and 1 Bronze
	26-30/10/2015	Intercollegiate Annual Athletic tournament, organized by RTM Nagpur University, Nagpur	Ku. Nikita Raut	First; 1 Gold and 2 Silver
2014-15	05-07/10/2014	Intercollegiate swimming competition, organized	Ku. Shreya Thakare	First; 3 Gold

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		by RTM Nagpur University, Nagpur	Ku. Ujali Deshmukh	Second; 3 Silver and 1 Bronze
	11-14/10/2014	Intercollegiate gymnastic tournament organized by RTM Nagpur University	Mr. Rajat Munde	First; 1 Gold
			Mr. Sarang Satpute	Second; 1 Silver
	26-27/12/2014	Intercollegiate <i>yogasan</i> tournament Nagpur	Ku. Dhanshree Lekurwale	First; 1 Gold, 1 Silver and 1 Bronze
2013-14	30/10/2013	Intercollegiate swimming competition, organized by RTM Nagpur University, Nagpur	Ku. Ujali Deshmukh	First; 1 Gold, 2 Silver and 1 Bronze
	10/12/2013	Intercollegiate <i>kabaddi</i> tournament, organized by RTM Nagpur University, Nagpur	Ku. Apeksha Nagose	First
	19/12/2013	Intercollegiate <i>yogasan</i> tournament, Nagpur	Ku. Dhanshree Lekurwale	First; 1 Gold and 1 Silver
2012-13	19/08/2012	Intercollegiate swimming competition, organized by RTM Nagpur University, Nagpur	Ku. Ujali Deshmukh	1 Gold and 2 Silver
2011-12	16-18/08/2011	Intercollegiate swimming competition, organized by RTM Nagpur University, Nagpur	Ku. Ujali Deshmukh	1 Gold and 1 Silver
	16/01/2012	Intercollegiate <i>yogasan</i> tournament Nagpur	Ku. Dhanashree Lekurwale	1 Silver

**5.3.3 How does the College seek and use data and feedback from its graduates and employers, to improve the performance and quality of the institutional provisions?**

- The principal and vice-principals interact at personal level with the graduates
- Suggestion boxes are installed.
- Feedback is taken from graduates.
- Problems are discussed in student council, IQAC and LMC meetings and the problems, if any, are rectified.
- Skill based short term courses have been started after getting inputs from employers.

**5.3.4 How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the publications / materials brought out by the students during the previous four academic sessions.**

- ‘*Chhatrasamvaad*’, a wall magazine is being brought out since the last 15 years which highlights articles and poems by students.
- College magazine ‘*Prerana*’ is published annually where the articles, poems, event reports and photographs are published. Its editorial board comprises of both teachers as well as students.
- Posters are displayed on the display boards of various cells like the Environment Cell, Women Cell, Cultural Activity Centre, NSS and sports. The departments of Botany, Zoology, Chemistry, Physics and Electronics encourage the students to prepare charts on relevant topics and display them in the subject notice board.
- Students are motivated for publishing articles in renowned dailies and participating in Radio talks and talk shows on Nagpur Doordarshan dealing with burning issues.

**5.3.5 Does the College have a Student Council or any similar body? Give details on its selection, constitution, activities and funding.**

- The college has a Students Council which is constituted as per the guidelines and notification by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur vide section 40 (2) (b) of Maharashtra University Act, 1994.
- The constitution of Student Council is as under:
  - Hon’ble Principal - Chairman
  - One senior teacher nominated by the principal
  - Teacher in-charge of National Cadet Corps
  - National Service Scheme Programme Officer
  - One student from each class – Academic Merit
  - Director of sports and Physical Education
  - One student from: - a) Sports b) National Service Scheme and Adult Education c) National Cadet Corps. d) Cultural Activities
  - Two lady students
- Activities  
The students' council conducts many programs. The council organizes annual social gathering which includes sports day, annual cultural event, science exhibition, flower show, rose day, fashion show, music, dance, drama, quiz, elocution competitions etc.

The council also celebrates important occasions like Republic Day, Teachers Day and Gandhi Jayanti.

- **Funding**  
For activities organized for students, the college provides financial support.

**5.3.6 Give details of various academic and administrative bodies that have student representatives on them.**

- Student council comprises of student members.
- IQAC has representation of students.
- Various subject associations have students as office bearers under the guidance of teacher in-charge. Students organize programs and activities conducted by these cells.
- Certain associations in the college like sports and cultural activity centre, NSS have students in the capacity of office bearers.
- The editorial board of college magazine '*Prerana*' and wall magazine '*Chhatrasamvaad*' have student members.

**5.3.7 How does the institution network and collaborate with the Alumni and former faculty of the Institution.**

- Former staff faculties are members of IQAC and Management Council.
- They are also invited as guests and judges for various academic and cultural activities and also as guest speakers.
- Alumni members are invited as guests and resource persons for interacting with the students in seminars, conferences and guest lectures.
- Feedback from former faculty and alumni is collected.

**Any other relevant information regarding Student Support and Progression which the college would like to include.**

- 'Book Bank' for economically weaker students by College Library.
- Felicitation of students excelling in academics, games and sports, cultural and extra-curricular activities by College Management on Republic Day every year.
- Best Library User award is given by library to students.

### *Student Support and Progression*

- Cash prize and trophy is awarded every year for essay competition to the students on the occasion of Ambedkar Jayanti celebrated by the college library.
- Career development guidance by staff members and librarian throughout the year.
- Subject toppers are felicitated by giving awards and cash prizes instituted by teaching faculty and supporting staff who have donated some amount. This amount is kept in fixed deposit and interest thereon is given as prize as per the instruction of donor.
- Prizes and certificates are given to students for participation in various extra-curricular and co-curricular activities by various departments.
- UGC Sponsored Career Oriented Programme on Solar Energy and Medicinal Molecular Biochemistry (Biotechnology) are available to the students.
- Under Environmental studies B.Sc. II year students have project work. Coordinator and Teacher in charge take initiatives to involve students in completion of project work (Practical based-Laboratory work). Around 250-270 students complete the project work every year.
- Short term courses in various disciplines are being conducted to inculcate the research quality in students and also to motivate them for higher teaching and social responsibility to become wise citizens and contribute to the Nation.
- Seminars, workshops and invited talks are organized for the students of various disciplines which expose them to recent advances and research going on worldwide in the field of science and technology.
- Training and Placement cell is established in college and various companies like ICICI Bank, TCS, WIPRO, Infosys etc. conduct their placement drives.
- Students' seminar/PPT presentation is also conducted in each academic session for the students of B.Sc. and M.Sc.
- Study tours/ Excursions are arranged for the students of B.Sc. and M.Sc. classes regularly.
- Visits to research laboratories and institutions like NEERI, CICR, CCRI, NBSS, NARC, Forensic Science Department, Institute of Science, Nagpur, State forensic laboratory, Nagpur are arranged for the students.

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- Grievance Redressal Cell, Internal Complaint Committee and Women cell were established in college to sort out the grievances of students, teachers and non teaching staff members of the college and give them justice.

## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

#### **6.1.1 State the vision and mission of the Institution and enumerate on how the Mission statement defines the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, institution's traditions and value orientations, vision for the future, etc.?**

##### **Vision**

The college is a center for imparting knowledge about basic sciences with their applicability to the society.

The college strongly believes that advances in basic sciences will mainly contribute towards building powerful knowledge based, multicultural and highly developed society. In-depth knowledge of mathematical, biological, physical and earth sciences along with modern outlook has been the main concern of the college.

The college envisages knowledge based multicultural society based on sound footing of basic sciences ready to contribute to international advances in the coming years. In this regard the college recognizes crucial importance of academic freedom, shared governance and strong faculty. The college believes in undertaking proactive measures to keep pace with the changing world.

The college is one of the prestigious colleges in Central India. Here, science education is a fusion of class room teaching and practical. Faculty is committed to students and their quest for excellence in science, education and research.

The college envisages development of mutual respect, leadership and quest for excellence among staff members and students.

##### **Mission**

The fundamental mission of the college is to generate and disseminate knowledge in basic sciences to further the physical, economical and intellectual well being of students and to motivate and enable students to seek highest levels of intellectual achievements and personal growth. The aim of the college is to create science graduates and postgraduates who will contribute to the progress of the nation in science and technology. At the same time, the college is committed to produce responsible citizens with a sense of integrity, honesty and more importantly having high moral values to the society.

**The distinctive characteristics of the college reflecting the vision and mission statement:**

- The college strives very hard to communicate the vision and mission to its stakeholders. Efforts are made to achieve standard of academic environment through linkage between teaching, learning and evaluation.
- Cultural, moral and social values amongst the students are inculcated via well qualified and dedicated faculty.
- Adequate and well-maintained infrastructure, well-equipped laboratories, and gymnasium are in place.
- Modern ICT facilities are used in teaching, learning and administration.
- Multiple combinations in UG programs.
- Post graduate courses in Chemistry, Physics, Mathematics and Botany.
- The college has been recognized as Place for Higher Learning and Research in the subject Physics and Chemistry.
- Overall development is achieved through sports and extra-curricular activities. The college organizes the programmes of birth and death anniversaries of social reformers.

**6.1.2 What is the role of top management, Principal and Faculty in design and implementation of its quality policy and plans?**

**Role of Top Management**

The objective of the Management is to impart the quality and affordable education to all. The management provides all the necessary financial support to update and maintain the infrastructure of the college. Management encourages the staff to visit the renowned institutes to develop vision for quality improvement in the field of education. Local Management Committee meets to review the policy, plans and action taken by the college as and when required.

**Role of Principal**

The principal works as the bridge between management and the stakeholders. The plans for various curricular and co-curricular activities are prepared by the principal in coordination with IQAC coordinator, heads/ coordinators of department and coordinators of various administrative assistance committees. The principal ensures the effective execution of the policies adopted by the management. The

principal is very keen and attentive about the progress of the institution.

### **Role of Faculty**

- Various committees chalk out the academic plan of the college. Proper counseling of the students about course selection is done at the time of admissions. Schematic plans for the co-curricular and extra-curricular activities are prepared to increase the overall development of students. The faculty members are nominated on various administrative assistance committees for attaining conducive academic ambience for the students. The college council contributes in preparing the policy and execution of plans. The college council meets twice in a year to discuss the progress of studies, the needs of the students, improvement of academic efficiency, internal management and discipline of the college. The faculty members are actively involved in mentor scheme.

### **6.1.3 What is the involvement of the leadership in ensuring?**

- **The policy statements and action plans for fulfillment of the stated mission**
- **Formulation of action plans for all operations and incorporation of the same into the Collegial strategic plan**
- **Interaction with stakeholders**
- **Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders**
- **Reinforcing the culture of excellence**
- **Champion organizational change**
- **The policy statements and action plans for fulfillment of the stated mission**
- **Formulation of action plans for all operations and incorporation of the same into the Collegial strategic plan**
- The management entrusts leadership to the principal who in turn leads the college. The management is the governing body and meets frequently in a year. For smooth functioning of the college various committees are formed. The principal is the chairperson for most of the committees. Committee members give feedback to the principal. After rigorous brainstorming sessions most of the decisions are considered and finally implemented by the management. The decisions are taken strictly adhering to the directions of management and action plan prepared in advance.
- The principal monitors the progress of the college through review meetings and also implements policies framed by the management and local managing committee. Based on information from various

stakeholders, the principal plans the priority for its effective implementation. The principal monitors receipts, expenditure and accounts with the provisions made in the budget and places before LMC.

- IQAC meets regularly to discuss the various issues related to the development of the college, academic environment, welfare of staff and students, planning various academic and administrative activities of the college.
- The principal often interacts with stakeholders, alumni for better support and maintains healthy relations with them. Alumni also extend their support to the betterment of the college.
- College has students' council as per the norms laid down by R.T.M. Nagpur University, Nagpur. The principal discusses various programmes related to students for their proper implementation and execution. The principal also takes feedback from the students about their difficulties, quality of teaching, facilities provided, etc.
- The principal interacts with the parents to discuss progress of their wards and seeks suggestions and feedback from them on various issues, formally and informally, for improvements in the college functioning. All the staff members are asked to remain present in these meetings so that any grievance personally attended.
- The management believes that college is like a family and all staff members are part and parcel of it. Therefore, any grievances arising in the college can be sorted out effectively. Individual or collective disputes or grievances of the staff members are addressed by the principal in the best possible manner at the college level.
- To promote the culture of excellence, wholehearted contribution of all the staff members is ensured at every level.
- For adopting new rules or policy of the management the principal invites opinion of the concerned HODs /in-charge about the feasibility of its implementation. Staff members are taken into confidence and ensured that decisions should be properly implemented. Changes in the existing rules and regulations are brought about after a thorough discussion in college council meetings based on the situation. A list of infrastructure requirements from various departments is procured and fund is allotted as per the requirement and viability. Administrative powers and responsibilities are delegated to teachers.
- Appropriate allotment of workloads for smooth and healthy work culture is adopted.
- Staff members are rewarded from time to time as per their achievements in various fields.
- The principal holds the college council meeting with non-teaching staff members to discuss the problems/ grievances if any.

**6.1.4 What are the procedures adopted by the institution to monitor and evaluate policies and plans of the institution for effective implementation and improvement from time to time?**

- The institution has well defined and transparent methods to monitor and evaluate the effective implementation and execution of its policies and plans. The policies and plans are discussed at various levels from time to time.
- Desired aims and objectives are achieved through various committees consisting of IQAC and HODs through study of self-evaluation/ deliberations/ discussions. After thorough discussion necessary steps are taken to ensure its implementation. The decisions taken are implemented effectively.
- The faculty, principal, and management interact with all stakeholders. Information received from different sources is tabled in the meetings of IQAC, LMC and managing committee.
- The policies and plans of the institution are effectively implemented and monitored through the following:
  - managing committee meeting,
  - local management committee meeting,
  - departmental meeting,
  - college council meeting,
  - student council meeting,
  - HOD's meeting,
  - IQAC meeting,
  - research committee meeting,
  - feedback from students.

**6.1.5 Give details of the academic leadership provided to the faculty by the top management?**

- The management motivates and encourages faculty members to develop innovative insights and the programs of the institution which can be used for the progress of the college.
- The management provides administrative liberty to the principal. The principal plays a vital role in ensuring effective communication amongst all the staff members of the college.
- All heads and coordinators of various departments along with faculty members have liberty to adopt modern academic methods to benefit the students.
- The teaching and non-teaching staff is encouraged to organize conferences/ symposia/ workshops/ seminars and to attend orientation and refresher courses to enhance their knowledge and remain updated.

They are also encouraged to publish research work at national and international platforms.

- Curricular and co-curricular activities are monitored by head of the department of the respective subjects.
- Faculty members are encouraged to represent academic bodies at various levels.
- Management ensures proper implementation and execution of Maharashtra University Act, 1994 to have representatives of teaching faculty and non teaching staff on the local managing committee and managing council.
- The college is recognized by RTM Nagpur University, Nagpur as Place for Higher Learning and Research in Physics and Chemistry. Many faculties are research supervisors. The top management, as a governing body, appreciates and rewards the academic excellence.

#### **6.1.6 How does the college groom leadership at various levels?**

- Various activities of the college are monitored by respective committees.
- Students are groomed for leadership through students' council, NSS, NCC, CAEE and various associations.
- Students exhibit their leadership qualities by organizing various functions, events and celebrations like welcome function, farewell functions and anniversaries of well known social reformers and freedom fighters, national days and Gandhi Jayanti.
- Faculty members, non-teaching staff and students are felicitated for their excellence and achievements on the occasion of Republic Day.
- The staff members and students represent our college in various government and non-government organizations.

#### **6.1.7 How does the college delegate authority and provide operational autonomy to the departments / units of the institution and work towards decentralized governance system?**

- The principal provides operational autonomy to all heads of the department for smooth functioning.
- Periodic meetings of the committees consisting of the principal, heads of departments/ coordinators and members of various cells are held to improve the quality of education.
- Decentralization of governance is ensured via various administrative assistance committees.

**6.1.8 Does the college promote a culture of participative management? If “yes”, indicate the levels of participative management.**

Yes.

- The college believes in a participative management and includes all in the administration, like Employees Credit Co-operative Society, cycle stand committee. The principal is ex officio president of these societies. All the cells/ associations are governed by the staff and students of the College.
- As per the Maharashtra University Act 1994, Local Management Committee (LMC) is in place. Three members from teaching faculty and one member from non-teaching staff are represented on LMC.
- The faculty members are involved in the decision making process during the meeting of college council and the IQAC. The conveners of various committees also have involvement in the decisions and deliberations of the meeting.
- The important suggestions regarding college development from the stakeholders are sought by the principal during staff meetings.
- All decisions are taken by the principal in consultation with stakeholders. Decisions regarding finances, developmental activities etc. are taken after discussion in IQAC and approval of LMC.

**6.2 Strategy Development and Deployment:**

**6.2.1 Does the Institution have a formally stated quality policy? How is it developed, driven, deployed, and reviewed?**

Yes.

- Management of the college believes the equality of rights of education to one and all. This is depicted from the monogram of governing body (Nagpur Shikshan Mandal) as " तत्सुखसुखित्वम् ".
- *Vision, mission* and *objectives* of the institution ensure the quality of education.
- The Administrative assistance committees, IQAC and local managing committee meet regularly for planning and effective implementation and execution.
- The decided policies are reviewed periodically by the managing committee, LMC, IQAC and college council.

**6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.**

Yes.

The following aspects are considered for inclusion in the perspective plan for development.

- Development plans are chalked out in advance by the departments regarding teaching, research and extension activity.
- Development of infrastructure and technological facilities are as per requirements.
- Promotion of ICT in teaching-learning process.
- Up-gradation of research laboratories for enhancing research activities.
- Recognition for higher learning and research centers in all subjects.
- Participation in cultural activities at state and national level.

**6.2.3 Describe the internal organizational structure and decision making processes.**

The internal organizational structure of the institution is as follows:

- The managing committee president of the society plays a central role in the decision making process for development and progress of the college.
- The policies regarding the quality enhancement, the financial support and decisions of the managing committee are carried out by local managing committee.
- The principal is empowered to take decisions on academic and administrative matters of the college.
- The college council also helps the principal on matters related to discipline and improvement of the academic upgradation of the college.
- All administrative matters related to faculty and students are handled by the office.
- Extracurricular activities are planned in consultation with students' council.

**6.2.4 Give a broad description of the quality improvement strategies of the Institution for each of the following**

- **Teaching and Learning**
- **Research and Development**
- **Community engagement**

- **Human resource management**
- **Industry interaction**

**Teaching and Learning:**

The college authorities execute strategies for the quality improvement in teaching learning process in the following manner:

- Qualified and competent teaching faculties are appointed as per the rules and regulations of the University, UGC and State Government.
- Effective teaching-learning facilities are made available to the teachers and students.
- Faculty is encouraged to use modern facilities to make teaching effective.
- Faculty members and students are inspired to update themselves from time to time.
- Lectures from eminent personalities are organized in the college.
- The college has well-equipped laboratories.
- To provide facilities to pursue doctoral research work in the college.
- Text books, journals, reference books are provided in the library.
- Periodic tests, assignments are in place for the evaluation of students through internal assignments.

**Research and Development:**

- The departments of Physics and Chemistry of the college have been recognized as Place for Higher Learning and Research by RTM Nagpur University, Nagpur.
- The management and principal of the college encourage teaching staff members to apply for major/ minor research projects to various funding agencies like UGC, CSIR, DST, DRDO, BARC etc.
- Speakers are invited to deliver talks to benefit staff and students through subject organizations and conferences and workshops. The college regularly organizes the national conference/ workshops and has also co-hosted the international symposium and conference.
- Many faculty members of the college are the recognized as supervisors for Ph.D.
- Post graduate students of various subjects are encouraged to participate in research activities like national and international seminars.
- The UG and PG students are motivated by visiting to research Institutes and expose to latest development in research field.

**Community engagement:**

- The college encourages students to take part in NSS, CAEE, NCC and other extension activities.
- The college organizes various programs to enable the students to respond to the larger issues of society like literacy mission, blood

donation camps, NSS national integrity camps, medical check-ups, cleanliness drive, tree plantation, visit to Old Age Home, intercollegiate competitions, etc.

- The college also organizes awareness programs on vital issues such as Legal Aid and Awareness Program with the help of District Legal Services Authority, Nagpur.
- The staff and students are motivated to take active participation along with NGOs in social programmes.

**Human resource management:**

Human resource management has become necessary for the development of the college,

- Teaching staff of the college is promoted on the basis of their PBAS and non-teaching staff of the college are promoted as per their performance.
- Various courses are organized to enhance expertise of existing human resource which helps in the betterment of the students.

**Industry interaction:**

- The students of Industrial Chemistry carry out their project work in collaboration with industries as a part of curriculum.
- Industry visits are arranged for the interaction of the students with industry personnel.
- Students of Geology are regularly exposed to mining industry.

**6.2.5 How does the Head of the institution ensure that adequate information (from feedback and personal contacts etc?) is available for the top management and the stakeholders, to review the activities of the institution?**

The head of the institution ensures that adequate information is made available to the top management through following activities;

- The periodic meetings are organized with the teaching faculty and non-teaching staff.
- Personal interaction with staff and students.
- Feedback of the students through suggestion box.
- All administrative and academic activities are placed before the LMC.
- The administrative and academic activities are discussed in IQAC meetings and report is submitted to the higher authorities.
- The report on teaching quality, curricular, extra-curricular activities and infrastructural requirements are prepared by the various departments and are communicated to the top management by the principal.

**6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?**

- HODs are authorised to look into every aspect of departmental functioning.
- Management has instituted following award to acknowledge the contributions of teaching staff.  
Senior college teacher: Late T. G. Deshmukh Best Teacher Award
- All committees are headed by staff members and they play an important role in planning and implementation of activities in different spheres of institutional functioning.
- The LMC takes informal feedback from the staff and forward their suggestions to the management in the LMC meetings. The management considers these suggestions in order to increase the effectiveness and efficiency of institutional progress.

**6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.**

- LMC has passed a resolution to meet three to four times every year. The resolution is implemented.
- Managing Committee has resolved for the development of education and infrastructure required. This resolution is implemented.

**6.2.8 Does the affiliating university make a provision for according the status of autonomy to an affiliated institution? If “yes”, what are the efforts made by the institution in obtaining autonomy?**

The affiliating university, RTM Nagpur University, Nagpur makes a provision for according the status of autonomy to an affiliated institution. However, no efforts have been made by our college till date to obtain autonomy.

**6.2.9 How does the Institution ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder relationship?**

- Suggestion box is installed in front of the principal’s office. The authorities of college analyze, address and resolve the complaints as early as possible.
- The college constituted the internal complaint committee under “Sexual Harassment of Women at Workplace and its Prevention Act, 2013”.

- The principal interacts personally with staff, students and parents. Suggestions/ complaints/ grievance received through the interactions are promptly attended and resolve by the principal.
- The college has constituted an anti-ragging committee for the prevention of ragging in the college premise as per UGC guidelines.

**6.2.10 During the last four years, had there been any instances of court cases filed by and against the institute? Provide details on the issues and decisions of the courts on these?**

- Number of court cases filed in last 4 years by the college: Nil
- Number of court cases filed in last 4 years against college: Nil

**6.2.11 Does the Institution have a mechanism for analyzing student feedback on institutional performance? If “yes” what was the outcome and response of the institution to such an effort?**

Yes.

- The principal of the college analyzes the feedback given by the students on the staff, curriculum and institution and takes the necessary steps to elevate the institutional performance.
- The student feedback on institution is discussed at the level of IQAC, LMC and college council.
- The feedbacks and suggestions received are placed before the principal for corrective measures from time to time.

**6.3 Faculty Empowerment Strategies:**

**6.3.1 What are the efforts made by the institution to enhance the professional Development of its teaching and non teaching staff?**

The efforts made by the institution to enhance the professional development of its teaching and non teaching staffs are:

- The teaching staff is encouraged to use modern tools like ICT and interactive teaching.
- The teaching faculties are motivated to participate in the conferences, seminars and workshops for updating knowledge of their subjects. Leaves are available to the staff for attending national, international conferences/ workshops.
- The teaching faculties are encouraged to attend orientation, refresher and short term courses organized by academic staff colleges and other colleges as well.
- The college authority forwards the applications of the staff for promotions under CAS to higher level.

- Non-teaching staff members of the college are permitted to participate in various administrative training programs like e-scholarship, *Sewarth* etc.
- The college recognizes the contribution of teaching faculty by best teacher award.
- The faculty involved in research, organizing seminars and workshops is given flexibility of time within the framework of rules.

**6.3.2 What are the strategies adopted by the institution for faculty empowerment through training, retraining and motivating the employees for the roles and responsibility they perform?**

- The teaching faculty and non-teaching staff members are encouraged to participate in these activities held by other reputed institutions and organizations. They are allowed to attend orientation courses, short term course, workshops organized by other institutes.
- The faculty members are encouraged to author books, publish research papers in reputed journals etc.

**6.3.3 Provide details on the performance appraisal system of the staff to evaluate and ensure that information on multiple activities is appropriately captured and considered for better appraisal.**

- A calendar for every academic session is prepared; accordingly faculty members holding responsibilities of different committees are mentioned in this calendar. This helps to organize various co-curricular and extracurricular activities by the individual departments throughout the academic session. It also makes easier for students to approach the staff members in relation to the different activities like short term courses, NCC, CAEE, sports and NSS.
- The self-assessment for the performance based appraisal system (PBAS) format approved by University and UGC includes information on activities like teaching evaluation, improvement in qualification, the information about organization and participation in seminars, workshops and conferences, co-curricular and extension activities field based activities, corporate life participation, research, publications, etc.
- The faculty member has to submit duly filled PBAS Performa at the end of each academic session to the office.
- Reports of activities organized by the various departments are submitted to the principal. This covers daily diary, attendance, confidential reports and feedback from the students and used for better performance and appraisal.

**6.3.4 What is the outcome of the review of the performance appraisal reports by the management and the major decisions taken? How are they communicated to the appropriate stakeholders?**

- On the basis of yearly self-assessment report submitted by the teaching staff and self-appraisals, confidential reports by the head of departments to the office and through personal observations. The principal suggests the improvement required in duties of the staff members and also communicates the evaluation report to the staff members.
- The score obtained from the academic performance indicator (API) based on PBAS is considered for promotion of staff member under CAS.
- Teaching faculty and non-teaching staff members take suggestions from the principal in positive spirit and use them to improve their performance.

**6.3.5 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

The welfare schemes available for teaching and non teaching staff are as:

- GPF/ CPF, pension and group life insurance schemes are in place for teaching and non-teaching staff members.
- The loan facility against GPF account is available.
- The college arranges free health check-up camp regularly under the women cell and other societies for all staff members.
- The staff members of the college with the help of the principal have established credit cooperative society in the college. This society offers long as well as short term loans to the staff members at competitive rate of interest.
- The leave travel concession scheme as per norms of State Government is in place.
- The college provides lien facility, medical reimbursement, and maternity/paternity leave for staff members as per the rules and regulations of State Government.
- The advance for Diwali festival against salary is sanctioned to the non-teaching staff.

**6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?**

- The college is one of the prestigious colleges in Central India. This college seeks an intellectually rich environment for faculty and

students where there is mutual respect, shared leadership and quest for excellence.

The measures taken by the institution for attracting and retaining eminent faculty are:

- The teaching staff is appointed strictly on the merit basis and as per norms of UGC/ University and State Government.
- The faculty for the extension in service for the periods of two years after the age of superannuation in regular service is available in the college.
- Best teacher award is instituted in the college for retaining eminent faculty. The management and principal encourage the faculty members for research and extend facilities required.

#### **6.4 Financial Management and Resource Mobilization:**

##### **6.4.1 What is the institutional mechanism to monitor effective and efficient use of available financial resources?**

- The principal, HODs and office staff regularly monitor the requirements of various departments which include new equipments, instruments, books, journals, etc. and maintenance of infrastructure. A budget is prepared taking into consideration these requirements.
- Committees are formed for proper utilization of grants received from funding agencies like UGC.
- The funds are utilized with the budgetary provisions through, quotations, comparative statements and approval by LMC.
- The college maintains separate cash book and ledgers for different heads. The transaction is supported by vouchers and cashbook.

##### **6.4.2 What are the institutional mechanisms for internal and external audit? When was the last audit done and what are the major audit objections? Provide the details on compliance.**

- Accounts of the college are regularly subjected to internal audit by registered chartered accountants, engaged by the college. The last audit was conducted on 31 March 2015.
- The external audit/ assessment is carried out by the State Government through the office of Joint Director of Higher Education. The last audit was conducted on 31 March 2011.
- There were no objections to this audit.

##### **6.4.3 What are the major sources of institutional receipts/funding and how is the deficit managed? Provide audited income and expenditure statement of academic and administrative activities of the previous four years and the reserve fund/corpus available with Institutions, if any.**

The major sources of institutional receipt/ funding are:

- Collection of fees from the students
- Salary and non-salary grants from State Government.
- Grants from UGC.
- Building rent received from various examinations agencies.
- Interest on corpus/reserve fund.
- Voluntary donations.
- Audit statements of last five years are attached (Refer Annexure XI).

**6.4.4 Give details on the efforts made by the institution in securing additional Funding and the utilization of the same (if any).**

• UGC grant to establish the Internal Quality Assurance Cell (IQAC)	Rs. 3,00,000=00
• UGC grant for remedial coaching (SC/ST/OBC) and equal opportunity centres	Rs. 2,91,250=00
• UGC grant for modern tools and techniques in plant science	Rs. 75,000=00
• UGC grant seminar in Mathematics	Rs. 64,500=00
• UGC grant seminar in Botany	Rs. 37,500=00
• UGC grant women hostel construction	Rs. 20,00,000=00
• UGC grant for development of sport equipment	Rs. 4,00,000=00
• UGC grant for Career Oriented Programme in Medicinal Molecular Biochemistry (Biotechnology)	Rs. 7,00,000=00
• UGC grant seminar in Library Science	Rs. 37,500=00
• Funds sanctioned for major research projects from various agencies	Rs. 47,10,667=00
• Funds sanctioned for minor research projects from UGC	Rs. 32,15,000=00
• UGC grant under XI plan for college development	Rs. 9,40,000=00
• UGC grant under XI plan for college development (Merged Scheme)	Rs. 14,27,000=00
• UGC grant under XII plan for general development assistance to colleges	Rs. 29,72,200=00
• UGC grant under XII plan for undergraduate development assistance scheme	Rs. 5,20,000=00
• UGC grant for additional assistance	Rs. 22,50,000=00

## **6.5. Internal Quality Assurance System (IQAS)**

### **6.5.1 Internal Quality Assurance Cell (IQAC)**

#### **a) Has institution established an Internal Quality Assurance Cell (IQAC)?**

**If “yes”, what is the institutional policy with regard to quality assurance and how has it contributed in institutionalizing the quality assurance processes?**

Yes.

The college has established an Internal Quality Assurance Cell (IQAC) on 1 November 2005.

The IQAC has been actively monitoring and participating in quality assurance within the existing academic and administrative system. The cell has regularly assessed the process as stated in the Annual Quality Assurance Reports (AQAR). It promotes quality culture in consonance with stated vision and mission of the college.

IQAC monitors and reviews all the activities of the college such as:

- Academic growth and excellence,
- Promotion of ICT in teaching, learning and evaluation process,
- Encouragement towards research aptitude and submission of research proposals to various funding agencies,
- Introduction of new programmes in the college,
- Organization of national and international conferences/ seminars/ workshops/symposium,
- Motivation and encouragement to the staff for pursuing Ph.D.,
- Preparation of future plans for development of the college,
- Introduction of innovative short term certificate courses in every department.

#### **b) How many decisions of the IQAC have been approved by the management/ authorities for implementation and how many of them were actually implemented?**

All the decisions of IQAC have been approved by the managements.

#### **c) Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.**

Yes.

- IQAC has retired teachers of the college and management representatives.
- Valuable suggestions are given by them.

**d) How do students and alumni contribute to the effective functioning of the IQAC?**

The students and well wishers offer the suggestion to IQAC and contribute for the betterment of the institution.

**e) How does the IQAC communicate and engage staff from different constituents of the institution?**

IQAC communicates through notices, e-mails, personal messages on landline and mobile phones.

**6.5.2 Does the institution have an integrated framework for Quality assurance of the academic and administrative activities? If “yes”, give details on its operationalisation.**

Yes.

**6.5.3 Does the institution provide training to its staff for effective implementation of the Quality assurance procedures? If “yes”, give details enumerating its impact.**

No.

**6.5.4 Does the institution undertake Academic Audit or other external review of the academic provisions? If “yes”, how are the outcomes used to improve the institutional activities?**

Yes. The academic audit is performed by the Local Enquiry Committee (LEC) constituted by RTM Nagpur University, Nagpur as and when required and its outcomes are used to improve the institutional activities.

**6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies regulatory authorities?**

- The college has constituted the committees for all the seven criteria in line with the requirement of NAAC.
- Opinions from other agencies are sought for the betterment of the functioning.

**6.5.6 What institutional mechanisms are in place to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?**

- Different committees are set up at the start of academic session. These committees work under the guidance of the principal and submit their report at the end of session.
- Academic calendar, daily diary, internal assessment like assignments, tests, seminars, various competitions organized by subject societies and remedial classes are in place to continuously review the teaching learning process.

**6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?**

- The management, parents, alumni are requested to meet and are briefed about quality enhancement initiatives taken by the college.

**Any other relevant information regarding Governance, Leadership and Management which the college would like to include:**

- Institute plans to start a Place for Higher Learning and Research in all subjects and Post-graduate Programme in Zoology.

## **CRITERION VII: INNOVATIONS AND BEST PRACTICES**

### **7.1 Environment Consciousness**

#### **7.1.1 Does the Institute conduct a Green Audit of its campus and facilities?**

No.

#### **7.1.2 What are the initiatives taken by the college to make the campus eco-friendly?**

##### **Energy conservation**

- Energy conservation is accomplished by taking care to switch off all electrical gadgets when not in use. Students are also motivated and oriented towards energy conservation.
- Due care is taken for ventilation in all the laboratories which provide fresh air and ample sunlight allowing us to use minimum electricity. Especially Chemistry laboratories are provided with exhaust fans. Wash rooms are also provided with exhaust fans.
- Orientation about energy conservation
- Installation of solar panel for lights in the garden

##### **Use of renewable energy**

- The Solar panels are installed under the career oriented course on Solar Energy. The stored energy backup is positively used in the office during the power failure.

##### **Water harvesting**

- Collected rain water is used in the Department of Chemistry.

##### **Check dam construction**

- This activity is not carried out in campus but National Service Scheme (NSS) unit of the college conduct an awareness program (पाणी अडवा पाणी जिरवा) during NSS residential camp at village *Tirkhura* nearby Nagpur.

##### **Efforts for Carbon neutrality**

- As efforts for carbon percentage control, all faculty members and students take caution not to use plastic.

##### **Plantation**

- All the departments have adopted a unique method of welcoming guests for various functions with a sapling. The saplings given to faculty members of the college are planted in the campus itself.

- NSS Unit of the college organizes “Save Environment Trip” every year to make public aware of the environmental loss, its flora and fauna. The volunteers give this message in the form of slogans and appeal people to save our environment and green planet.
- Tree plantation is carried out on regular basis by various departments and extension units in college premises.

### **Hazardous waste management**

- The college has installed exhaust fans particularly in Chemistry department and wash rooms and proper ventilation is provided to expel hazardous gases wherever necessary.
- Waste is collected by municipal agency regularly.
- Beside regular activities like blood donation, tree plantation, *Shramdaan*, Cleanliness Drive, Anti-Narcotic Drive, No-addiction, Voter’s Awareness conducted by Continuing Adult Education and Extension (CAEE) and NSS Unit, the NSS unit of the college also organizes Special Village Camp of one week duration to acquaint volunteers with rural part of India and its dearth of basic needs. As a community service, the NSS and CAEE units work properly to achieve its desired goal.
- CAEE of the college regularly conducts Cleanliness Program to mark *Rakshabandhan* at *Panchavati* Old Age Home every year to create responsibility among the students for their aged parents and environment awareness as a whole.

## **7.2 Innovations**

### **7.2.1 Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the college.**

1. The college has adopted a system of combination of Conventional classroom teaching and advanced interactive teaching wherein students are encouraged to interact on various aspects of curricular and allied fields.
2. Use of ICT and other audiovisual aids for teaching theory as well as practical classes.
3. The college is under electronic CCTV surveillance.
4. The non-teaching staff is regularly educated about handling of various chemicals, apparatus, specimens, fossils and various electronic instruments for smooth conduct of practicals.
5. The college conducts Career Oriented Programs like Solar Energy and Molecular Medicinal Biochemistry (Biotechnology).

6. All the departments regularly conduct various competitions like, poster competition, quiz competition and seminars on the various topics concerned to the university syllabus for students in each session.
7. All the departments conduct short term courses to give hands on training to the students which not only encourages them to enrich their knowledge but also gives them confidence to earn their basic needs. Several short term courses like PCB designing in Electronics; Medicinal Chemistry and Chemistry in pharmacy in Chemistry; Mushroom cultivation in Botany; Commercial fisheries in Zoology, etc., develop confidence among the students to become self employable after completing graduation.

### **7.3 Best Practices**

#### **7.3.1 Elaborate on any two best practices which have contributed to the achievement of the Institutional Objectives and/or contributed to the Quality improvement of the core activities of the college.**

**The following practices have lead to the fulfillment of Institutional quality improvement:**

#### **BEST PRACTICE I**

**Title of the practice: Assign-Test**

**Context that required the initiation of the practice:**

- Semester system is introduced for the UG students.
- For optimum use of time.
- Students cannot be assessed properly.
- For best possible assessment of students for proper attention and personal interaction with students.

**Objective of the practice:**

- To assess the students of UG effectively in short time.
- To build presentation skill.
- To develop the habit of self-study.

**The practice:**

- Students are asked to prepare the answers of at least two important questions from their syllabus.
- They are asked to prepare the questions thoroughly write the solution at home.
- Students are called on a particular day along with the question and answer they have prepared.
- Students are asked question to judge their preparation and are given suggestions for improvement.
- Students are also asked to use black board to explain the things in depth.

**Impact of the practice:**

- Students enthusiastically prepare the questions at home in fully relaxed and in a positive frame of mind.
- Preparations becomes more through and with a focus.
- Assimilation of knowledge is more than the traditional exam system.
- On-spot suggestions and comments by the faculty enhance the knowledge and confidence of the students.
- One-to one interaction is possible.

**Obstacles faced if any, strategies adopted to overcome them:**

- No obstacles are faced.

**Resources required:**

- Traditional resources such as chalk and talk method is used.

**Conclusion:**

- This test has proved to be an excellent tool, which can assess and encourage the students to adopt a positive attitude towards the subject, at the same time relieves them of the unnecessary pressure of the examination.

## **BEST PRACTICE II**

**Title of the Practice: Orientation of New Students**

**Context that required the initiation of the practice:**

- Students seeking admission to the college are from different Boards. They need to be oriented to a completely different pattern of University syllabus and examination.
- Further, the students that are admitted to the college come from diverse social, financial and educational backgrounds. They are required to be brought on a same platform.
- The newly admitted students are not aware of topography of the college building. Similarly, they have no or little information about various facilities in the colleges, how to use them. They have no idea of filling up of various forms like registration, machine cards and finally examination form.
- The students need to be informed about the rules, regulations of the college and responsibilities of the students themselves.
- Therefore, orientation of the students is done by the admission committee and through the principal-student interaction meet.

**Objective of the practice:**

- To orient newly admitted students of the college towards the undergraduate degree courses and examination patterns as well as towards the functioning of the college.

**The practice:**

- The admission committee performs the initial phase of orientation during the admission process.
- The undergraduate students are informed about various subject groups they can avail. Additionally the college faculty members conduct various short-term courses. Students are advised to take up courses of their choice after making them aware of the contents of these courses.
- The formal orientation is performed by the Principal-student interaction meet, where students are informed about various rules, regulations and their responsibilities. The Principal along with senior faculty members of all the departments interacts with students and inform them about the functioning of individual departments by the faculty members of respective departments.
- Further, the new students are made aware of semester pattern of internal marks.
- Electronic informative system has been installed at the entrance of the college where the information about upcoming events, competitions, schedule of various special classes, the examination timetable is displayed.

**Impact of the practice:**

- There has been tremendous increase in student-teacher interaction.
- The functioning of the office in relation to registration of the students, enrolment of the students for University examinations, submission of examination forms, payment of fees and distribution of results, has become smoother.
- Students appear more confident when they are on campus. They approach teachers more easily than before. Students share their problems and seek advice from the teachers.
- In summary, student-teacher relations have strengthened and this has resulted in better performance of the students.

**Obstacles faced if any, strategies adopted to overcome them:**

- The admission process continues for about two months. If the number of students joining late is considerably high, the orientation programme needs to be repeated.

**Resources required:**

- No special resources are required.

### **BEST PRACTICE – III**

**Title of the practice: Result Analysis System**

**Context that required the initiation of the practice:**

- To analyze results of B.Sc. (Final) examinations.

**Objective of the practice:**

- The students of various subject groups pass out from college after completion of six semesters. When they graduate, they have variety of avenues. The result analysis helps these students to understand their strengths and weaknesses.
- Result analysis also helps teachers to understand strengths and lacunae in teaching-learning process.

**The practice:**

- When the results are declared by the university, the result analysis committee analyzes the results. The names of toppers are declared on various notice boards and are appropriately appreciated. The weaker students are advised separately. The students are counseled for their carrier selection.

**Impact of the practice:**

- The number of students opting for postgraduate courses has been enhanced.
- Slow learners opt for various private courses like basic computer courses and seek employment.

**Obstacles faced if any, strategies adopted to overcome them:**

- Slow learners hesitate to contact the teachers; hence teachers make personal contact with those students.

**Resources required:**

- Audiovisual devices, LCD projector and electronic media.

## **BEST PRACTICE – IV**

### **Title of the practice: One-Day Inter College Symposium for Students**

#### **Context that required the initiation of the practice:**

- To develop responsiveness of seminar and conferences among UG and PG students and faculty members.

#### **Objective of the practice:**

- To give opportunity to the students to exchange dialogue with the eminent researchers of various fields.
- To get acquainted with the basic concept of National/ International seminar/ conferences, their purpose, requirements and arrangements as whole.
- To plant a seed of organizing an event that cultivates awareness and interest of research in the developing minds of students.
- To encourage students to choose research activity on the topic of their interest and like. Also, to make them aware of required qualification, opportunities and scopes of research in various fields.

#### **The practice:**

- The One-day inter-college symposium in Electronics is organized by the students, for the students under the auspices of Electronics Society.
- The students under the guidance of mentor teachers and the principal finalized all the financial arrangements, planning, conduction and schedule.
- The eminent researchers to deliver the invited talks were decided on the topics of fundamentals of research and current developing topics.
- The structure of symposium was arranged in such a fashion as it depicted a replica of mini conference of scientist and research groups.
- Three lectures from three resource persons were set properly in symposium, including lunch after the second session. The first session consisted of a keynote address by a research person from other university. Two lectures were delivered by speakers from the city itself with sound knowledge in their respective work.
- The main attraction of the symposium is that all the conduction of inaugural function, sessions, up to valedictory functions were conducted by the students on their own.
- Students from other reputed colleges of the city also showed their interest to attend the symposium that ended with their positive feedback in the valedictory function.
- The students were awarded different prizes of the competitions held during the respective year and toppers were given appreciation.

**Impact of the practice:**

- Students got a platform to interact with eminent researchers and resource persons invited.
- They learnt various fields of research where they can excel themselves for the betterment of their carrier
- They got exposure to present themselves as members of organizing such a big show, this not only boosts their confidence to organize such big events in near future but also encourages them to surface out their talents in research activities.

**Obstacles faced if any, strategies adopted to overcome them:**

- Financially weaker students unable to pay registration fees and opting to miss the symposium.
- College provides financial aid for the extra expenses required for miscellaneous expenditures.
- One day college schedule disturbed because of symposium is compensated on any other convenient day.
- The weaker section students were given relaxation from payment.

**Resources required:**

- No special resources are required.

**BEST PRACTICE – V**

**Title of the practice:**

**Cleanliness Program and *Rakshabandhan* at *Panchavati* Old Age Home**

**Context that required the initiation of the practice:**

- On the occasion of *Rakshabandhan* the students are taken to “Old Age Home” where students are acquainted with the pangs of loneliness faced by these deprived senior citizens. As a result students develop a bond of love and affection with them and are sensitized to take care of aged people. The students voluntarily clean the campus of old age home along with celebration.

**Objective of the practice:**

- To develop awareness about cleanliness and responsibilities towards seniors in the society.
- To help the students understand problems of old aged peoples and develops an instinct to help them in any possible manner.
- To love and respect elderly people, irrespective to the fact whether they are related with them or not.

- Regular visits by the students to the old age home works towards psychological improvements of the residents that they are not left alone by the society.
- Interactions with these seniors makes the students think that they will take care of their parents and grandparents properly.

**The practice:**

- The Department of CAEE unit regularly conducts one-day *Rakshabandhan* program in *Panchavati* Old Age Home.
- Fruits were distributed to the people of “Old Age Home” by the students of our college.
- Students did undertake the responsibility to clean the “Old Age Home” from inside as well as outside.
- On the occasion of *Rakshabandhan* celebration girls tied *Rakhi* to male inmates of the “Old Age Home” where as female members tied *Rakhi* to boy students.

**Impact of the practice:**

- The students were enthusiastic in taking part in the activity; they placed dustbins in the college.
- There was a remarkable positive change in their behavior towards staff members of the college

**Obstacles faced if any, strategies adopted to overcome them:**

- No obstacles faced.

**Resources required:**

- No special resources are required.

**SECTION – C: INPUTS FROM THE DEPARTMENTS**

**EVALUATIVE REPORT OF CHEMISTRY DEPARTMENT**

<b>1. Name of the department -</b>		Chemistry			
<b>2. Year of Establishment</b>		Under Graduate -1949 Post Graduate- 2007			
<b>3. Names of Programmes / Courses offered</b>		UG with Chemistry as one of the subject PG (M.Sc.) – (Self Funded: SF) and Ph.D. - (Self Funded: SF)			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc. –Semester pattern (Credit Based System) PG (SF): Semester pattern (Choice Based Credit System)			
<b>6. Participation of the department in the courses offered by other departments</b>		Course	Department		
		Nil	Nil		
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		For Ph.D. students Taywade College, Koradi. Shri Shivaji Science College, Amravati			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>		Position	Sanctioned	Filled	
		Professors	Nil	Nil	
		Associate Professors	05	05	
		Asst. Professors	05	Nil	
		Fixed Pay (S.F.)	Nil	02	
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)</b>					
Name of Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. M. G. Dhonde	M.Sc. SET Ph.D.	Head and Associate Professor	Organic Chemistry	16	04
Dr. I. M. Sarin	M.Sc. Ph.D.	Associate Professor	Physical Chemistry	29	Nil
Dr. S. S. Sakhare	M.Sc. Ph.D.	Associate Professor	Physical Chemistry	29	Nil
Dr. (Mrs.) R. R. Gupta	M.Sc. Ph.D.	Associate Professor	Inorganic Chemistry	22	02

*Evaluative Report of Chemistry Department*

Dr. C. B. Talwatkar	M.Sc. Ph.D.	Associate Professor	Inorganic Chemistry	26	01		
<b>11. List of senior visiting faculty</b>			Nil				
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>			UG: B.Sc.-Theory: 8.33 % Practicals: 37.60 % (C.H.B. faculty) PG (S.F.): Theory and Practical: 100 % (Ad-Hoc and C.H.B. faculty)				
<b>13. Student -Teacher Ratio (programme wise)</b>			UG	60.81 : 1			
			PG	5 : 1			
			M.Phil.	NA			
<b>14. Number of academic support staff (technical) and administrative staff</b>			Sanctioned	Filled			
			12	12			
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>			Ph.D.- 04; Ph.D. SET-01				
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>			<b>National</b>		<b>International</b>		
			Nil		Nil		
<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>			No of Project	Year	Funding Agency	Amount Sanctioned	
			03 (Minor)	2009-11	UGC	Rs. 4,25,000/-	
			01 (Major)	2011-14	UGC	Rs. 12,82,867/-	
			Total Grants received			Rs. 14,36,960/-	
<b>18. Research Centre /facility recognized by the University</b>			Department of Chemistry is recognized Place for Higher Learning and Research by RTM Nagpur University, Nagpur.				
<b>19. Publications: Publication per Faculty</b>							
<b>20. Number of papers published in peer reviewed journals (national / international) by faculty and students</b>			Faculty		National	International	Total
			Dr. M. G. Dhonde		02	13	15
			Dr. I. M. Sarin		--	02	02
			Dr. (Mrs). R. R. Gupta		04	01	05
			Dr. C. B. Talwatkar		02	04	06
<b>21. Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)</b>				All the papers are listed in 'Google Scholar'.			

*Evaluative Report of Chemistry Department*

<b>Books Published</b>	05		
<b>Books with ISBN/ISSN numbers with details of publishers</b>	Faculty	With ISSN Number	Without ISSN Number
	Dr. I. M. Sarin	01	01
	Dr. R. R. Gupta	02	--
	Dr. C. B. Talwatkar	--	01
<b>Citation Index</b>	Dr. M. G. Dhonde		24
	Dr. C. B. Talwatkar		02
<b>h-Index</b>	Dr. M. G. Dhonde		03
	Dr. C. B. Talwatkar		01
<b>Impact Factor</b>	Dr. M. G. Dhonde		0.301-2.14
	Dr. I. M. Sarin		0.465
	Dr. R. R. Gupta		0.67
	Dr. C. B. Talwatkar		0.2334-0.94
<b>20. Areas of consultancy and income generated</b>	Nil		
<b>21. Faculty as members in</b>	National committees	International Committees	Editorial Boards
	Dr. M. G. Dhonde	01	---
<b>22. Student projects</b>			
<b>Percentage of students who have done in-house projects including inter departmental/programme</b>			0.4 %
<b>Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies</b>			No
<b>23. Awards/ Recognitions received by faculty and students</b>			
S. N.	Name of Faculty/Students	Awards/Recognition	Years
01	Mr. Roshan Supare	Murkute and Late Wamanrao and Umabai Vidya Mem. Prize for secured highest marks in Chemistry (B.Sc. final Year)	2011
02	Mr. Deepak Supare	Late R.P. Chitale Mem. Prize for secured second highest marks in Chemistry (B.Sc. final Year)	2011
03	Ms. Sonu Khsirsagar	<b>Third Prize</b> (Inter collegiate seminar in collaboration with RTMNUCTA)	10/12/11
04	Ms. Payal Bhatt; Ms. Payal Dongre; Ms. Neha Goyal	<b>First Prize</b> (Quiz competition for B.Sc.-M.Sc. Chemistry students at S.M.M. college of science)	29/12/11
05	Mr. Swapnil Sayare	<b>First Prize</b> (Inter Collegiate Seminar at Kamla Nehru Mahavidyalya, Nagpur)	29/12/11
06	Ms. Payal Dongre	<b>Second Prize</b> (Inter Collegiate Poster competition at Sevadal Mahavidyalya, Nagpur)	29/12/11

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07	Ms. Sapna D. Barde	Murkute and Late Wamanrao and Umabai Vidya Mem. Prize for secured highest marks in Chemistry (B.Sc. final Year)	2012
08	Mr. Ganseh R. Surkar	Late R.P. Chitale Mem. Prize for second secured highest marks in Chemistry (B.Sc. final Year)	2012
09	Dr. M. G. Dhonde	Best Teacher Award (Late T.G. Deshmukh Memorial Award)	26/01/12
10	Ms. Payal Dongre	<b>Third Prize</b> (UG-Poster competition at Shri Shivaji Science College, Nagpur)	25/09/12
11	Ms. Mausamee Tarane and Ms. Roshani Pakhare	<b>Third Prize</b> (PG-Poster competition at Shri Shivaji Science College, Nagpur)	25/09/12
12	Ms. Saijiya Ansari	Murkute and Late Wamanrao and Umabai Vidya Mem. Prize for secured highest marks in Chemistry (B.Sc. final Year)	2013
13	Ms. Joyti Sharma	Late R.P. Chitale Mem. Prize for secured second highest marks in Chemistry (B.Sc. final Year)	2013
14	Ms. Payal Bhatt	Murkute and Late Wamanrao and Umabai Vidya Mem. Prize for secured highest marks in Chemistry (B.Sc. final Year)	2014
15	Ms. Payal Dongre	Late R.P. Chitale Mem. Prize for secured second highest marks in Chemistry (B.Sc. final Year)	2014
16	Dr. I. M. Sarin	Best Teacher Award (Late T.G. Deshmukh Memorial Award)	26/01/15
17	Mr. Mangesh N. Zade	Best Paper presentation Award (National Conference) at Dr. Ambedkar College, Nagpur	2015-16
18	Mr. Bramahcharan R. Mishra	Murkute and Late Wamanrao and Umabai Vidya Mem. Prize for secured highest marks in Chemistry (B.Sc. final Year)	2015
19	Ms. Anjali R. Michael	Late R.P. Chitale Mem. Prize for secured second highest marks in Chemistry (B.Sc. final Year)	2015
20	Mr. Amol Gedekar	Late Smt. A.S. Jodh Mem. Prize for secured highest marks in Chemistry (M.Sc. final Year)	2015
21	Mr. Bramahcharan R. Mishra Ms. Anjali R. Michael	Late Smt. A.S. Jodh Mem. Prize for secured highest marks in Chemistry Summer-2015 (B.Sc. final Year Topper –Boy and Girl)	2015
<b>24. List of eminent academicians and scientists/ visitors to the department</b>			
<b>Name of Guest/Speaker</b>		<b>Designation and Institute</b>	<b>Date</b>
Dr. Hemant Pande		Head, Hislop College, Nagpur	08/10/2011
Dr. Sunil H. Ganatra		Associate Prof., Institute of Science, Nagpur	21/02/2014
Dr. M. G. Bhotmange		Professor and Head, Department of Food Technology, LIT, Nagpur	25/04/2015
<b>25. Seminars/ Conferences/Workshops organized and the source of funding</b>			
State level Seminar: Role of Chemistry in Maintaining Ecology		Sponsored by UGC	14 <sup>th</sup> March 2015

26. Student profile programme/course wise					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
2014-15	380	290	148	142	51.09
2013-14	432	331	111	220	63.64
2012-13	305	305	101	204	61.63
2011-12	236	236	102	134	80.77
2010-11	231	231	96	135	38.10
2014-15 (M.Sc. I)	31	22	10	12	(M.Sc. II)-50.00
2013-14	20	12	03	09	33.33
2012-13	25	11	01	10	80.00
2011-12	20	13	04	09	67.00
2010-11	25	22	08	14	67.00
*M=Male *F=Female					
27. Diversity of Students					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	94	06	00		
2013-14	95	05	00		
2012-13	96	04	00		
2011-12	94	06	00		
2010-11	97	03	00		
M.Sc. I (2010-15)	100	00	00		
28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.					NET-JRF-01
29. Student progression	Student progression		Years	Against % enrolled	
	UG to PG		2010-15	42.75	
	PG to M.Phil.		2010-15	NA	
	PG to Ph.D.		2010-15	5.00	
	Ph.D. to Post-Doctoral		2010-15	NA	
	Employed				
	<ul style="list-style-type: none"> <li>• Campus selection</li> <li>• Other than campus recruitment</li> </ul>		2010-15	5.00	
Entrepreneurship/Self-employment		2010-15	NA		
30. Details of Infrastructural facilities					
a) Library	The Department of Chemistry has a departmental library enriched with adequate number of Reference books, Journals and abstract.				
b) Internet facilities for Staff and Students	Yes				
c) Class rooms with ICT facility	Yes				
d) Laboratories	3- Classical labs; 1- Instrumentation Lab; All the laboratories are well equipped, ventilated and spacious for every student. The labs have L.P.G. gas line,				

*Evaluative Report of Chemistry Department*

	exhaust fans and fire extinguisher, fuming cupboards etc.		
<b>e) Staff Room</b>	Separate staff room for teaching staff members		
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>	1556 (2010-15)		
<b>32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts</b>			
Inter-Collegiate Seminar Collaboration with RTMNUCTA		10/12/ 2011	
National UG Level "ACT Concept Test in Chemistry"		18/06/2014	
Quiz competition		23/12/11 and 14/02/14	
Short Term courses		2013 onwards	
<b>Special Lectures/Talks</b>			
<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>
Dr. Hemant Pande	Head, Hislop College, Nagpur	"Fun with Chemistry"	8/10/2011
Dr. Santosh D. Deosarkar	Assistant Professor, SRTM Univeristy, Nanded	Irreversible Thermodynamics	02/09/13
Dr. C. S. Bhaskar	Assistant Professor and HOD, Taywade college, Koradi	Medicinal Chemistry and its natural sources	12/02/2014
Dr. Sunil H. Ganatra	Associate Prof., Institute of Science, Nagpur	Rational Drugs Design	21/02/2014
Dr. Hemant Pande	Head, Hislop College, Nagpur	Chemo-secrets of Advertisement	20/09/2014
Dr. Santosh D. Deosarkar	Assistant Professor, SRTM Univeristy, Nanded	Quantum Mechanics	26/09/2014
Dr. R. U. Khope	Associate Professor, Shivaji Science College, Nagpur	Quantum Mechanics	23-24 /03/2015
Dr. W. B. Gurnule	Associate Professor, Kamla Nehru Mavidyalya, Nagpur	Coordination Chemistry	23-24 /03/2015
Dr. C. S. Bhaskar	Assistant Professor and HOD, Taywade college, Koradi	Synthesis and importance of Medicinal drugs from natural source like plant	07/04/2015
Mr. Vinod D. Deotale,	Scientist, Institute of Pesticide Formulation Technology, Gurgaon, Haryana	Waste Recycling and its Management	09/04/2015
Dr. M. G. Bhotmange	Professor and Head, Department of Food Technology, LIT, Nagpur	Food Preservative and its consequences	25/04/2015
<b>• Lab Visits</b>			
<b>Class</b>	<b>Visit at</b>	<b>Purpose</b>	<b>Date</b>
M.Sc. part-I and II	Indian Institute of chemical Technology, Hyderabad	Educational Tour	21/02/2012

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<b>33. Teaching methods adopted to improve student learning</b>	<ol style="list-style-type: none"> <li>1. Seminars and Guest lectures</li> <li>2. Power point presentation</li> <li>3. Use of ball and stick model</li> </ol>
<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>	
Faculty members involved in the Social and extension activities and motivate the students to involve in the extension activities of the institution.	
<b>35. SWOC analysis of the department</b>	
<p style="text-align: center;"><b>STRENGTH</b></p> <ul style="list-style-type: none"> <li>• A competent well qualified staff.</li> <li>• Good results as compared to the University.</li> <li>• Availability of Research facilities.</li> <li>• Self funded course.</li> </ul>	<p style="text-align: center;"><b>WEAKNESS</b></p> <ul style="list-style-type: none"> <li>• Insufficient teaching staff.</li> <li>• Poor job opportunities in city.</li> <li>• Financial constraints of student.</li> </ul>
<p style="text-align: center;"><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• P.G. and Ph.D. program in Department.</li> <li>▪ Students can appear for Competitive, NET/SET examinations.</li> <li>• Students after doing Ph.D. join to reputed institutes.</li> <li>• Employment in Chemical industries.</li> </ul>	<p style="text-align: center;"><b>CHALLENGES</b></p> <ul style="list-style-type: none"> <li>• Mediocre students at PG level.</li> <li>• To create job opportunities.</li> </ul>
<p style="text-align: center;"><b>FUTURE PLANS</b></p> <ul style="list-style-type: none"> <li>• To develop vision and interest in Chemistry amongst the students.</li> <li>• Regular student's evolution using different techniques.</li> <li>• Training for competitive examination.</li> <li>• To apply for different grants to elaborate research.</li> <li>• Self employment by using industrial project.</li> </ul>	

**EVALUATIVE REPORT OF INDUSTRIAL CHEMISTRY  
DEPARTMENT**

<b>Name of the department -</b>		Industrial Chemistry			
<b>2. Year of Establishment</b>		Under Graduate -1999-2000			
<b>3. Names of Programmes / Courses offered</b>		UG with Industrial Chemistry as one of the subject (Self Funded)			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc. -Semester (Credit based) from 2013 (S.F.)			
<b>6. Participation of the department in the courses offered by other departments</b>		Course		Department	
		Nil		Nil	
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>		Position		Sanctioned	Filled
		Visiting /Guest Faculty /CHB (Self Funded)		Nil	06
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D. / M. Phil. etc.,)</b>					
Name of Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
--	--	--	--	--	--
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		UG: B.Sc.-Theory: 100 % Practical:100 % (Visiting faculty)			
<b>13. Student -Teacher Ratio (programme wise)</b>		UG		4.4 : 1	
<b>14. Number of academic support staff (technical) and administrative staff</b>		Sanctioned		Filled	
		Nil		Nil	
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>		PG			
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>		<b>National</b>		<b>International</b>	
		Nil		Nil	
<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>					Nil
<b>18. Research Centre /facility recognized by the University</b>					NA
<b>19. Publications:</b>					Nil

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<b>20. Areas of consultancy and income generated</b>					Nil
<b>21. Faculty as members in National and international committee</b>					Nil
<b>22. Student projects</b>					
<b>a. Percentage of students who have done in-house projects including inter departmental/programme</b>					NA
<b>b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies</b>					No
<b>23. Awards/Recognitions received by faculty and students</b>					Nil
<b>24. List of eminent academicians and scientists/ visitors to the department</b>					Nil
<b>25. Seminars/ Conferences/Workshops organized and the source of funding</b>					Nil
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
2014-15	23	23	13	10	--
2013-14	23	23	14	09	--
2012-13	00	00	00	00	--
2011-12	11	11	09	02	100
2010-11	01	01	01	00	87.50
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States		% of abroad	
2014-15	100	00		00	
2013-14	100	00		00	
2012-13	100	00		00	
2011-12	100	00		00	
2010-11	100	00		00	
<b>28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>					Nil
<b>29. Student progression</b>	<b>Student progression</b>		<b>Years</b>	<b>Against % enrolled</b>	
	UG to PG		2010-15	Data not received	
	PG to M.Phil.		2010-15	NA	
	PG to Ph.D.		2010-15	NA	
	Ph.D. to Post-Doctoral		2010-15	NA	
	Employed • Campus selection • Other than campus recruitment		2010-15	Data not received	
Entrepreneurship/Self-employment		2010-15	Data not received		
<b>30. Details of Infrastructural facilities</b>					
<b>a) Library</b>		No separate departmental library			
<b>b) Internet facilities for Staff and Students</b>		Yes			

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<b>c) Class rooms with ICT facility</b>	Yes		
<b>d) Laboratories</b>	One Chemistry laboratory- is ventilated and spacious with basic equipments for every student.		
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>	47 (2010-15)		
<b>32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts</b>			
• <b>Lab Visits</b>			
<b>Class</b>	<b>Visit at</b>	<b>Purpose</b>	<b>Date</b>
B.Sc. Semester-IV	Darpan Poly Industries, Mouda	Industrial visit	22/03/2015
<b>33. Teaching methods adopted to improve student learning</b>	1. Seminars and Guest lectures 2. Prepared notes on syllabus		
<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>	Nil		
<b>35. SWOC analysis of the department</b>			
<b>STRENGTH</b>		<b>WEAKNESS</b>	
<ul style="list-style-type: none"> <li>• Good results as compared to the university</li> <li>• Self funded course</li> </ul>		<ul style="list-style-type: none"> <li>• Insufficient teaching staff</li> <li>• B.Sc. Course is non granted</li> <li>• Fee structure is decided by the University</li> <li>• Input of low caliber students</li> <li>• Financial constraints of student</li> </ul>	
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>	
<ul style="list-style-type: none"> <li>• Some UG students can do PG in Industrial Chemistry.</li> <li>▪ Students can appear for Competitive examination</li> <li>• Employment in Chemical industries</li> </ul>		<ul style="list-style-type: none"> <li>• Mediocre students at UG level.</li> </ul>	
<b>FUTURE PLANS</b>			
<ul style="list-style-type: none"> <li>• To develop interest in Industrial Chemistry amongst the students.</li> <li>• Intensive student – Teacher – Industry interaction.</li> <li>• Self employment by using industrial project.</li> </ul>			

**EVALUATIVE REPORT OF PHYSICS DEPARTMENT**

<b>1. Name of the department -</b>		Physics			
<b>2. Year of Establishment</b>		Under Graduate -1949 Post Graduate- 2012			
<b>3. Names of Programmes / Courses offered</b>		UG with Physics as one of the subject PG (M.Sc.) – (Self-Funded: SF) and Ph.D. - (Self-Funded: SF)			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc.- Semester pattern PG (SF): Semester pattern (CBCS)			
<b>6. Participation of the department in the courses offered by other departments</b>		Course	Department		
		Nil	Nil		
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>	Position		Sanctioned	Filled	
	Professors		Nil	Nil	
	Associate Professors		05	05	
	Asst. Professors		04	01	
		Fixed pay (S.F.) for PG		Nil	01
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)</b>					
Name of Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last 4 years
Dr. S. G. Charalwar	M.Sc. Ph.D.	Principal	Acoustics	28	00
Dr. M. S. Atone	M.Sc. Ph.D.	Associate Professor	Solid State Physics	27	00
Dr. J. N. Ramteke	M.Sc. Ph.D.	Associate Professor	Acoustics	27	03
Dr. V. V. Soman	M.Sc. Ph.D.	Associate Professor	Solid State Physics	26	00
Dr. D. V. Nandanwar	M.Sc. NET Ph.D.	Associate Professor	Solid State Physics	23	05
Dr. S. G. Goswami	M.Sc. Ph.D.	Assistant Professor	Acoustics	10	00
<b>11. List of senior visiting faculty</b>			Nil		
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary</b>			UG: B.Sc.- Theory and Practicals: 46 % (C.H.B. faculty) PG (S.F.): Theory and Practical:100% (C.H.B. faculty)		

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<b>faculty</b>					
<b>13. Student -Teacher Ratio (programme wise)</b>	UG		49 : 1		
	PG		10 : 1		
	M.Phil.		NA		
<b>14. Number of academic support staff (technical) and administrative staff</b>	Sanctioned		Filled		
	10		10		
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>	Ph.D.- 05; Ph.D. NET-01				
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>	<b>National</b>		<b>International</b>		
	Nil		Nil		
<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>	No of Project	Year	Funding Agency	Amount Sanctioned	
	05 (Minor)	2009-11	UGC	Rs. 6,20,000/-	
	Total Grants received			Rs. 4,92,500/-	
<b>18. Research Centre /facility recognized by the University</b>	Department of Physics is recognized Place for Higher Learning and Research by RTM Nagpur University, Nagpur.				
<b>19. Publications.</b>					
Publication per Faculty					
<b>Number of papers published in peer reviewed journals (national / international) by faculty and students</b>	Faculty		National	International	Total
	1. Dr. S. G. Charalwar		00	02	02
	2. Dr. M. S. Atone		00	03	03
	3. Dr. J. N. Ramteke		05	12	17
	4. Dr. V. V. Soman		00	03	03
	5. Dr. D. V. Nandanwar		00	15	15
	6. Dr. S. G. Goswami		02	05	07
<b>Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)</b>			All the papers are listed in 'Google Scholar'.		
<b>Monographs</b>	Nil				
<b>Books Published</b>	09				
<b>Chapter in Books</b>	Dr. J. N. Ramteke		01		
	Dr. D. V. Nandanwar		03		
	Dr. S. G. Goswami		05		
<b>Books Edited</b>	Nil				
<b>Books with ISBN/ISSN numbers with details of publishers</b>	Faculty		With ISSN Number	Without ISSN Number	
	1. Dr. J. N. Ramteke		01	--	
	2. Dr. D. V. Nandanwar		03	--	
	3. Dr. S. G. Goswami		05	--	
<b>Citation Index</b>	Dr. M. S. Atone			06	
	Dr. J. N. Ramteke			39	
	Dr. V. V. Soman			03	
	Dr. D. V. Nandanwar				
<b>SNIP</b>	Dr. M. S. Atone			1.347	
<b>SJP</b>	Dr. M. S. Atone			0.77	

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<b>h-Index</b>	Dr. M. S. Atone	01	
	Dr. J. N. Ramteke	03	
	Dr. V. V. Soman	02	
	Dr. D. V. Nandanwar	02	
<b>Impact Factor</b>	Dr. M. S. Atone	2.527	
	Dr. J. N. Ramteke	4.438	
	Dr. V. V. Soman	0.51, 0.913	
	Dr. D. V. Nandanwar	4.438	
	Dr. S. G. Goswami	2.375, 4.438	
<b>20. Areas of consultancy and income generated</b>	Nil		
<b>21. Faculty as members in</b>	National committees	International Committees	Editorial Boards
Dr. V. V. Soman working as a National coordinator in NCIEP	01	Nil	Nil
<b>22. Student projects</b>			
<b>a. Percentage of students who have done in-house projects including inter departmental/programme</b>		NA	
<b>b. Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies</b>		No	
<b>23. Awards/ Recognitions received by faculty and students</b>			
<b>S. N.</b>	<b>Name of Faculty/Students</b>	<b>Awards/Recognition</b>	<b>Years</b>
01	Mr. Roshan Supare	Bapurao Khatkhedkar Maharaj Mem. Prize secured highest mark in Physics	2011
02	Ms. Kalyani P. Nikure	Bapurao Khatkhedkar Maharaj Mem. Prize secured highest mark in Physics	2012
03	Dr. J. N. Ramteke	Best Teacher Award (Late T.G. Deshmukh Memorial Award)	26/01/2012
04	Ms. Joyti Sharma	Bapurao Khatkhedkar Maharaj Mem. Prize secured highest mark in Physics	2013
05	Dr. V. V. Soman	Best Teacher Award (Late T.G. Deshmukh Memorial Award)	26/01/14
06	Miss. Payal Bhatt	Bapurao Khatkhedkar Maharaj Mem. Prize secured highest mark in Physics	2014
07	Ms. Harsha J. Bhoyar	Bapurao Khatkhedkar Maharaj Mem. Prize secured highest mark in Physics	2015
<b>24. List of eminent academicians and scientists/ visitors to the department</b>			
Dr. Rajgopalan	PG Department of Physics, RTM Nagpur University, Nagpur	2014	
Dr. S. V. Mohril	PG Department of Physics, RTM Nagpur University, Nagpur	2015	
Dr. V. A. Tabhane	PG Department of Physics, S. P. Pune University, Pune	2015	
Dr. Mahavir Singh	NPL, New Delhi	2015	
Dr. Deoraj Singh	Amity School of Engineering, Delhi	2015	
Dr. R. R. Yadav	PG Department of Physics, Allahabad University, Allahabad	2015	
Dr. (Ms.) Paikire	Cuttack University, Cuttak	2015	

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Dr. Mannel E. Zakaria	French Embassy	2015			
Dr. Vladimir V. Petrov	Russia	2015			
<b>25. Seminars/ Conferences/Workshops organized and the source of funding</b>					
Co host for the International Conference on <b>Ultrasonics</b>	Sponsored by UGC	22 <sup>nd</sup> -24 <sup>nd</sup> January 2015			
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
<b>2014-15</b>	220	192	102	90	61.11
<b>2013-14</b>	188	163	73	90	82.14
<b>2012-13</b>	147	147	54	93	67.61
<b>2011-12</b>	90	90	44	46	72.50
<b>2010-11</b>	167	167	77	90	61.30
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
<b>2014-15</b>	94	06	00		
<b>2013-14</b>	93	07	00		
<b>2012-13</b>	95	05	00		
<b>2011-12</b>	94	06	00		
<b>2010-11</b>	96	04	00		
<b>28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>					Nil
<b>29. Student progression</b>	Student progression	Years	Total Enrolled	Against % enrolled	
	UG to PG	2010-15	246	10.00	
	PG to M.Phil.	2010-15	--	Nil	
	PG to Ph.D.	2010-15	--	--	
	Ph.D. to Post-Doctoral	2010-15	--	--	
	Employed • Campus selection • Other than campus recruitment	2010-15	--	5.00	
Entrepreneurship/Self-employment	2010-15	--	--		
<b>30. Details of Infrastructural facilities</b>					
<b>a. Library</b>	The Department has departmental core library enriched with adequate number of books				
<b>b. Internet facilities for Staff and Students</b>	Yes				
<b>c. Class rooms with ICT facility</b>	01				
<b>d. Laboratories</b>	02- Laboratory is well equipped with basic instruments.				
<b>31. Number of students receiving financial assistance from</b>				1004 (2010-15)	

college, university, government or other agencies			
<b>32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts</b>			
<ul style="list-style-type: none"> <li>Special Lectures/Talks</li> </ul>			
Name of Guest/Speaker	Designation and Institute	Title	Date
Dr. Dilip Peshwe	VNIT, Nagpur	Basics of Nano-technology	01/02/2012
Dr. Subhash Kondawar	Physics dept. PGTD Nagpur	Basics in Nano-science	02/02/2012
Dr. K G Rewatkar	Dr. Ambedkar college, Nagpur	Applications of Nano-technology	03/02/2012
Dr. Kishor Ghormare	Chairman BoS in Physics, RTM Nagpur University, Nagpur	Fascination in Science	29/08/2012
Dr. Prashant Gandhi	Ramdeo Baba Engineering college, Nagpur	Career in Physics	13/09/2013
<b>33. Teaching methods adopted to improve student learning</b>		Practical demonstration, Power point presentation and Models	
<b>34. Participation in Institutional Social Responsibility(ISR)and Extension activities</b>		Nil	
<b>35. SWOC analysis of the department</b>			
<b>STRENGTH</b>		<b>WEAKNESS</b>	
<ul style="list-style-type: none"> <li>A competent well qualified staff.</li> <li>Good results as compared to the University.</li> <li>PG/ Ph.D. programmes available.</li> </ul>		<ul style="list-style-type: none"> <li>Some teaching posts are vacant.</li> <li>Unaided M.Sc. Course.</li> <li>Input of low caliber students.</li> <li>Financial constraints of students.</li> </ul>	
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>	
<ul style="list-style-type: none"> <li>Students can do PG in Physics.</li> <li>Students can appear for Competitive examination.</li> </ul>		<ul style="list-style-type: none"> <li>Mediocre students at PG level.</li> <li>To create job opportunities.</li> </ul>	
<b>FUTURE PLANS</b>			
<ul style="list-style-type: none"> <li>Intensive remedial coaching.</li> <li>To enhance student – teacher interaction.</li> <li>To apply for funding to elaborate research to different agencies.</li> </ul>			

**EVALUATIVE REPORT OF BOTANY DEPARTMENT**

<b>1. Name of the department -</b>		Botany			
<b>2. Year of Establishment</b>		Under Graduate - 1949 Post Graduate- 2015-16			
<b>3. Names of Programmes / Courses offered</b>		UG with Botany as one of the subject PG (M.Sc.) - (Self Funded: SF)			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG: B.Sc. -Semester (Credit based system) PG (SF): Semester (CBCS)			
<b>6. Participation of the department in the courses offered by other departments</b>		Course	Department		
		Nil	Nil		
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>	Position	Sanctioned	Filled		
	Professors	Nil	Nil		
	Associate Professors	02	02		
	Asst. Professors	02	02		
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Dr. Ashwajit A. Fulzele	M.Sc., NET, Ph.D.	HOD and Associate Professor	Mycology and Plant Pathology	23	03
Dr. Surendra K. Giri	M.Sc., B.Ed., Ph.D.	Associate Professor	Phycology	22	-
Dr. (Mrs.) Archana M. Sawane	M.Sc., B.Ed., Ph.D.	Assistant Professor	Palynology	10	-
Ms. Shamali D. Khalatkar	M.Sc., NET	Assistant Professor	Plant Molecular Biology and Biotechnology	04	-
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		UG: B.Sc.-Theory: 5% (2015-16) Practicals: 12% (for 2015-16, C.H.B. faculty) PG (S.F.): Theory & Practical:100% (Ad-Hoc & C.H.B. faculty)			

13. Student -Teacher Ratio (programme wise)	UG	2010-15	50 : 1		
	PG	10 : 1			
	M.Phil.	NA			
14. Number of academic support staff (technical) and administrative staff	Sanctioned	Filled			
	05	05			
15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.	NET, Ph.D. -01; Ph.D.- 02; NET-01				
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.	National		International		
	01		Nil		
17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received	No of Project	Year	Funding Agency	Amount Sanctioned	
	01 (Minor)	2013-15	UGC	Rs. 1,00,000/-	
	01 (Major)	2014-17	DAE, BARC	Rs. 24,75,000/-	
	Total Grants received			Rs.12,65,000/-	
18. Research Centre /facility recognized by the University	No				
19. Publications.					
Publication per Faculty					
Number of papers published in peer reviewed journals (national / international) by faculty and students	Faculty		National	International	Total
	Dr. A. A. Fulzele		06	04	10
	Dr. S. K. Giri		07	03	10
	Dr. (Mrs.) A. M. Sawane		05	01	06
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)			All the papers are listed in 'Google Scholar'.		
Monographs		Nil			
Books Published		Dr. S. K. Giri: 02			
Chapter in Books		Nil			
Books Edited		Nil			
Books with ISBN/ISSN numbers with details of publishers	Faculty		With ISSN Number	Without ISSN Number	
	Dr. S. K. Giri		02	--	
Citation Index	Dr. S. K. Giri			07	
	Dr. (Mrs.) A. M. Sawane			04	
SNIP		Nil			
SJP		Nil			
h-Index	Dr. S. K. Giri			02	
	Dr. (Mrs.) A. M. Sawane			02	
Impact Factor	Dr. A. A. Fulzele			1.04	
	Dr. S. K. Giri			1.04	
	Dr. (Mrs.) A. M. Sawane			2.015	
20. Areas of consultancy and income generated	Fungal species Identification by Dr. A. A. Fulzele				

<b>21. Faculty as members in</b>		<b>National committees</b>	<b>International Committees</b>	<b>Editorial Boards</b>
Dr. S. K. Giri		01	-	-
<b>22. Student projects</b>				
a) Percentage of students who have done in-house projects including inter departmental/programme				NA
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies				NA
<b>23. Awards/ Recognitions received by faculty and students</b>				
<b>S. N.</b>	<b>Name of Faculty/Students</b>	<b>Awards/Recognition</b>		<b>Years</b>
01	Mohd. A. Karim	Late S. L. Shinde Memorial Prize & Late Principal M. J. Pahade Memorial Prize for Highest marks in Botany		2011
02	Sapna Barde	Late S. L. Shinde Memorial Prize & Late Principal M. J. Pahade Memorial Prize for Highest marks in Botany		2012
03	Payal Shewatkar	Late S. L. Shinde Memorial Prize & Late Principal M. J. Pahade Memorial Prize for Highest marks in Botany		2013
04	Pravin Nagdive	Late S. L. Shinde Memorial Prize & Late Principal M. J. Pahade Memorial Prize for Highest marks in Botany		2014
05	Brahmacharan Mishra	Late S. L. Shinde Memorial Prize & Late Principal M. J. Pahade Memorial Prize for Highest marks in Botany		2015
<b>24. List of eminent academicians and scientists/ visitors to the department</b>				
Dr. S. K. Singh		Scientist and Coordinator, National Facility for Culture Collection of Fungi, Agharkar Research Institute, Pune		
Dr. Keshav Kranthi		Director, CICR, Nagpur		
Prof. C. Manoharachary		Professor Emeritus, Osmania University, Hyderabad		
Dr. R. D. Makade		Senior Scientist, BARC, Mumbai		
Dr. Satish Wate		Director, NEERI, Nagpur		
Dr. Hemant Purohit		Sr. Scientist, Environment Genomics Division, NEERI, Nagpur		
Dr. R. P. Thakare		Retd. Professor, PGTD Botany, RTMNU, Nagpur		
Dr. S. B. Nandeshwar		Senior Scientist & Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur		
Dr. Alka Chaturvedi		Professor and Head, PGTD Botany, RTMNU, Nagpur		
Dr. A. A. Saoji		Ex-Director, Institute of Science, Nagpur		
Dr. S. A. Kalkar		Head, PGTD Botany, Government Institute of Science, Nagpur		
Dr. T. Srinivasu		Professor, PGTD Botany, RTMNU, Nagpur		
<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>				
National Seminar: Modern Tools and Techniques in Plant Sciences (MTTPS-15)		UGC	14 <sup>th</sup> March 2015	
National Workshop: Techniques in Taxonomy: Classical to Modern Approach		UGC	30 <sup>th</sup> and 31 <sup>st</sup> March 2012	
Inter-Collegiate Seminar Competition in association with Indian Science Congress Association		ISCA	26 <sup>th</sup> February 2013	
National Seminar on Recent Trends in Bio-Geo Sciences		UGC	14 <sup>th</sup> October 2010	

26. Student profile programme/course wise					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
2014-15	138	110	31	79	85.71
2013-14	103	103	28	75	70.97
2012-13	106	106	36	70	54.55
2011-12	90	90	29	61	66.67
2010-11	87	87	27	60	61.50
M.Sc. Sem-I (2015-16)	23	21	02	19	-
*M=Male *F=Female					
27. Diversity of Students					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	98	02	00		
2013-14	97	03	00		
2012-13	99	01	00		
2011-12	98	02	00		
2010-11	100	00	00		
28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.					Nil
29. Student progression	Student progression	Years	Total Enrolled	Against % enrolled	
	UG to PG	2010-15	151	10.00	
	PG to M.Phil.	2010-15	NA	NA	
	PG to Ph.D.	2010-15	NA	NA	
	Ph.D. to Post-Doctoral	2010-15	NA	NA	
	Employed	2010-15	Nil	Nil	
	• Campus selection • Other than campus recruitment		NA	NA	
Entrepreneurship/Self-employment	2010-15	Nil	Nil		
30. Details of Infrastructural facilities					
a) Library	Yes with Reference Books, Practical Manuals and Floras				
b) Internet facilities for Staff & Students	Yes				
c) Class rooms with ICT facility	Laboratory can be facilitated for ICT				
d) Laboratories	01 with all required instruments and practical material				
31. Number of students receiving financial assistance from college, university, government or other agencies				548 (2010-15)	
32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts					
Sr. NO.	Name of Guest/Speaker	Designation and Institute	Title	Date	
1)	Dr. Aarti Saoji	Ex-Director, Institute of Science, Nagpur	Warming And Sustainable Development	13 <sup>th</sup> August 2010	

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2)	Dr. Mrs Alka Chaturvedi	Professor and Head, PG Department of Botany, RTM Nagpur University, Nagpur	Names of the Plants	22 <sup>nd</sup> September 2011
3)	Dr. Mrs Alka Chaturvedi	Professor and Head, PG Department of Botany, RTM Nagpur University, Nagpur	Recent developments in plant taxonomy	31 <sup>st</sup> March 2012
4)	Dr. K.J. Cherian	Head, Dept. of Botany, Hislop College, Nagpur	Isolation of Cyanobacteria	31 <sup>st</sup> March 2012
5)	Dr. (Mrs.) S.A. Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Palynology and taxonomy	30 <sup>th</sup> March 2012
6)	Dr. T. Shrinivasu	Associate Professor, PGTD Botany Department, RTMNU, Nagpur	Electronic Herbarium	31 <sup>st</sup> March 2012
7)	Dr. N.M. Dongarwar	Associate Professor, PGTD Botany Department, RTMNU, Nagpur	Phytochemical Analysis	31 <sup>st</sup> March 2012
8)	Dr. D.K. Kapgate	Head, Dept. of Botany, J. M. Patel College, Bhandara	Paleobotany and Taxonomy	31 <sup>st</sup> March 2012
9)	Dr. R. Badere	Assistant Professor, Dept. of Botany, Hislop College, Nagpur	DNA Finger printing	31 <sup>st</sup> March 2012
10)	Dr. W.Y. Tagade	Assistant Professor, Dept. of Botany, Science College, Tiroda	Isolation of Phylloplane and Rhizosphere Mycoflora	30 <sup>th</sup> March 2012
11)	Dr. K. Borkar	Scientific Officer, National Dairy Development Board, Nagpur	Isolation of Phylloplane and Rhizosphere Mycoflora	30 <sup>th</sup> March 2012
12)	Mrs. V. A. Fulzele	Shivaji Science College, Nagpur	Computational Biology and Bioinformatics	31 <sup>st</sup> March 2012
13)	Dr. M. Kawale	Assistant Professor, Dept. of Botany, Dhote Bandhu Mahavidyalaya, Gondia	Column Chromatography	30 <sup>th</sup> March 2012
14)	Dr. Sandeep Hate	Assistant Professor, Dept. of Botany, Santaji Mahavidyalaya, Nagpur	Phytochemical Analysis	31 <sup>st</sup> March 2012
15)	Dr. R. Khapekar	Assistant Professor, Dept. of Botany, Sindhu Mahavidyalaya, Nagpur	Isolation of Algae	31 <sup>st</sup> March 2012
16)	Dr. Lalchand Dalal	Associate Professor, Department of Botany, JB Science College, Wardha	Isolation of <i>Rhizobium</i>	30 <sup>th</sup> March 2012
17)	Dr. S. K. Singh	Scientist and Coordinator, National Facility for Culture Collection of Fungi Agharkar Research Institute, Pune	Recent Developments in Fungal Taxonomy	30 <sup>th</sup> March 2012
18)	Dr. N. Naqvi	Head, Dept. of Botany, S.F.S. College, Nagpur	Isolation of Mycorrhiza	30 <sup>th</sup> March 2012

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19)	Dr. Vinod Dongre	Associate Professor, Department of Botany, Seva Dal Mahavidyalaya, Nagpur	Karyotyping	30 <sup>th</sup> March 2012
20)	Dr. (Mrs.) S.A. Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Hazardous Biopollutants	13 <sup>th</sup> Sept 2012
21)	Dr. D. P. Gogle	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Judge for Science Model Competition	2011-12
22)	Dr. Vinod Dongre	Associate Professor, Department of Botany, Seva Dal Mahavidyalaya, Nagpur	Judge for Poster Competition	30 <sup>th</sup> August 2013
23)	Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Inter-collegiate Seminar Competition in collaboration with ISCA	26 <sup>th</sup> February 2013
24)	Dr. S. B. Nandeshwar	Senior Scientist & Head, Biotechnology Division, Central India Institute for Cotton Research, Nagpur	<i>Agrobacterium</i> - mediated Gene Transfer in Plants	30 <sup>th</sup> August 2013
25)	Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Conservation of Orchids	22 <sup>nd</sup> August 2014
26)	Dr. Nitin M. Dongarwar	Associate Professor, PG Department of Botany, RTMNU, Nagpur	Judge for Poster Competition organized for B. Sc. Semester I students	22 <sup>nd</sup> August 2014
27)	Dr. Satish Wate	Director, CSIR-NEERI	Biogeochemical Processes In The Near Subsurface	14 <sup>th</sup> March 2015
28)	Dr. Keshav Kranthi	Director, CICR, Nagpur	New Advances in Plant Sciences	14 <sup>th</sup> March 2015
29)	Dr. Hemant Purohit	Principal Scientist and Head, Environmental Genomics Division, CSIR-NEERI	Genomic tools: Sequencing to Barcoding	14 <sup>th</sup> March 2015
30)	Dr. Surekha Kalkar	Head, Department of Botany, Institute of Science, Nagpur	Chitale Herbarium Technique	14 <sup>th</sup> March 2015
31)	Dr. P. S. Jakhi	Associate Professor, Department of Botany, Institute of Science, Nagpur	Chitale Herbarium Technique	14 <sup>th</sup> March 2015
32)	Dr. Sushma U. Borkar	Associate Professor, Department of Botany, Institute of Science, Nagpur	Judge for Poster Session in UGC Sponsored National Seminar on Modern Tools and Techniques in Plant Sciences	14 <sup>th</sup> March 2015
33)	Dr. S. B. Nandeshwar	Senior Scientist & Head, Biotechnology Division, Central India Institute for	Judge for Poster Session in UGC Sponsored	14 <sup>th</sup> March 2015

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		Cotton Research, Nagpur	National Seminar on Modern Tools and Techniques in Plant Sciences	
34)	Mr. Kaustav Chatterjee	Green Vigil Foundation	Environmental Threats at Global and Local Level	15 <sup>th</sup> September 2015
<b>33. Teaching methods adopted to improve student learning</b>		a) Poster competitions, Science Model Exhibitions, Guest Lectures b) ICT (PowerPoint Presentations, Audio Visual Aids) c) Botanical Excursions, exposure to nature d) Students Seminars e) Examinations f) Use of charts g) Question banks		
<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>				
Plantation drives, voter day sensitization				
<b>35. SWOC analysis of the department</b>				
<b>STRENGTH</b>		<b>WEAKNESS</b>		
<ul style="list-style-type: none"> <li>• Well-qualified, competent staff.</li> <li>• Post Graduation in Botany.</li> <li>• Career-oriented programme on Medicinal Molecular Biochemistry (Biotechnology).</li> <li>• Quality of the students is average.</li> </ul>		<ul style="list-style-type: none"> <li>• Quality of the students is average.</li> <li>• Less employability after B.Sc.</li> <li>• Insufficient infrastructure</li> </ul>		
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>		
<ul style="list-style-type: none"> <li>• Students seeking admission to the subject is gradually increasing.</li> <li>• Aptitude for basic sciences is increasing.</li> <li>• With M.Sc., research will be on rise.</li> </ul>		<ul style="list-style-type: none"> <li>• Industrial employment not possible as the syllabus is not at par for providing employment.</li> <li>• Demand for Professional courses still on a higher side.</li> <li>• Quality of research needs to be improved.</li> <li>• Setting up of well-equipped Research laboratory.</li> </ul>		
<b>FUTURE PLANS</b>				
<ul style="list-style-type: none"> <li>• Development of infrastructure.</li> <li>• Self-employable courses for students.</li> <li>• Quality research is the vision for coming years.</li> <li>• Enhancement of research facility.</li> </ul>				

**EVALUATIVE REPORT OF ZOOLOGY DEPARTMENT**

<b>1. Name of the department -</b>		Zoology			
<b>2. Year of Establishment</b>		Under Graduate - 1952			
<b>3. Names of Programmes/ Courses offered</b>		UG with Zoology as one of the subject			
<b>4. Names of Interdisciplinary courses and the departments/ units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG: B.Sc .- Semester (Credit based system)			
<b>6. Participation of the department in the courses offered by other departments</b>		Course	Department		
		Medicinal Molecular Biochemistry	Conducted by Department of Botany		
<b>7. Courses in collaboration with other Universities, industries, foreign institutions,</b>		NA			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>	<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>		
	Professors	Nil	Nil		
	Associate Professors	Nil	Nil		
	Asst. Professors	04	04		
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Dr. (Mrs). U. R. Sonparote	M.Sc., Ph.D.	HOD and Assistant Professor	Fisheries, Endocrinology	24 years	Nil
Dr. P. U. Gajbe	M.Sc., Ph.D., NET, SET	Assistant Professor	Entomology	11 years	Nil
Dr. (Mrs.) R. S. Saha	M.Sc., Ph.D.	Assistant Professor	Entomology, Environmental Toxicology	04 years	Nil
Dr. N. V. Palande	M.Sc., Ph.D., NET	Assistant Professor	Neurobiology, Molecular Biology	04 years	Nil
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		<b>Year</b>	<b>Theory (UG)</b>	<b>Practical (UG)</b>	
		2010-12	33.33	36.31	
<b>13. Student -Teacher Ratio (programme wise)</b>		UG			
		2010-15	50 :1		

14. Number of academic support staff (technical) and administrative staff	<b>Sanctioned</b>		<b>Filled</b>		
	05		04		
15. Qualifications of teaching faculty with D.Sc./ D.Litt./ Ph.D./ M.Phil./ P.G.	Ph.D.- 02; Ph.D., NET-02				
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.	<b>National</b>		<b>International</b>		
	Nil		Nil		
17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received	<b>No. of Projects</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>	
	02 (Minor)	2009-11	UGC	Rs.1,75,000/-	
	01 (Major)	2013-16	UGC	Rs.9,90,000/-	
	Total Grants sanctioned			Rs.11,65,000/-	
	Total Grants received			Rs. 7,38,800/-	
18. Research Centre /facility recognized by the University	NA				
<b>19. Publications</b>					
Publication per Faculty					
Number of papers published in peer reviewed journals (national / international) by faculty and students	<b>Faculty</b>		<b>National</b>	<b>Inter-national</b>	<b>Total</b>
	1. Dr. (Mrs.) U. R. Sonparote		09	Nil	09
	2. Dr. P. U. Gajbe		01	Nil	01
	3. Dr. (Mrs.). R. S. Saha		03	03	06
	4. Dr. N. V. Palande		Nil	04	04
Number of publications listed in International Database (For E.g.: Web of Science, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)			All papers listed in 'Google Scholar'.		
<b>Monographs</b>		Nil			
<b>Books Published</b>		02			
<b>Chapter in Books</b>		Nil			
<b>Books Edited</b>		Nil			
Books with ISBN/ISSN numbers with details of publishers	<b>Name of faculty</b>	<b>With ISBN</b>	<b>Without ISBN</b>		
	Dr. (Mrs.) R. S. Saha	02	-		
<b>Citation Index</b>	1. Dr. P. U. Gajbe		86		
	2. Dr. N. V. Palande		13		
<b>SNIP</b>	Dr. N. V. Palande		0.830-1.067		
<b>SJP</b>	Dr. N. V. Palande		0.584-1.147		
<b>h-Index</b>	1. Dr. P. U. Gajbe		04		
	2. Dr. N. V. Palande		03		
<b>Impact Factor</b>	1. Dr. (Mrs.) U. R. Sonparote		0.2-0.3		
	2. Dr. N. V. Palande		1.622-2.580		

*Evaluative Report of Zoology Department*

<b>20. Areas of consultancy and income generated</b>		Nil		
<b>21. Faculty as members in</b>		<b>National committees</b>	<b>International Committees</b>	<b>Editorial Boards</b>
		Nil	Nil	Nil
<b>22. Student projects</b>				
a) <b>Percentage of students who have done in-house projects including inter departmental/programme</b>				Nil
b) <b>Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/Industry/other agencies</b>				Nil
<b>23. Awards/ Recognitions received by faculty and students</b>				
<b>S. N.</b>	<b>Name of Faculty/Students</b>	<b>Awards/Recognition</b>		<b>Years</b>
1	Bramhacharan Mishra	Late Kashibai Murhar Memorable Prize for obtaining Highest marks in Zoology (B.Sc. final year)		2014-15
2	Pravin Nagdive	Late Kashibai Murhar Memorable Prize for obtaining Highest marks in Zoology (B.Sc. final year)		2013-14
3	Naushi Sheikh	Late Kashibai Murhar Memorable Prize for obtaining Highest marks in Zoology (B.Sc. final year)		2012-13
4	Sapna Barde	Late Kashibai Murhar Memorable Prize for obtaining Highest marks in Zoology (B.Sc. final year)		2011-12
5	Mohammad A. Karim	Late Kashibai Murhar Memorable Prize for obtaining Highest marks in Zoology (B.Sc. final year)		2010-11
<b>24. List of eminent academicians and scientists/visitors to the department</b>				
<b>Name of Guest/Speaker</b>		<b>Name of Institute</b>		<b>Date</b>
Shri. Kaustav Chatterji		Green vigil foundation (NGO)		15.09.2015
Shri. Vijay Choube		RST Cancer Hospital, Nagpur		13.09.2014
Dr. S. B. Zade		PGTD of Zoology, RTM Nagpur University, Nagpur		04.09.2013
Dr. (Mrs.) V. V. Baile		PGTD of Zoology, RTM Nagpur University, Nagpur		27.09.2012
Dr. R. J. Andrew		Hislop College, Nagpur		14.09.2011
<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>				Nil

<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
2014-15	135	106	27	59	58.33
2013-14	130	102	28	74	75.76
2012-13	107	107	37	70	57.14
2011-12	86	86	40	46	80.00
2010-11	90	90	25	65	71.40
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	98	02	00		
2013-14	97	03	00		
2012-13	99	01	00		
2011-12	98	02	00		
2010-11	100	00	00		
<b>28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>					Nil
<b>29. Student progression</b>	<b>Student progression</b>	<b>Years</b>	<b>% enrolled</b>		
	UG to PG	2010-15	10.00		
	PG to M.Phil.	2010-15	NA		
	PG to Ph.D.	2010-15	NA		
	Ph.D. to Post-Doctoral	2010-15	NA		
	Employed • Campus selection • Other than campus recruitment	2010-15	NA		
	Entrepreneurship/Self-employment	2010-15	NA		
<b>30. Details of Infrastructural facilities</b>					
<b>a) Library</b>		Department of Zoology maintains a departmental library enriched with adequate number of textbooks and reference books.			
<b>b) Internet facilities for Staff &amp; Students</b>		Available for staff			
<b>c) Class rooms with ICT facility</b>		Yes			
<b>d) Laboratories</b>		2 & Research laboratory -1			
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>					564 (2010-15)
<b>32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts</b>					
• Short Term courses			2013 onwards		

*Evaluative Report of Zoology Department*

• Special Lectures/Talks			
Name of Guest/Speaker	Designation and Institute	Title	Date
Shri. Kaustav Chatterji	Green vigil foundation (NGO)	Environmental threats at global and local level	15.09.2015
Shri. Vijay Choube	RST Cancer Hospital, Nagpur	Cancer: Treatment and Prevention	13.09.2014
Dr. S. B. Zade	PGTD of Zoology, RTM Nagpur University, Nagpur	Conservation of Biodiversity	04.09.2013
Dr. (Mrs.) V. V. Baile	PGTD of Zoology, RTM Nagpur University, Nagpur	Neuro-endocrine system of fish	27.09.2012
Dr. R. J. Andrew	Hislop College, Nagpur	The egg	14.09.2011
<b>33. Teaching methods adopted to improve student learning</b>		Use of ICT, Study tours, Poster/model exhibition	
<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>			NA
<b>35. SWOC analysis of the department</b>			
<b>STRENGTH</b>		<b>WEAKNESS</b>	
• Well qualified and competent faculty.		• Old infrastructure.	
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>	
• PG course in Zoology and recognized research centre in Zoology.		• Professional Courses of other institutions.	
<b>FUTURE PLANS</b>			
• To start PG course in Zoology.			
• To strengthen Zoology laboratory with advanced equipments.			

**EVALUATIVE REPORT OF MATHEMATICS DEPARTMENT**

<b>1. Name of the department -</b>		Mathematics			
<b>2. Year of Establishment</b>		Under Graduate -1949 Post Graduate- 2012			
<b>3. Names of Programmes/ Courses offered</b>		UG with Mathematics as one of the subject PG (M.Sc) - (Self Funded: SF)			
<b>4. Names of Interdisciplinary courses and the departments/ units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc. -Semester (Credit based system) PG (SF): Semester (CBCS)			
<b>6. Participation of the department in the courses offered by other departments</b>		<b>Course</b>	<b>Department</b>		
		Nil	Nil		
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>		<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>	
		Professors	Nil	Nil	
		Associate Professors	01	01	
		Asst. Professors	01	01	
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt. / Ph.D. / M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Dr. Arun S. Muktibodh	M.Sc., M.Phil., Ph.D.	Associate professor	Abstract Algebra	32	Nil
Shri Satish T. Rathod	M.Sc., M.Phil.	Assistant Professor	Relativity	10	Nil
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		UG: B.Sc.-Theory: Practicals: Nil% (C.H.B. faculty) PG (S.F.): Theory: 90% (Ad-Hoc & C.H.B. faculty)			
<b>13. Student -Teacher Ratio (programme wise)</b>		UG		100:1	
		PG		5:1	
		M.Phil.		NA	
<b>14. Number of academic support staff (technical) and administrative staff</b>		Sanctioned		Filled	
		Nil		Nil	
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>		M.Phil., Ph.D.- 01; M.Phil.-01			
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>		<b>National</b>		<b>International</b>	
		Nil		Nil	

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<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>	<b>No of Project</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>	
	01 (Minor)	2009-11	UGC	Rs. 30,000/-	
	Total Grants received			Rs. 30,000/-	
<b>18. Research Centre /facility recognized by the University</b>	NA				
<b>19. Publications.</b>					
Publication per Faculty					
<b>Number of papers published in peer reviewed journals (national / international) by faculty and students</b>	<b>Faculty</b>		<b>National</b>	<b>International</b>	<b>Total</b>
	Dr. Arun S. Muktibodh		01	09	10
	Shri Satish T. Rathod		--	01	01
<b>Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)</b>			All the papers are listed in 'Google Scholar'.		
<b>Monographs</b>			Arun S. Muktibodh	01	
<b>Books Published</b>			01		
<b>Chapter in Books</b>			Nil		
<b>Books Edited</b>			Nil		
<b>Books with ISBN/ISSN numbers with details of publishers</b>			Nil		
<b>Citation Index</b>			59		
<b>SNIP</b>			Nil		
<b>SJP</b>			Nil		
<b>h-Index</b>			05		
<b>Impact Factor</b>			Nil		
<b>20. Areas of consultancy and income generated</b>			Nil		
<b>21. Faculty as members in</b>	<b>National committees</b>		<b>International Committees</b>	<b>Editorial Boards</b>	
Dr. Arun S. Muktibodh	01		01	01	
<b>22. Student projects</b>					
<b>a) Percentage of students who have done in-house projects including inter departmental/programme</b>				NA	
<b>b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies</b>				No	
<b>23. Awards/ Recognitions received by faculty and students</b>					
<b>S. N.</b>	<b>Name of Faculty/Students</b>	<b>Awards/Recognition</b>		<b>Years</b>	
01	Ms. Shobhana Sorte	Shri P.W. Mokashi Prize & Late V.L. Mutadkar Memo Prize secured highest marks in B.Sc. Final		2010-11	
02	Ms. Neha Goyal	First Prize (Inter-collegiate seminar at LAD College, Nagpur)		2012	
03	Ms. Payal Bhatt	Third Prize (Inter-collegiate seminar at LAD College, Nagpur)		2012	
04	Rajat Chikankar	First Prize (Seminar Competition at Bhawbhuti Mahavidyalaya, Amgaon)		2012	
05	Prachi Padole	Consolation Prize (Seminar Competition at Bhawbhuti Mahavidyalaya, Amgaon)		2012	
06	Ms. Kaylani P. Nikure	Shri P.W. Mokashi Prize & Late V.L. Mutadkar Memo Prize secured highest marks in B.Sc. Final		2011-12	
07	Tushar Ingole	First Prize (Inter-collegiate Seminar		2013	

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		Competition at our College)			
08	Rinki Mohadikar	Consolation Prize (Inter-collegiate Seminar Competition at our College)	2013		
09	Ms. Prachi Padole	Shri P.W. Mokashi Prize & Late V.L. Mutadkar Memo Prize secured highest marks in B.Sc. Final	2012-13		
10	Ms. Payal Bhatt	Shri P.W. Mokashi Prize & Late V.L. Mutadkar Memo Prize secured highest marks in B.Sc. Final	2013-14		
11	Ms. Ashwini Burle	Shri P.W. Mokashi Prize & Late V.L. Mutadkar Memo Prize secured highest marks in B.Sc. Final	2014-15		
<b>24. List of eminent academicians and scientists/visitors to the department</b>					
<b>Name of Guest/Speaker</b>		<b>Designation and Institute</b>	<b>Date</b>		
Mr. Vivek Wagh		A mathematics educationist	14/03/ 2015		
Dr. Anil Bhalekar		Professor emeritus, CSIR	24/08/ 2015		
<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>					
National seminar on 'Group Theory and Applications'		Sponsored by UGC	14 <sup>th</sup> March -2015		
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4)	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
B.Sc. I					
2014-15	250	219	142	77	53.95
2013-14	245	228	133	95	86.89
2012-13	192	192	101	91	75.00
2011-12	90	90	44	46	78.57
2010-11	166	166	75	91	79.40
M.Sc.- I	140	22	04	18	15.00
M.Sc.- II	16	16	02	14	25.00
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	96	04	00		
2013-14	97	03	00		
2012-13	95	05	00		
2011-12	96	04	00		
2010-11	94	06	00		
<b>28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>			Nil		
<b>29. Student progression</b>	<b>Student progression</b>	<b>Years</b>	<b>Total Enrolled</b>	<b>Against % enrolled</b>	
	UG to PG	2010-15	300	10.00	
	PG to M.Phil.	2010-15	NA	NA	
	PG to Ph.D.	2010-15	NA	NA	
	Ph.D. to Post-Doctoral	2010-15	NA	NA	
	Employed • Campus selection • Other than campus recruitment	2010-15	22 (Only PG)	20.00	

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	Entrepreneurship/Self-employment	2010-15	NA	NA
<b>30. Details of Infrastructural facilities</b>				
<b>a) Library</b>	Along with the central Library, Department of Mathematics is having adequate number of collection of Reference books.			
<b>b) Internet facilities for Staff &amp; Students</b>	Department of Mathematics is having Internet facility for staff and students both. Students are supplied with the educational sites and e-notes. Staff has full access to the innovative teaching materials via numerous websites available on the net.			
<b>c) Class rooms with ICT facility</b>	One lecture hall (Room No. 3) with overhead projector.			
<b>d) Laboratories</b>	NA			
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>			1017 (2010-15)	
<b>32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts</b>				
<b>Name of Guest/Speaker</b>	<b>Designation and Institute</b>	<b>Title</b>	<b>Date</b>	
Dr. Anil Bhalekar	Professor emeritus CSIR	‘Santilli’s Isomathematics’	14 <sup>th</sup> March 2015	
Shri Vivek Wagh	Educationist	‘Evaluation and Guidance’	24 <sup>th</sup> August 2015	
<b>33. Teaching methods adopted to improve student learning</b>		<ol style="list-style-type: none"> <li>1. Use of IT for effective communication and understanding.</li> <li>2. ‘Chalk and Talk’ method.</li> <li>3. Seminars and Guest lectures.</li> </ol>		
<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>			Nil	
<b>35. SWOC analysis of the department</b>				
<b>STRENGTH</b>		<b>WEAKNESS</b>		
<ul style="list-style-type: none"> <li>• Highly Qualified Staff</li> <li>• Extensive student –teacher interaction with special problem solving sessions.</li> <li>• Effective use of IT along with ‘Chalk and Talk’ method</li> <li>• Use of Remedial coaching.</li> </ul>		<ul style="list-style-type: none"> <li>• Cannot spare sufficient time for 1 to 1 interaction with the students as the students’ strength is too much.</li> <li>• Students’ response is not up to the mark.</li> </ul>		
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>		
<ul style="list-style-type: none"> <li>• Post graduation in Mathematics opens up opportunities in teaching field.</li> <li>• Opportunity to develop Research centre in Mathematics for Ph.D. students.</li> <li>• Can start training centre for ‘Aptitude test’ for Mathematics</li> </ul>		<ul style="list-style-type: none"> <li>• Motivating students to pursue Mathematics as a major subject at Post graduate level.</li> <li>• To make the subject more interesting and bring it to the concrete level for easy understanding.</li> </ul>		
<b>FUTURE PLANS</b>				
<ul style="list-style-type: none"> <li>• To apply for Major Research Projects.</li> <li>• To use modern teaching methodology as a supplement to the regular ‘chalk and talk’ method.</li> <li>• To make optimum use of advanced Information Technology.</li> </ul>				

**EVALUATIVE REPORT OF GEOLOGY DEPARTMENT**

<b>1. Name of the department -</b>		Geology			
<b>2. Year of Establishment</b>		Under Graduate -1952			
<b>3. Names of Programmes / Courses offered</b>		UG with Geology as one of the subject			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc. -Semester (Credit based system)			
<b>6. Participation of the department in the courses offered by other departments</b>		<b>Course</b>		<b>Department</b>	
		Nil		Nil	
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>		<b>Position</b>		<b>Sanctioned</b>	<b>Filled</b>
		Professors		Nil	Nil
		Associate Professors		03	03
		Asst. Professors		01	Nil
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D. / M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Shri R. P. Deshpande	M.Sc. (Tech.), M.Phil.	HOD, Associate Professor	Sedimentology	33	-
Dr. S. P. Joshi	M.Sc. (Tech.), Ph.D.	Associate Professor	Hydrogeology	29	-
Dr. M. B. Bhagat	M.Sc. (Tech.), Ph.D.	Associate Professor	Micropaleontology	27	-
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		UG: B.Sc.-Theory: Practicals: 25% (C.H.B. faculty)			
<b>13. Student -Teacher Ratio (programme wise)</b>		UG		50:1	
<b>14. Number of academic support staff (technical) and administrative staff</b>		Sanctioned		Filled	
		03		03	
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>		M. Phil.- 01; Ph.D. -02			
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>		<b>National</b>		<b>International</b>	
		Nil		Nil	

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<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>	<b>No of Project</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>
	02 (Minor)	2009-11	UGC	Rs. 2,65,000/-
	Total Grants received			Rs.1,82,500/-
<b>18. Research Centre /facility recognized by the University</b>		NA		
<b>19. Publications.</b>				
Publication per Faculty				
<b>Number of papers published in peer reviewed journals (national / international) by faculty and students</b>	<b>Faculty</b>	<b>National</b>	<b>International</b>	<b>Total</b>
	Dr. S. P. Joshi	01	02	03
	Dr. M. B. Bhagat	01	-	01
<b>Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)</b>			All the papers are listed in 'Google Scholar'.	
<b>Monographs</b>			Nil	
<b>Books Published</b>			Nil	
<b>Chapter in Books</b>			Nil	
<b>Books Edited</b>			Nil	
<b>Citation Index</b>			Nil	
<b>SNIP</b>			Nil	
<b>SJP</b>			Nil	
<b>h-Index</b>			Nil	
<b>Impact Factor</b>			Nil	
<b>20. Areas of consultancy and income generated</b>			Nil	
<b>21. Faculty as members in</b>	<b>National committees</b>	<b>International Committees</b>	<b>Editorial Boards</b>	
	-	-	-	
<b>22. Student projects</b>				
<b>a) Percentage of students who have done in-house projects including inter departmental/programme</b>				NA
<b>b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies</b>				No
<b>23. Awards/ Recognitions received by faculty and students</b>				
<b>S. N.</b>	<b>Name of Faculty/Students</b>	<b>Awards/Recognition</b>		<b>Years</b>
01	Ms. Anjali Michael	Gold medal in Geology		2015
<b>24. List of eminent academicians and scientists/ visitors to the department</b>				
Dr. Y. A. Murkute	Assistant Professor, PGTD, RTM Nagpur University, Nagpur			21/09/10
Dr. Kirtikumar Randive	Associate Professor, PGTD, RTM Nagpur University, Nagpur			19/11/11
Dr. D. B. Malpe	Professor and Head, PGTD, RTM Nagpur University, Nagpur			21/10/12
Dr. M. Manjare	Assistant Professor, PGTD, RTM Nagpur University, Nagpur			02/02/14
Dr. S. P. Khadse	Head, Associate Professor, Shivaji Science College, Nagpur			28/01/15

<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>					
National Seminar "Recent trends in Biogeosciences.		UGC Sponsored		Date 14/10/2010	
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
2014-15	100	86	46	40	80.65
2013-14	90	81	32	49	90.48
2012-13	83	83	41	42	80.00
2011-12	80	80	40	40	77.78
2010-11	77	77	37	40	55.60
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	98	02	00		
2013-14	100	00	00		
2012-13	97	03	00		
2011-12	98	02	00		
2010-11	100	00	00		
<b>28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>					Nil
<b>29. Student progression</b>	<b>Student progression</b>	<b>Years</b>	<b>Total Enrolled</b>	<b>Against % enrolled</b>	
	UG to PG	2010-15	133	40.00	
	PG to M.Phil.	2010-15	NA	NA	
	PG to Ph.D.	2010-15	NA	NA	
	Ph.D. to Post-Doctoral	2010-15	NA	NA	
	Employed • Campus selection • Other than campus recruitment	2010-15	NA	80.00 (After PG)	
	Entrepreneurship/Self-employment	2010-15	NA	NA	
<b>30. Details of Infrastructural facilities</b>					
<b>a) Library</b>	The Department of Geology is having departmental library enriched with adequate number of Reference books and Journals and abstract.				
<b>b) Internet facilities for Staff &amp; Students</b>	No				
<b>c) Class rooms with ICT facility</b>	No				
<b>d) Laboratories</b>	Laboratory is well equipped.				
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>				488 (2010-15)	
<b>32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts</b>					
Name of Guest/Speaker	Designation and Institute		Title	Date	
Dr. Y. A. Murkute	Assistant Professor, PGTD, RTM Nagpur		Ground Water	21/09/10	

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	University, Nagpur		
Dr. Kirtikumar Randive	Associate Professor, PGTD, RTM Nagpur University, Nagpur	Antarctica	19/11/11
Dr. D. B. Malpe	Professor and Head, PGTD, RTM Nagpur University, Nagpur	Earthquake	21/10/12
Dr. M. Manjare	Assistant Professor, PGTD, RTMNU, Nagpur	Remote Sensing	02/02/14
Dr. S. P. Khadse	Head, Associate Professor, Shivaji Science College, Nagpur.	Hydrogeology	28/01/15
<b>33. Teaching methods adopted to improve student learning</b>		ICT, Conventional chalk and duster, Field work, visit to mines and govt. research institutes	
<b>34. Participation in Institutional Social Responsibility (ISR) and Extension activities</b>			
NCC, NSS, Swaccha Bharat Abhiyaan, Environment Protection Drives			
<b>35. SWOC analysis of the department</b>			
<b>STRENGTH</b>		<b>WEAKNESS</b>	
<ul style="list-style-type: none"> <li>One of the few college with rare collection of fossils specimens.</li> </ul>		<ul style="list-style-type: none"> <li>Input percentage low.</li> <li>Insufficient infrastructure.</li> </ul>	
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>	
<ul style="list-style-type: none"> <li>Opens-up job opportunity in Government department.</li> </ul>		<ul style="list-style-type: none"> <li>Language problem.</li> <li>Challenge to develop department into a good research center.</li> </ul>	
<b>FUTURE PLANS</b>			
<ul style="list-style-type: none"> <li>In future the department should be developed into a PG center and research center.</li> </ul>			

**EVALUATIVE REPORT OF ELECTRONICS DEPARTMENT**

<b>1. Name of the department -</b>		Electronics			
<b>2. Year of Establishment</b>		Under Graduate -1986			
<b>3. Names of Programmes / Courses offered</b>		UG with Electronics as one of the subject			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc.- Semester (Credit based system)			
<b>6. Participation of the department in the courses offered by other departments</b>		<b>Course</b>		<b>Department</b>	
		Nil		Nil	
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>	<b>Position</b>		<b>Sanctioned</b>		<b>Filled</b>
	Professors		Nil		Nil
	Associate Professors		Nil		Nil
	Asst. Professors		02		01
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt. / Ph.D. / M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Dr. Nilesh D. Meshram	M.Sc., Ph.D., SET	Assistant Professor & Head	Biomedical Instrumentation	10	Nil
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		UG: B.Sc.-Theory: 59.12% Practical: 22.5 % (C.H.B. faculty)			
<b>13. Student -Teacher Ratio (programme wise)</b>		UG		64 : 1	
<b>14. Number of academic support staff (technical) and administrative staff</b>		<b>Sanctioned</b>		<b>Filled</b>	
		02		01	
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>		SET, Ph.D. -01			
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>		<b>National</b>		<b>International</b>	
		Nil		Nil	
<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>		<b>No of Project</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>
		01 (Minor)	2009-11	UGC	Rs.1,30,055/-
		Total Grants received			
<b>18. Research Centre /facility recognized by the University</b>		NA			

<b>19. Publications.</b>				
Publication per Faculty				
Number of papers published in peer reviewed journals (national / international) by faculty and students	Faculty	National	International	Total
	Dr. Nilesh D. Meshram	-	04	04
Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)			All the papers are listed in 'Google Scholar'.	
Monographs			Nil	
Books Published			Nil	
Chapter in Books			Nil	
Books Edited			Nil	
Citation Index			Nil	
SNIP			Nil	
SJP			Nil	
h-Index			Nil	
Impact Factor			1.2 to 5.618	
20. Areas of consultancy and income generated			Nil	
21. Faculty as members in	National committees	International Committees	Editorial Boards	
	-	-	-	
<b>22. Student projects</b>				
a) Percentage of students who have done in-house projects including inter departmental/programme				NA
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies				No
<b>23. Awards/ Recognitions received by faculty and students</b>				
S. N.	Name of Faculty/Students	Awards/Recognition		Years
01	Mr. Akash Dube	Late Indumati Ramanujam Naidu memorial prize for secured highest marks in Electronics		2010-11
02	Dr. Nilesh D. Meshram	Best Poster Presentation at National conference (NCRTP-2014) Raipur, Chhattisgarh		12-14/03/2014
03	Ku. Ravina Paunikar	Late Indumati Ramanujam Naidu memorial prize for secured highest marks in Electronics		2013-14
04	Ku. Ashwini Burile	Late Indumati Ramanujam Naidu memorial prize for secured highest marks in Electronics		2014-15
05	Dr. Nilesh D. Meshram	Best Poster Presentation at International Symposium (ISU-15) Nagpur University, Nagpur		22- 24/01/2015
		Best Oral Presentation at ETECS-2015, Kolhapur		13-14/02/2015
		Felicitation of Ph.D. at International Conference on Dr. Babasaheb Ambedkar: Vision and 21 <sup>st</sup> Century by Dr. Ambedkar's Teachers welfare association, Nagpur.		08/03/2015

<b>24. List of eminent academicians and scientists/ visitors to the department</b>					
Dr. S. J. Sharma	Head, Dept. of Electronics, RTM Nagpur University, Nagpur	Chief Guest lecture on “Sensors & Ultrasonics in Research” in Inauguration of Electronics Society-2011-12 on 13 <sup>th</sup> Sept. 2011			
Dr. C. V. Dhuley	Chairman BoS, Electronics, RTM Nagpur University, Nagpur.	Chief Guest lecture on “Future Prospectus in B.Sc. Electronics” in Inauguration of Electronics Society-2012-13. 22 <sup>nd</sup> Oct. 2012			
Dr. Mrs. Jayamala Dumre	Director, Continuing Adult Education & Extension, RTM Nagpur University, Nagpur.	Guest of Honor Lecture on “Presentation of different schemes for the students of graduation” On 20 <sup>th</sup> Sept. 2013			
Shri. Madhukar Khode	Mauli satsang mandal, Digras, Yavatmal.	A talk on “Literacy of Non-Addiction” on 07 <sup>th</sup> Oct. 2013.			
Dr. Mrs. M. Niyazi	Principal, Shri. Binzani Mahavidyalaya, Nagpur	Chief Guest, Popular Talk on “Co-Curricular activities” at IFE-2014. 22 <sup>nd</sup> Feb 2014			
Dr. (Mrs.) T. Sengupta	Associate Scientist, MRSAC, Nagpur	Guest Lecture on “Satellite Communication” IFE-2014 22 <sup>nd</sup> Feb 2014			
Prof. Dr. S. S. Bhoga	Ex-Head, Dept. of Physics, RTM Nagpur University, Nagpur	Chief Guest Popular Talk on on “Research in Electronics” IFE-2014 22 <sup>nd</sup> Feb 2014			
Dr. S. Rajagopalan	Retired Professor, RTM Nagpur University, Nagpur	Chief Guest in “Electronics Research & Scopes” Inauguration of Electronics Society. 2014-15			
Mr. Mahendra Kamble	Pra. Jagero, Motivational Guru, Yoga Expert & Meditation specialist, Nagpur	Guest Lecture on “Yoga & Meditation ” on 17 <sup>th</sup> Oct. 2014			
Dr. R. R. Mudholkar	Professor, Kolhapur University, Kolhapur	Guest of Honor Lecture on “Fuzzy Logic” in ETAE-2015, Students symposium in SMM College. 03 <sup>rd</sup> Mar. 2015			
Dr. (Mrs.) Charusheela P. Joshi	Professor in RKNEC, Nagpur.	Guest Lecture on “Phosphors for Solid State Lighting” in ETAE-2015, Students symposium in SMM College. 03 <sup>rd</sup> Mar. 2015			
<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>					
One day Inter college Symposium on “Interactions in Fundamental Electronics” (IFE-14)		Self funded	22 <sup>nd</sup> February 2014		
One day Inter college Symposium on “ Emerging Trends and Applications of Elctronics” (ETAE-15)		Self funded	3 <sup>rd</sup> March 2015		
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
<b>2014-15</b>	55	43	22	21	50.00
<b>2013-14</b>	52	40	18	22	50.00
<b>2012-13</b>	36	36	25	11	60.00
<b>2011-12</b>	27	27	16	11	80.00
<b>2010-11</b>	30	30	17	13	50.00
*M=Male *F=Female					

27. Diversity of Students				
Name of the Course B.Sc.	% of same state	% of other States	% of abroad	
2014-15	100	00	00	
2013-14	100	00	00	
2012-13	100	00	00	
2011-12	100	00	00	
2010-11	100	00	00	
28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.			02	
29. Student progression	Student progression	Years	Total Enrolled	Against % enrolled
	UG to PG	2010-11	06	50.00
		2011-12	05	40.00
		2012-13	10	60.00
		2013-14	12	50.00
		2014-15	11	40.00
	PG to M.Phil.	2010-15	NA	--
	PG to Ph.D.	2010-15	NA	--
	Ph.D. to Post-Doctoral	2010-15	NA	--
Employed • Campus selection • Other than campus recruitment	2010-15	44	5.00	
Entrepreneurship/Self-employment	2010-15	Data not received	--	
30. Details of Infrastructural facilities				
a) Library	The Department of Electronics having departmental library enriched with adequate number of Reference books and Journals and abstract.			
b) Internet facilities for Staff & Students	Yes			
c) Class rooms with ICT facility	Yes			
d) Laboratories	Electronics laboratory is well equipped with basic instruments.			
31. Number of students receiving financial assistance from college, university, government or other agencies			173 (2010-15)	
32. Details on student enrichment programmes (special lectures / workshops / seminar) with external experts				
Sr. No.	Name of Guest/Speaker	Designation and Institute	Title	Date
1.	Dr. S. J. Sharma	Head, Dept. of Electronics, RTM Nagpur University, Nagpur	Chief Guest lecture on "Sensors & Ultrasonics in Research" in Inauguration of Electronics Society-2011-12	13 <sup>th</sup> September 2011

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2.	Dr. C. V. Dhuley	Chairman BoS, Electronics, RTM Nagpur University, Nagpur.	Chief Guest lecture on “Future Prospectus in B.Sc. Electronics” in Inauguration of Electronics Society-2012-13.	22 <sup>nd</sup> October 2012
3.	Prof. H. M. Paul	Head, Dept. of Electronics, SFS college, Nagpur	Chief Guest lecture on “Scope of Electronics for Industries and Research ” in Inauguration of Electronics Society-2013-14,	12 <sup>th</sup> August 2013
4.	Dr. Mrs. Jayamala Dumre	Director, Continuing Adult Education & Extension, RTM Nagpur University, Nagpur.	Guest of Honor Lecture on “Presentation of different schemes for the students of graduation”	20 <sup>th</sup> September 2013
5.	Mrs. Yashshree Nandanwar,	Corporator, Nagpur Municipal Corporation, Nagpur.	Popular Talk on “ Social awareness of science Students”	20 <sup>th</sup> September 2013
6.	Shri. Madhukar Khode	Mauli satsang mandal, Digras, Yavatmal.	A talk on “Literacy of Non-Addiction”	07 <sup>th</sup> October 2013.
7.	Dr. V. M. Pendsey	Asso. Prof. in Sindhu Mahavidyalaya, Nagpur.	Guest Lecture on “How to study Electronics” on	14 <sup>th</sup> December 2013
8.	Dr. Mrs. M. Niyazi	Principal, Shri. Binzani Mahavidyalaya, Nagpur	Chief Guest, Popular Talk on “Co-Curricular activities” at IFE-2014.	22 <sup>nd</sup> February 2014
9.	Dr. Onkar S. Khemkar	Coordinator & Asso. Prof., Computer Dept., VMV college, Nagpur	Guest Lecture On “Biomedical Instrumentation” IFE-2014.	22 <sup>nd</sup> February 2014
10.	Dr. (Mrs.) T. Sengupta	Associate Scientist, MRSAC, Nagpur	Guest Lecture on “Satellite Communication” IFE-2014	22 <sup>nd</sup> February 2014
11	Dr. Vyankatesh R. Vyaghra	Assistant Prof.,	Guest Lecture on “Circuit Maker Software” IFE-2014.	22 <sup>nd</sup> February 2014
12	Prof. Dr. S. S. Bhoga	Ex-Head, Dept. of Physics, RTM Nagpur University, Nagpur	Chief Guest Popular Talk on on “Research in Electronics” IFE-2014	22 <sup>nd</sup> February 2014
13.	Dr. Sridevi Darisi	Asso. Prof. in LAD College, Nagpur	Popular Talk on “Activities in Science” at IFE-2014	22 <sup>nd</sup> February 2014
14.	Dr. S. Rajagopalan	Retired Professor, Nagpur University, Nagpur	Chief Guest in “Electronics Research & Scopes”	6 <sup>th</sup> August 2014

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			Inauguration of Electronics Society. 2014-15	
15.	Mr. Mahendra Kamble	Pra. Jagero, Motivational Guru, Yoga Expert & Meditation specialist, Nagpur	Guest Lecture on “Yoga & Meditation ”	17 <sup>th</sup> October 2014
16.	Dr. Mrs. Rina Saha	Vice-Principal, Shri. M. Mohota College of science, Nagpur.	Lecture on “White Cane Day”	17 <sup>th</sup> October 2014
17.	Dr. Nilesh Meshram	Head, Dept. of Electronics, S. M. Mohota College of Science, Nagpur	Lecture on “ Divergent Thinking”	11 <sup>th</sup> February 2015
18.	Dr. S. J. Sharma	Head, Department of Electronics, RTM Nagpur University, Nagpur.	Chief Guest, Popular Talk on “Electronics Research” in ETAE-2015.	3 <sup>rd</sup> March 2015
19.	Dr. R. R. Mudholkar	Professor, Kolhapur University, Kolhapur	Guest of Honor Lecture on “Fuzzy Logic” in ETAE-2015.	3 <sup>rd</sup> March 2015
20.	Dr. V.M. Pendsey	Asso. Prof. in Sindhu Mahavidyalaya, Nagpur.	Guest Lecture on “Applications of microcontrollers” in ETAE-2015.	3 <sup>rd</sup> March 2015
21.	Dr. (Mrs.) Charusheela P. Joshi	Professor in RKNEC, Nagpur.	Guest Lecture on “Phosphors for Solid State Lighting” in ETAE-2015.	3 <sup>rd</sup> March 2015
22.	Dr. V. B. Sapre	Retd. Prof. and Head, Dept. of Physics, RTM Nagpur University, Nagpur.	Guest lecture on “Possibilities of Research in the subject Electronics”	20 <sup>th</sup> August 2015
23.	Dr. A. S. Sahsrabuddhe	Vice-Principal (Junior College), S. M. Mohota College of Science, Nagpur.	Guest Lecture on “International literacy Day”	8 <sup>th</sup> September 2015
24.	Dr. V. M. Pendsey	Asso. Prof. Sindhu Mahavidyalaya, Nagpur	Guest Lecture on Circuit Maker Software	10 <sup>th</sup> September 2015
<b>• Lab Visits</b>				
	<b>Class</b>	<b>Visit at</b>	<b>Purpose</b>	<b>Date</b>
	B.Sc. Electronics all	INDORAMA Synthetic Ltd., Butibori, Nagpur.	Educational Tour	16/12/2011
	B.Sc. Electronics all	NEERI, Nagpur.	Educational Tour	12/01/2012
	B.Sc. Electronics all	Maharashtra Remote sensing Applications Centre (MRSAC), VNIT, Campus, Nagpur.	Educational Tour	15/01/2013
	B.Sc. Electronics all	Visit to Raman Science Center, Nagpur.	Educational Tour	14/08/2015
<b>33. Teaching methods adopted to improve student learning</b>			1. Seminars and Guest lectures 2. Power point presentation 3. Use of Practical Simulation of Electronic instrumentations	

<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>	
Head is Officer-in charge, Continuing Adult Education and Extension unit of the college and actively conducts various social activities.	
<b>35. SWOC analysis of the department</b>	
<b>STRENGTH</b>	<b>WEAKNESS</b>
<ul style="list-style-type: none"> <li>• Competent and well qualified staff.</li> <li>• Good results as compared to other colleges.</li> <li>• Availability of Research facilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Sufficient fund not available for upgradation of laboratory.</li> <li>• Insufficient teaching staff.</li> <li>• Input of low caliber students</li> <li>• Financial constraints of student.</li> </ul>
<b>OPPORTUNITIES</b>	<b>CHALLENGES</b>
<ul style="list-style-type: none"> <li>• Most UG students can do PG in Electronics.</li> <li>▪ Students can appear for Competitive examination.</li> <li>• Employment in Electronics &amp; research Industries.</li> </ul>	<ul style="list-style-type: none"> <li>• Strength of Students at UG level due to less number of PG centers available</li> <li>• Less scope to Electronics Science since B.E. in Electronics are more preferred.</li> <li>• Less job opportunities in pure Electronics.</li> </ul>
<b>FUTURE PLANS</b>	
<ul style="list-style-type: none"> <li>❖ Plan to Organize International/ National Conference in “Nanotechniques in Biomedical Instrumentation”.</li> <li>❖ To start the new combination of Electronics, Math &amp; Computer Science at UG level.</li> <li>❖ To Start PG Course in biomedical instrumentation &amp; add-on courses.</li> <li>❖ To start research work in solar simulator.</li> </ul>	

**EVALUATIVE REPORT OF COMPUTER SCIENCE DEPARTMENT**

1. Name of the department -	Computer Science		
2. Year of Establishment	Under Graduate- 2007-08		
3. Names of Programmes / Courses offered	UG with Computer Science as one of the subject (S.F.)		
4. Names of Interdisciplinary courses and the departments/units involved	Nil		
5. Annual/ semester/choice based credit system (programme wise)	UG : B.Sc.- Semester (Credit based system) (SF)		
6. Participation of the department in the courses offered by other departments	<b>Course</b>	<b>Department</b>	
	Nil	Nil	
7. Courses in collaboration with other Universities, industries, foreign institutions, etc.	Nil		
8. Details of courses/programmes discontinued (if any) with reasons	Nil		
9. Number of Teaching posts	<b>Position</b>	<b>Sanctioned</b>	<b>Filled</b>
	Fixed pay (S.F.)	Nil	04
10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)	Nil		
11. List of senior visiting faculty	Nil		
12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty	UG: B.Sc.-Theory: 100% Practicals:100% (C.H.B. faculty)		
13. Student -Teacher Ratio (programme wise)	UG	28:1	
14. Number of academic support staff (technical) and administrative staff	Sanctioned	Filled	
	Nil	Nil	
15. Qualifications of teaching faculty with D.Sc/ D.Litt/ Ph.D/ M.Phil/PG.	PG		
16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.	<b>National</b>	<b>International</b>	
	Nil	Nil	
17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received	Nil		
18. Research Centre /facility recognized by the University	NA		
19. Publications. Publication per Faculty	Nil		
20. Areas of consultancy and income generated	Nil		
21. Faculty as members in	<b>National committees</b>	<b>International Committees</b>	<b>Editorial Boards</b>
	-	-	-
22. Student projects			
a) Percentage of students who have done in-house projects including inter departmental/programme			NA
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies			No
23. Awards/ Recognitions received by faculty and students			Nil
24. List of eminent academicians and scientists/ visitors to the department			Nil

*Evaluative Report of Computer Science Department*

<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>					Nil
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) B.Sc. I	Applications received	Selected	Enrolled		Pass percentage of B.Sc. final year
			*M	*F	
2014-15	60	44	22	12	80.00
2013-14	56	42	10	32	92.31
2012-13	43	43	18	25	77.27
2011-12	32	32	14	18	84.62
2010-11	33	33	08	25	71.40
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	100	00	00		
2013-14	100	00	00		
2012-13	100	00	00		
2011-12	100	00	00		
2010-11	100	00	00		
<b>28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>					Nil
<b>29. Student progression</b>	<b>Student progression</b>	<b>Years</b>	<b>Total Enrolled</b>	<b>Against % enrolled</b>	
	UG to PG	2010-15	63	10.00	
	PG to M.Phil.	2010-15	NA	NA	
	PG to Ph.D.	2010-15	NA	NA	
	Ph.D. to Post-Doctoral	2010-15	NA	NA	
	Employed • Campus selection • Other than campus recruitment	2010-15	-	Data not available	
	Entrepreneurship/ Self-employment	2010-15	-	Data not available	
<b>30. Details of Infrastructural facilities</b>					
<b>a) Library</b>	The Department of Computer Science is departmental library enriched with adequate number of text & reference books.				
<b>b) Internet facilities for Staff &amp; Students</b>	Yes				
<b>c) Class rooms with ICT facility</b>	Yes				
<b>d) Laboratories</b>	One laboratory is well equipped, ventilated & sufficient for every student.				
<b>e) Staff Room</b>	Separate staff room for teaching staff members				
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>				128 (2010-15 )	
<b>32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts</b>				Nil	
<b>33. Teaching methods adopted to improve student learning</b>			1. Seminars and Guest lectures 2. Power point presentation with ICT		

<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>	
Faculty members involved in the Social and extension activities and motivate the students to involve in the extension activities of the institution.	
<b>35. SWOC analysis of the department</b>	
<b>STRENGTH</b>	<b>WEAKNESS</b>
<ul style="list-style-type: none"> <li>• Well equipped laboratory.</li> <li>• Self funded course.</li> </ul>	<ul style="list-style-type: none"> <li>• No permanent Staff.</li> <li>• Input of low caliber students.</li> <li>• Inadequate infrastructure.</li> </ul>
<b>OPPORTUNITIES</b>	<b>CHALLENGES</b>
<ul style="list-style-type: none"> <li>• Job opportunities in IT and computer industries.</li> </ul>	<ul style="list-style-type: none"> <li>• Mediocre students.</li> </ul>
<b>FUTURE PLANS</b>	
<ul style="list-style-type: none"> <li>• Intensive remedial coaching for academically weaker students.</li> <li>• Training for competitive examination.</li> <li>• Self employment by using industrial project.</li> <li>• Upgradation of laboratory.</li> </ul>	

**EVALUATIVE REPORT OF LANGUAGE DEPARTMENT**

<b>1. Name of the Department -</b>		Languages			
<b>2. Year of Establishment</b>		Under Graduate-1949			
<b>3. Names of Programmes / Courses offered</b>		B.Sc. Semester- I and II with English as one of the compulsory subjects. Marathi/ Supplementary English/ Hindi are optional subjects			
<b>4. Names of Interdisciplinary courses and the departments/units involved</b>		Nil			
<b>5. Annual/ semester/choice based credit system (programme wise)</b>		UG : B.Sc.- Semester (Credit based system)			
<b>6. Participation of the department in the courses offered by other departments</b>		<b>Course</b>	<b>Department</b>		
		Nil	Nil		
<b>7. Courses in collaboration with other Universities, industries, foreign institutions, etc.</b>		Nil			
<b>8. Details of courses/programmes discontinued (if any) with reasons</b>		Nil			
<b>9. Number of Teaching posts</b>	<b>Position</b>		<b>Sanctioned</b>	<b>Filled</b>	
	Professors		Nil	Nil	
	Associate Professors		01	01	
	Clock Hour Basis		-	Marathi- 01 Hindi- 01	
<b>10. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt. /Ph.D./ M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Dr. J. A. Janbandhu	M.A., NET, SET, Ph.D.	Assistant Professor	Jewish American Literature	17	-
<b>11. List of senior visiting faculty</b>		Nil			
<b>12. Percentage of lectures delivered and practical classes handled (programme wise) by temporary faculty</b>		Nil			
<b>13. Student -Teacher Ratio (programme wise)</b>		UG		English: 332:1 Supp. English: 38:1	
<b>14. Number of academic support staff (technical) and administrative staff</b>		<b>Sanctioned</b>		<b>Filled</b>	
		Nil		Nil	
<b>15. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>		NET, SET, Ph.D. - 01			
<b>16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>		<b>National</b>		<b>International</b>	
		Nil		Nil	
<b>17. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>		<b>No of Project</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>
		01 (Minor)	2010-12	UGC	Rs. 60,000/-
		Total Grants received			Rs. 55,000/-

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<b>18. Research Centre /facility recognized by the University</b>	No				
<b>19. Publications.</b>					
Publication per Faculty					
<b>Number of papers published in peer reviewed journals (national / international) by faculty and students</b>					
<b>Faculty</b>	<b>National</b>	<b>International</b>	<b>Total</b>		
Dr. J. A. Janbandhu	01	03	04		
<b>Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)</b>			All the papers are listed in 'international database'		
<b>Monographs</b>	Nil				
<b>Books Published</b>	03				
<b>Books with ISBN/ISSN numbers with details of publishers</b>	<b>Faculty</b>	<b>With ISSN Number</b>	<b>Without ISSN Number</b>		
	Dr. J. A. Janbandhu	02	01		
<b>Impact Factor</b>	0.998 (IIFS) - 3.503 ( SJIF)				
<b>20. Areas of consultancy and income generated</b>	Nil				
<b>21. Faculty as members in</b>	National committees	International Committees	Editorial Boards		
	-	-	-		
<b>22. Student projects</b>					
a) Percentage of students who have done in-house projects including inter departmental/programme			NA		
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies			No		
<b>23. Awards/ Recognitions received by faculty and students</b>			Nil		
<b>24. List of eminent academicians and scientists/ visitors to the department</b>			Nil		
<b>25. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>			Nil		
<b>26. Student profile programme/course wise</b>					
Name of the Course/programme (refer question no. 4) <b>B.Sc. I</b>	Applications received	Selected	Enrolled		Pass percentage of B.Sc. Final Year
			*M	*F	
2014-15	367	367	141	226	-
2013-14	371	371	142	229	-
2012-13	341	341	165	176	-
2011-12	306	306	152	154	-
2010-11	278	278	104	174	-
*M=Male *F=Female					
<b>27. Diversity of Students</b>					
Name of the Course B.Sc.	% of same state	% of other States	% of abroad		
2014-15	100%	00	00		
2013-14	100%	00	00		
2012-13	100%	00	00		
2011-12	100%	00	00		
2010-11	100%	00	00		
<b>28. How many students have cleared national and state competitive</b>					NA

<b>examinations such as NET, SLET, GATE, Civil services, Defense services, etc.</b>				
<b>29. Student progression</b>	<b>Student progression</b>	<b>Years</b>	<b>Total Enrolled</b>	<b>Against % enrolled</b>
	UG to PG	2010-15	NA	NA
	PG to M.Phil.	2010-15	NA	NA
	PG to Ph.D.	2010-15	NA	NA
	Ph.D. to Post-Doctoral	2010-15	NA	NA
	Employed • Campus selection • Other than campus recruitment	2010-15	NA	NA
	Entrepreneurship/Self-employment	2010-15	NA	NA
<b>30. Details of Infrastructural facilities</b>				
<b>a) Library</b>	The Department of English has Departmental Library enriched with adequate number of books.			
<b>b) Internet facilities for Staff &amp; Students</b>	Through Library			
<b>c) Class rooms with ICT facility</b>	Yes			
<b>31. Number of students receiving financial assistance from college, university, government or other agencies</b>	367 (2010-15)			
<b>32. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts</b>	Nil			
• Special Lectures/Seminars/Workshop/popular Talks	Nil			
<b>33. Teaching methods adopted to improve student learning</b>	Unit Tests, Group Discussion, Study Notes, Evaluation and Queries pertaining to syllabus are adopted to solve student's problems & improve their learning.			
<b>34. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>				
NSS Regular and Special Activities are carried out. Tree Plantation, Blood Donation, Voter Awareness, <i>Shramdaan</i> , Special Village Camp, Street show, Participation in Various activities organized by the NSS Cell of the University.				
<b>Years</b>	<b>Blood Donation</b>			
<b>2013-15</b>	<b>80</b>			
<b>35. SWOC Analysis of the Department</b>				
<b>STRENGTH</b>			<b>WEAKNESS</b>	
• The subject offers students to enrich with spoken aspect of the Language.			• Limited to B.Sc. first year	
<b>FUTURE PLANS</b>				
• The department has a proposal to organize UGC sponsored One Day workshop on Effective Writing in the forthcoming session, 2015-2016.				

**EVALUATIVE REPORT OF LIBRARY AND INFORMATION CENTRE**

<b>1. Name of the department -</b>		Library and Information centre			
<b>2. Year of Establishment</b>		Under Graduate- 1949			
<b>3. Names of Programmes / Courses offered</b>		Short term course: Personality development and Information Management			
<b>4. Number of Teaching posts</b>	<b>Position</b>		<b>Sanctioned</b>	<b>Filled</b>	
	Associate Professors		01	01	
<b>5. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.,)</b>					
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>
Dr. E. B. Raut	M.L.I.Sc., M.A. (Eco.), M.Com., Ph.D., NET (Library Science and Commerce)	Librarian (Associate Professor)	Library Science	19	-
<b>6. Number of academic support staff (technical) and administrative staff</b>		<b>Sanctioned</b>		<b>Filled</b>	
		4		4	
<b>7. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>		M.L.I.Sc., M.A.(Eco.), M.Com., Ph.D.,			
<b>8. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received.</b>		<b>National</b>		<b>International</b>	
		NIL		NIL	
<b>9. Departmental projects funded by DST- FIST; UGC, DBT, ICSSR, etc. and total grants received</b>		<b>No of Project</b>	<b>Year</b>	<b>Funding Agency</b>	<b>Amount Sanctioned</b>
		(Minor) 1	2009-11	UGC	Rs.60,000/-
		Total Grants received			Rs. 51,171/-
<b>10. Research Centre /facility recognized by the University</b>		NA			
<b>11. Publications.</b>		<b>6</b>			
Publication per Faculty					
<b>Number of papers published in peer reviewed journals (national / international) by faculty and students</b>		<b>Faculty</b>	<b>National</b>	<b>International</b>	<b>Total</b>
		Dr. E. B. Raut	03	03	06
<b>Number of publications listed in International Database (For Eg: Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)</b>				NIL	
<b>Monographs</b>		NIL			
<b>Books Published</b>		NIL			
<b>Chapter in Books</b>		NIL			
<b>Books Edited</b>		NIL			
<b>Citation Index</b>		NIL			
<b>SNIP</b>		NIL			
<b>SJP</b>		NIL			

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<b>h-Index</b>	NIL		
<b>Impact Factor</b>	NIL		
<b>12. Areas of consultancy and income generated</b>	NIL		
<b>13. Faculty as members in</b>	<b>National committees</b>	<b>International Committees</b>	<b>Editorial Boards</b>
Dr. E. B. Raut	-	-	IJRSSIS online peer review journal (Edi. Board Member)
<b>14. Student projects</b>			
a) Percentage of students who have done in-house projects including inter departmental/programme	NA		
b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/other agencies	NA		
<b>15. Awards/ Recognitions received by faculty and students</b>	NA		
<b>16. List of eminent academicians and scientists/visitors to the department</b>			
<b>Name of Academicians</b>	<b>Designation /Name of Institute</b>		
Dr. Sanjay Kumbhar	Asso. Prof. and Head Department of Library and Information Science, S. P. Pune University, Pune		
Dr. Niranjana Singh	Director, Dept. of Library, Rashtriya Hindi Bhasha Vikas Sansthan, Agra		
Dr. P. Dakhole	Head, Librarian, RTM Nagpur University, Nagpur		
Dr. Mrs. Ashwini Paradkar	Head, Dept. of Library, S. F. S. College.		
<b>17. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>			
UGC Sponsored one day National Seminar on "Role of Libraries and Librarians towards economical weaker society in changing environment"	Sponsored by UGC	Date: 14 <sup>th</sup> March 2015	
<b>18. Details of Infrastructural facilities</b>			
<b>a. Library Layout</b>			
<b>Sr. No.</b>	<b>Headings</b>	<b>Description</b>	<b>Area in sq. ft.</b>
A	Total Library area and Layout	Total Area	2520
		<ul style="list-style-type: none"> <li>▪ Stack room: 600 sq ft.</li> <li>▪ Lending section: 300</li> <li>▪ Librarian room: 100</li> <li>▪ Students : 700</li> <li>▪ Teaching Staff and P.G. Students: 300</li> <li>▪ IT zone/Computers: 150</li> <li>▪ Reference section: 200</li> <li>▪ Binding room: Binding work gives on Contract basis</li> <li>▪ Corridor 170</li> </ul>	
B	Seating Capacity of the	▪ Total seating capacity	110
C	Working hours of the Library	<ul style="list-style-type: none"> <li>▪ On working days 8 hours</li> <li>▪ On examination days 8 hours</li> <li>▪ On Holidays Library kept open on winter and summer holidays</li> </ul>	

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D	Seating Capacity of the Library	<ul style="list-style-type: none"> <li>▪ Total seating capacity 110</li> <li>▪ For Students 90</li> <li>▪ For Staff 15</li> <li>▪ For Library staff 05</li> </ul>
<b>Internet facilities for Staff &amp; Students</b>		
<b>Heads</b>	<b>Descriptions</b>	<b>Numbers</b>
OPAC	Online Public Access Catalogue	Yes it is open for staff and students
E-Resources	Electronic resource management package for E-journals and e-books	INFLIBNET package and other Open sources available on Internet
Searching tools	Federated searching tools to search articles in multiple databases	Free and open software tools can be use
Library Website	There is no separate college library website	NO
E-publications	In-house/remote access to e-publications	Yes
Library Automation	Library is atomization through LIB-MAN software and Bar-Coding.	YES
Computers	Total For Public Access	13 07
Printers	Total For Public Access	02 02
Internet	Internet band width/ speed : 2 mbps, 10 mbps, 1 GB	One Broadband Connections with speed of 2-10 mbps
Institutional Repository	Institutional Repository	Yes
E-Learning	Content management system for e-learning	Yes
Resource Sharing	Participation in Resource sharing networks/consortia (like INFLIBNET)	Yes through INFLIBNET (N-List)
<b>19. Details on student enrichment programmes (special lectures/ workshops / eminar) with external experts</b>		
<b>20. Participation in Institutional Social Responsibility(ISR) and Extension activities</b>		
All kind of allotted extension ISR and activities can done by Librarian and Library staff.		
<b>21. SWOC analysis of the department</b>		
<b>STRENGTH</b>		<b>WEAKNESS</b>
<ul style="list-style-type: none"> <li>▪ Positive approach of Management, Faculty, and supportive staff.</li> <li>▪ Effective use of technology.</li> <li>▪ Huge and good collection of books.</li> </ul>		<ul style="list-style-type: none"> <li>▪ Insufficient space for stack room.</li> <li>▪ Small reading room and improper furniture.</li> <li>▪ Lack of IT expert library staff.</li> <li>▪ Insufficient Fund.</li> </ul>
<b>OPPORTUNITIES</b>		<b>CHALLENGES</b>
<ul style="list-style-type: none"> <li>▪ Huge college premises and open field for expansion.</li> <li>▪ Increasing students' strength.</li> <li>▪ Dedicated faculties.</li> <li>▪ Dedicated supporting staff.</li> </ul>		<ul style="list-style-type: none"> <li>▪ Declining reading habits.</li> <li>▪ Damaging reading materials.</li> <li>▪ Insufficient space.</li> <li>▪ Motivation to the students.</li> <li>▪ Restricted and insufficient fund.</li> </ul>

**FUTURE PLANS**

The following steps are already underway to deepen assessment of this competency

- To teach, instruct, practice and assess the skill development with the help of ITC field expert.
- Increasing stack room space and reading room space.
- Organize more orientation programmes for students.
- Proposal is to be a Separate library building with modern technology in near future.

**EVALUATIVE REPORT OF PHYSICAL EDUCATION AND SPORTS DEPARTMENT**

<b>1. Name of the department -</b>		Physical Education				
<b>2. Year of Establishment</b>		Under Graduate - 1949				
<b>3. Names of Programmes / Courses offered</b>		UG				
<b>4. Number of Teaching posts</b>	<b>Position</b>		<b>Sanctioned</b>	<b>Filled</b>		
	Professors		Nil	Nil		
	Associate Professors		Nil	Nil		
	Asst. Professors		01	01		
<b>5. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt. /Ph.D./ M.Phil. etc.,)</b>						
<b>Name of Faculty</b>	<b>Qualification</b>	<b>Designation</b>	<b>Specialization</b>	<b>No. of Years of Experience</b>	<b>No. of Ph.D. Students guided for the last 4 years</b>	
Dr. S. S. Bhonsale	M.P.Ed. Ph.D.	Assistant Director	Physical Education	23	02	
<b>6. Number of academic support staff (technical) and administrative staff</b>			<b>Sanctioned</b>		<b>Filled</b>	
			Ad-hoc	Nil	01	
<b>7. Qualifications of teaching faculty with DSc/ D.Litt/ Ph.D/ MPhil/PG.</b>			M.P.Ed., Ph.D.- 01			
<b>8. Publications.</b>						
<b>Number of papers published in peer reviewed journals (national / international) by faculty and students</b>			<b>Faculty</b>	<b>National</b>	<b>International</b>	<b>Total</b>
			Dr. S. S. Bhonsale	02	-	02
<b>9. Awards/ Recognitions received by faculty and students</b>						
<b>S. N.</b>	<b>Name of Faculty/Students</b>	<b>Awards/Recognition</b>			<b>Years</b>	
01	Ku. Ujali Deshmukh	<b>One Gold &amp; One Silver medal</b> , inter college Swimming competition, Organized by RTM Nagpur University, Nagpur (First Place)			2011-12	
02	Ku. Dhanshree Lekurwale	<b>One Silver Medal</b> , Inter-collegiate Yogasan Tournament Nagpur (Second Place).			2011-12	
03	Ku. Ujali Deshmukh	<b>One Gold &amp; Two Silver medal</b> , inter college Swimming competition, Organized by RTM Nagpur University, Nagpur (First Place)			2012-13	
04	Ku. Shreya Thakare	Secured <b>4<sup>th</sup></b> rank in All India long distance 14 km Swimming Competition held at Kolkata			23/12/ 2012	
05	Ku. Shreya Thakare	Secured <b>3<sup>rd</sup></b> rank in 5 km marine swimming from rank rock to Gate way of India, Mumbai			10/02/ 2013	
06	Ku. Ujali Deshmukh	<b>One Gold, Two Silver &amp; One Bronze medal</b> , inter college Swimming competition, Organized by RTM Nagpur University, Nagpur (First Place)			30/10/2013	
07	Ku. Shreya Thakare	Secured <b>8<sup>th</sup></b> rank in All India Naval sea swimming Competition held at Mumbai			17/11/ 2013	
08	Ku. Apeksha Nagose	Inter college Kabaddi Tournament, Organized by RTM Nagpur University, Nagpur (First Place)			10/12/2013	
09	Ku. Dhanshree Lekurwale	<b>One Gold &amp; One Silver Medal</b> , Inter-collegiate Yogasan Tournament, Nagpur ( <b>First Place</b> ).			2013-14	
10	Ku. Dhanshree Lekurwale	<b>One Gold, One Silver &amp; One Bronze. Medal</b> , Asian International Yoga Competition at South			2014-15	

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		Korea ( <b>First Place</b> ).	
11	Ku. Shreya Thakare	<b>Three</b> Gold medals, inter college Swimming competition, Organized by RTM Nagpur University, Nagpur ( <b>First Place</b> )	05-07/10/2014
12	Ku. Ujali Deshmukh	<b>Three</b> Silver & <b>One</b> Bronze medals, inter college Swimming competition, Organized by RTM Nagpur University, Nagpur ( <b>Second Place</b> )	05-07/10/2014
13	Ku. Samisha Ladge	Secured <b>3<sup>rd</sup></b> rank in All India Naval sea swimming Competition held at Mumbai	17/11/2014
14	Ku. Shreya Thakare	Secured <b>3<sup>rd</sup></b> rank in All India Naval sea swimming Competition held at Mumbai	17/11/2014
15	Mr. Rajat Munde	<b>One</b> Gold Medal ( <b>First Place</b> ) in inter collegiate Gymnastic Tournament Organized by RTM Nagpur University.	11-14/10/2014
16	Mr. Sarang Satpute	<b>One</b> Silver Medal ( <b>Second Place</b> ) in inter collegiate Gymnastic Tournament Organized by RTM Nagpur University.	11-14/10/2014
17	Ku. Dhanshree Lekurwale	<b>One</b> Gold, <b>One</b> Silver & <b>One</b> Bronze. Medal, Inter-collegiate Yogasan Tournament Nagpur ( <b>First Place</b> ).	2014-15
18	Ku. Shreya Thakare	<b>Two</b> Gold, & <b>One</b> Silver Medal, inter college Swimming competition, Organized by RTM Nagpur University, Nagpur ( <b>First Place</b> ).	14-16/09/2015
19	Ku. Ujali Deshmukh	<b>One</b> Silver & <b>One</b> Bronze medals, inter college Swimming competition, Organized by RTM Nagpur University, Nagpur ( <b>Second Place</b> )	14-16/09/2015
20	Ku. Nikita Raut	<b>One</b> Gold & <b>Two</b> Silver medals, inter college Annual Athletic Tournament, Organized by RTM Nagpur University, Nagpur ( <b>First Place</b> )	26-30/10/2015
<b>10. List of eminent academicians and scientists/visitors to the department</b>			
<b>S. N.</b>	<b>Name of Academicians</b>	<b>Departments</b>	<b>Dates</b>
01	Dr. Jayprakash Duble	Deputy Director, MSU services, Nagpur	24/12/2012
02	Prof. Rajesh Bawankule	Arts & Commerce Night College, Nagpur	06/12/2013
03	Dr. Madhavi Aychit	Institute of Science, Nagpur	29/12/2014
<b>11. Seminars/ Conferences/Workshops organized &amp; the source of funding</b>			
<b>Workshops</b>	<b>Title</b>	<b>Funded</b>	<b>Date</b>
	Wrestling	Self funded	2012 onwards
	Gymnastics	Self funded	2013 onwards
	Swimming	Self funded	2014 onwards
	Water Polo	Self funded	2014 onwards
<b>12. Details of Infrastructural facilities</b>			
<b>a) Gymnasium</b>	<b>Yes</b>		
<b>b) Other facilities</b>	▪ Play Ground	▪ Volleyball Court	▪ Track And Field-400m Track
▪ Badminton Outdoor	▪ Push Up	▪ Kabaddi Court	▪ Basketball Court
			▪ Table Tennis
			▪ Yoga hall
<b>13. Details on student enrichment programmes (special lectures / workshops /seminar) with external experts</b>			

*Evaluative Report of Physical Education and Sports Department*

Special Lectures/ Talks			
Name of Guest/Speaker	Designation and Institute	Title	Date
Dr. Jayprakash Duple	Deputy Director, MSU services, Nagpur	Tairaki aak Jiwanupoyogi Kala aani Manoranjan	24/12/2012
Prof. Rajesh Bawankule	Arts & Commerce Night college, Nagpur	Importance of Mallakhamb exercise	06/12/2013
Dr. Madhavi Aychit	Institute of Science, Nagpur	Importance of Valleyball games (Rules and regulation)	29/12/2014
Dr. Milind Guru	Yoga Exert, Nagpur	Importance of Yoga in daily life	19/12/2015
14. Teaching methods adopted to improve student learning			
▪ Practical method	▪ Tactics method	▪ Explanation method	▪ Discussion method
15. Participation in Institutional Social Responsibility(ISR) and Extension activities			
Student involved in the Social and extension activities			
<b>Years 2014-15</b>	Organized by Department of Physical Education collaboration with Rotary Club	<b>50</b> students have participated for <b>Blood Donation</b>	

### Section D: Support Facilities

#### 1. Continuing Adult Education and Extension (CAEE)

Unit: - Continuing Adult Education and Extension

- Chairman :- Principal Dr. S. G. Charalwar
- Program Officer :- Dr. N. D. Meshram
- Co-program Officer:- Dr. M. G. Dhonde
- Co-program Officer:- Dr. S. S. Bhonsale
- No. of Students :- 90 (2015-16)

Year	Participants	Activities
2011-12	25	Visit to <i>Aanandvan</i> , Warora
2013-14	30	<i>Rakshabandhan</i> Program at Old Age Home, A talk on “Divergent Thinking”, Talk on Literacy of Non-Addiction
2014-15	100	Tree plantation at department, World Population Day, Blood donation camp, <i>Rakshabandhan</i> at <i>Panchavati</i> Old Age Home, <i>Swachata Abhiyan</i> at <i>Panchavati</i> Old Age Home, Workshop on Meditation & yoga, White cane day & organ donation awareness program
2015-16	90	Blood donation camp, <i>Rakshabandhan</i> at <i>Panchavati</i> Old Age Home, <i>Swachata Abhiyan</i> at <i>Panchavati</i> Old Age Home

## 2. Library

- Year of Establishment : 1949
- Number of teaching posts : Single (1)

Post	Sanctioned	Filled
Librarian	1	1

1. Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.)

Name	Qualification	Designation	Specialization	No. of years of experience
Dr. Eknath B. Raut	M.L.I.Sc. M.A. (Eco.) M.Com. Ph.D. (Library Science)	Librarian	Library and information science Studies	19

- Dr. E. B. Raut presented paper in International conference at Nagpur (India) and Colombo (Sri Lanka)

- Publications:

International Journals	National Journals	International Conferences	Total number of Conferences
02	02	02	06

- National Seminar: UGC Sponsored one day National Seminar on “Role of Libraries and Librarians towards economical weaker society in changing environment” Organized by S.M.M. College of Science, Nagpur, Department of Library and Information Centre on 14<sup>th</sup> March, 2015 & Funded by UGC.
- Number of academic support staff (technical) and administrative staff sanctioned and filled:

Post	Sanctioned	Filled
Assistant Librarian	00	00
Clerk	01	00
Attendant	04	04
Peon	01	00

- Details of Infrastructural facilities and print and e-sources.

Sr. No.	Sources	Total
1	Text Books	17,028
2	Reference Books	3,153
3	General Book	11,353
4	e-Sources CD/DVD etc.	154
5	Bound Volumes	554
6	Journals	19
7	Magazines	12
8	News papers	16
9	Manuscript	10
10	INFLIBNET N-List (Ahmedabad) subscribed	Consortia

- Working hours : 8 hours, on working days and during examination  
On holidays : During summer and winter vacations library is open
- Shift : One
- Services and facilities
- Online Public Access Catalogue (OPAC): Users can browse library resources through OPAC from any computer connected with the college library network.
- The online resource collection: We are member of INFLIBNET, using N-List for online resource and using open sources of information on internet
- Total numbers of computer terminals: 13
- Total numbers of scanners : 02
- Total numbers of printers : 02
- Internet facility : Yes to all through broad band and Wi-Fi
- Institutional Repository : Work in progress
- Participation in resource sharing : Yes through N-List
- Electronic resource management : Yes through INFLIBNET, N-List package
- Computerized circulation desk
- Two computers attached with a latest digital barcode scanner on circulation counter. Almost books tagged with barcode stickers.
- Library automation: Yes the library automation work has been done by using Lib-Man software and most of services are provided using library automation facility.
- Reprographic service: Reprographic (Photocopy) service is available in the library for academic purpose.
- Library website : There is no separate library website

- Dr. Sanjay Kumbhar (Asso. Prof. and Head, Department of Library and Information Science, S. P. Pune University, Pune)
- Dr. Niranjan Singh (Director, Dept. of Library, Rashtriya Hindi Bhasha Vikas Sansthan, Agra)
- Other activities from library

Each year, the library hosts special events such as book talks, reading groups, book reading competition and student art exhibit on unedited board. Library also makes available facility to reading groups for anyone wishing to discuss the texts and literature. Conduct Short Term course of Information Management and Personality Development.

Sr. No.	Events
1	Book Exhibition on 16 <sup>th</sup> September 2011
2	Writing Skill Competition, 23 <sup>rd</sup> September 2011
3	Book Exhibition on 18 <sup>th</sup> September 2012.
4	How to use Internet Workshop from 3 <sup>rd</sup> -15 <sup>th</sup> October 2012
5	Computer operating and PPT Slide making 3 <sup>rd</sup> -15 <sup>th</sup> October, 2012
6	Book Exhibition on 23 <sup>rd</sup> September 2013.
7	Essay competition, on 7 <sup>th</sup> October 2013 in the College library reading room. Topic: To save Environment: my view and my contribution
8	Book Exhibition 04 <sup>th</sup> September 2014
9	Essay competition on, "Dr. (Babasaheb) Bhimrao R. Ambedkar his life and work on social reformation in India", 12 <sup>th</sup> October 2014
10	Book Exhibition 14 <sup>th</sup> September 2015

**3. National Service Scheme (NSS)**

**2015-16:** NSS volunteers organized Save Environment trip to Ramdegi Dist Chandrapur on 30<sup>th</sup> August 2015

**2014-15**

Sr. No.	Date	Name of Activity	No. of Participants
1.	13/09/14	Blood Donation Camp sponsored by Jeeven Jyoti Blood Bank, Nagpur	40
2.	26/09/14	Participated in 100th Convocation of RTM Nagpur University.	15
3.	30/09/14	Save Environment Trip to Ramdegi, Dist. Chandrapur.	90
4.	13/10/14	Clean India Drive (Rally) & Voter's Awareness Rally in Reshimbagh Zone, Nagpur	264
5.	26/11/14	Participated in Sanvidhaan Diwas Rally organized by RTM Nagpur University	35
6.	06/02/15	Participated and Interacted with Shri Nitin Gadkari, Minister, Govt. of India at Scientific Sabhagrih, Laxminagar, Nagpur	300
7.	21-27/02/15	Seven Day's Special Village Camp at Karhandla (Tirkhura, Sev, Thana), Tah. Umrer Dist. Nagpur	100
8.	13/03/15	Participated in One Day Workshop on "Clean India Movement: Youth Power with Scientific Approach" at Institute of Science, Nagpur	50

**2013-14**

Sr. No.	Date	Name of Activity	No. of Participants
1.	26/07/13	Shramadaan	100
2.	11/09/13	Participation in Vishwabandhutva Din	75
3.	02/10/13	Street Play on Dangers of Drugs/Alcohol	15
4.	02-03/10/13	Participation in 2 <sup>nd</sup> Anti Drug Abuse Gathering held at V. Deshpande Hall, Nagpur	100
5.	03/10/13	Participation in Essay Competition in Anti Drug Abuse Gathering held at V. Deshpande Hall, Nagpur	20
6.	25-31/01/14	Special Village Camp at Soundad Dist. Gondia	75

## 2012-13

Sr. No.	Date	Name of Activity	No. of Participants
1.	21/07/12	Guest Lecture: Importance of NSS	150
2.	26/07/12	Shramdaan	150
3.	01/08/12	Tree Plantation	75
4.	01/08/12	Save Female Child Rally by NSS Volunteers	150
5.	20/08/12	Debate on Environment Awareness	50
6.	28/08/12	Elocution on Role of Youth in India's Progress	140
7.	05/09/12	Teachers Day Celebration	350
8.	10/09/12	Essay Competition Role of Teacher in Making Society	50
9.	24/09/12	Group Discussion Corruption: A Fatal Disease in Society	35
10.	29/09/12	Participation in Seminar at Legal Aid Service, Civil Court, Nagpur	10
11.	03-07/12/12	Special Village Camp at Satgaon, Tah. Hingna Dist. Nagpur	90
12.	09/12/12	Participation in "Organ Plantation" at Instt. Of Engg. Hall, North Ambazari Road, Nagpur	12
13.	14/12/12	Participation in Adv. Rajendra Rathi Intercollegiate Essay Competition held at Smt. Binzani Mahila Mahavidyalaya, Mahal, Nagpur	02
14.	30/01/13	Guest Lecture on Gandhiji & Modern India	150
15.	08-13/02/13	NSS Special Village Camp at Banor (Hingna) Ta. Mouda Dist Nagpur	75
16.	18/02/13	Blood Donation Camp	100
17.	14/04/13	NSS Volunteers participated in "Save Nag River Campaign"	60

## 2011-12

Sr. No.	Date	Name of Activity	No. of Participants
1.	06/06/11	Participation in “International Day Against Drug Abuse & Illicit Trafficking”	200
2.	28/06/11	Fresher’s Orientation	150
3.	30/06/11	Essay Writing Competition (I Love India)	25
4.	07/07/11	Queries & Quandaries	100
5.	18/07/11	College Foundation Day Celebration	350
6.	23/07/11	Bokare Collegiate Elocution Competition	75
7.	01/08/11	Inauguration of <i>Chhatrasamvaad</i> College Wall Magazine & Debate on “Corruption & Lokpal”	100
8.	13/08/11	Tree Plantation in College Campus	100
9.	20/08/11	Environmental Trip to Ramdegi	40
10.	23-29/08/11	Participation in Female Anti-Foeticide National Movement held at Pune	100
11.	06/09/11	Article Writing (On Teacher’s Day)	40
12.	07/09/11	Rapid Writing Competition	100
13.	08/09/11	Guest Lecture on “Importance of Ayurveda”	100
14.	10/09/11	Teacher’s Day Celebration	100
15.	16/09/11	Inauguration of Social Service Society & Informal Group Discussion	400
16.	23/09/11	“Democracy in India” informal Group Discussion	200
17.	24/09/11	Participation in Dharma Bharti Mission	75
18.	24/09/11	Group Discussion on “Saving Water & Electricity”	100
19.	29-30/09/11	Gram Jan Sanwaad Camp at Soundad Village	100
20.	01/10/11	Participation in Dance Competition at Nikalas College, Nagpur (2 <sup>nd</sup> Prize)	100
21.	11/10/11	Inauguration of <i>Chhatrasamvaad</i> college Wall magazine (English Edition)	15
22.	19/10/11	Guest Lecture on “Major causes of Osteoporosis”	100
23.	28/11/11	Jyotiba Fule Death Anniversary Celebration	300

<b>Sr. No.</b>	<b>Date</b>	<b>Name of Activity</b>	<b>No. of Participants</b>
24.	22/12/11	Participation in “Workshop on Corruption” held at Gurunanak Bhavan, Nagpur by NSS Dept. (RTMNU, Nagpur)	200
25.	28/12/11	Participation in “Workshop on Attitude Development, WAD” at Smt. Binzani College, Mahal, Nagpur	10
26.	03/01/12	College Day Celebration	400
27.	21-22/01/12	Participation in NMC Elections	80
28.	30/01/12	Guest Lecture on “Gandhiji & 21 <sup>st</sup> Century”	200

**2010-11**

<b>Sr. No.</b>	<b>Date</b>	<b>Name of Activity</b>	<b>No. of Participants</b>
1.	28/08/10	Shramdaan	100
2.	02/09/10	Tree Plantation	50
3.	23-27/02/11	Special Village camp at Tirkhura Ta: Umrer Dist. Nagpur	75

#### 4. Physical Education and Sports

Year of Establishment : 1949

Number of Teaching Post : One

Teaching Posts	Sanctioned	Filled
Assistant Director	One	One (Male)

**Faculty profile with name, qualification, designation, specialization, (D.Sc./ D.Litt./ Ph.D./ M.Phil. etc.,)**

Name of Faculty	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. Students guided for the last four years
Dr. S. S. Bhonsale	M.P.Ed. Ph.D.	Assistant Professor	Physical Education	23	02

#### Sports and Games facilities:

- Indoor Games
  - Table Tennis
  - Chess
  - *Yoga*
  - Wrestling
- Outdoor Games
  - Volleyball
  - *Kabaddi*
  - *Kho-kho*
  - Football
  - Basketball
  - Badminton
  - Cricket
  - *Mallakhamb*
- Gymkhana with well equipped facilities

**Student participation at University level sports and Games:**

<b>Sports and Games</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>Total</b>
Volleyball	10	18	24	22	12	09	95
Badminton	--	04	04	04	02	02	16
Cricket	12	16	16	16	14	12	86
Athletics	--	08	04	07	07	06	32
Cross-Country	--	01	--	--	01	03	05
Chess	--	06	04	05	04	04	23
<i>Kabaddi</i>	--	--	--	01	--	--	01
Table-Tennis	--	03	03	--	--	--	06
Swimming	01	01	02	02	02	03	11
Water polo	--	--	--	--	--	01	01
Fencing	--	--	--	--	--	01	01
Taekwondo	--	--	--	01	02	02	05
Judo	--	--	--	01	01	--	02
Wrestling	--	03	02	--	--	--	05
<i>Yoga</i>	01	01	01	01	01	--	05
Gymnastics	--	--	--	--	02	02	04

**Remarkable achievements in sports events (List of colour holders)**

<b>Year</b>	<b>Sports events</b>	<b>Level</b>	<b>Number of Achievers</b>
2010-11	Swimming	All India inter-University	01
2011-12	Swimming	All India inter-University	01
	Yoga	All India inter-University	01
2012-13	Swimming	All India inter-University	01
	Kabaddi	All India inter-University	01
	Yoga	All India inter-University	01
	Volleyball	All India inter-University	01
2013-14	Swimming	All India inter-University	02
	Yoga	All India inter-University	01
	Taekwondo	All India inter-University	01
2014-15	Swimming	All India inter-University	02
	Gymnastics	All India inter-University	02
	Yoga	All India inter-University	01
2015-16	Swimming	All India inter-University	01
	Water polo	All India inter-University	01
	Volleyball	All India inter-University	01

**UGC Grant received**

Year	Sports events	Amount sanctioned Rs.	Amount received Rs.
2012-13	Gym equipment	5,00,000/-	4,00,000/-

**International participation in Yoga**

Year	Name of student	Sports events	Level	Number of Achievers
2014-15	Dhanashree S. Lekurwale	<i>Yoga</i>	International (South Korea)	01 Gold & 01 Silver
2015-16	Dhanashree S. Lekurwale	<i>Yoga</i>	International (Thailand)	02 Gold & 01 Silver

**Awards/ Recognition received by faculty**

Dr. S. S. Bhonsale

- Award of Ph.D. by RTM Nagpur University, Nagpur on 10<sup>th</sup> April 2010
- Member of Swimming, Diving and Water polo selection committee (men & women) 2010 till date
- Organizing Secretary 79<sup>th</sup> Senior State Level Swimming, Diving and Water polo Championship 2015
- Joint Secretary Maharashtra state Amateur Aquatic association 2014 till date
- Hon. Secretary, Nagpur district Amateur Aquatic Association 2009 till date
- Founder and president, Chimasaheb Bhosle Hanuman Vyayam Shala, Nagpur
- Secretary of Tajraj Hira Akhada Mandal, Nagpur
- Executive Member, Ramsagar Swimming Club, Khindsi, Ramtek
- President, Dolphin Swimming and Sporting Club, Nagpur
- Secretary, Nagpur district Amateur Triathlon Association
- Executive Member, Nehru Krida Mandal, Nagpur
- Joint Secretary of Maratha Vidya Prasarak Samaj, Nagpur
- Guest lecture of expert in sports
- Awareness Camping Program
- Recognition of Physical Education Director

**SWOC analysis of the department and Future plan****Strength**

- Well qualified and experienced faculty
- Gym facility for girl students

- Participation of student in various games/sports at intercollegiate, University, National and International level
- Color holder and championship in various games

**Weakness**

- Unavailability of indoor Stadium
- Space crunch

**Opportunities**

- Participation facilities for students in various games/ sports at intercollegiate, University, National and International level
- Incentive schemes for players (cash prize, track suit, sports cup, mementoes & certificates)
- Facility of coaching for games experts

**Challenges**

- To inculcate awareness of outdoor games
- To imbibe importance of physical fitness
- To inculcate moral and ethical values

**Future plan**

- To provide more indoor game facilities
- To organized guest lectures and coaching camps
- To modernize Gymnasium

## **Section E: Others**

### **POST REACCREDITATION INITIATIVES**

**For second cycle of reaccreditation, NAAC Peer team visited the college from August 30 to September 1, 2010.**

The college has fulfilled the maximum compliances in the best possible manner. The compliance to the recommendations and observations of Peer team were duly considered during the last five years. In addition to the compliances of the suggestions by NAAC peer team in their last visit, the college has taken following post accreditation initiatives.

- **Major/ Minor Research Projects:** The major/ minor research projects are sanctioned and funded by various government agencies to the faculty members of the college.
- **Short term courses :** Basic short term courses in every department are started effectively
- **Expansion of sports activities:** Indoor and outdoor sports facilities are expanded by the Physical education Department of the college in collaboration with external/ private sport clubs. The college started well equipped gymnasium for students and staff.
- **Improvement of infrastructure:** College has takes efforts to improvement in the infrastructure as per requirement.
- **MOU with industries and NGO:** Industries nearby Nagpur city and some Non-Government Organisations extend their cooperation and MOUs are formed with them.
- **Recognition of Research Laboratories :** Recognition to the research laboratory of the college as Place for Higher Learning and Research by Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur in the subject Chemistry and Physics.
- As number of girls students admitted from outskirts of the Nagpur city is increasing, women hostel is constructed with the aid of University Grants Commission.
- The management instituted Best Teacher Award for the teacher every year to encourage better performance for all round activities
- College has applied for additional assistance to UGC and additional assistance grant of Rs. 25 Lakhs from UGC is obtained for purchase of laboratory equipments and teaching aids.
- Organising National seminars and International conferences.
- Regarding women's safety and security in the college, college has appointed full time ladies security guard.
- For redressal of the girl students' grievances/ complaints women cell is constituted in the college.

**Declaration by the Head of the Institution**

  
Nagpur Shikshan Mandal's  
**SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE**  
Umred Road, Nagpur-440 009 Tel. : 0712-2744992 Fax : 0712-2744992  
E-mail:mohotacollege@yahoo.co.in Website:www.mohotasci.edu.in

President <b>A.K. GANDHI</b> Tel. : 2425883, 6619800	Secretary <b>SUDHIR BAHETI</b> Tel. : 2422933,2425442	Principal <b>Dr. S.G. CHARALWAR</b> Tel. : 2745984
--	---	--

Ref. : \_\_\_\_\_ Date : 15.01.16

**Declaration by the Head of the Institution**

I certify that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Date : Nagpur  
Place : 15.01.16

  
Dr. Sanjay G. Charalwar  
Principal  
S.M. Mohota College of Science,  
S.M.M. College Of Science, Nagpur



*Our Mission*  
We are committed to 'Excellence in Education' and 'All Round Development of the Students.'

## Certificate of Compliance



Nagpur Shikshan Mandal's

### SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE

Umred Road, Nagpur-440 008 Tel. : 0712-2744992 Fax : 0712-2744992  
E-mail:mohotacollege@yahoo.co.in Website:www.mohotasci.edu.in

President  
**A.K. GANDHI**  
Tel. : 2426883, 6619800

Secretary  
**SUDHIR BAHETI**  
Tel. : 2422933,2425442

Principal  
**Dr. S.G. CHARALWAR**  
Tel. : 2745964

Ref. :

Date : 15.01.2016

### Certificate of Compliance

(Affiliated/Constituent/Autonomous Colleges and Recognized Institutions)

This is to certify that **Shri Mathuradas Mohota College of Science, Nagpur**

1. Stipulated by the affiliating University and/or
2. Regulatory Council/Body [such as UGC, NCTE, AICTE, MCI, DCI, BCI, etc] and
3. The affiliation and recognition [if applicable] is valid as on date.  
In case the affiliation / recognition is conditional, then a detailed enclosure with regard to compliance of conditions by the institution will be sent.

It is noted that NAAC's accreditation, if granted, shall stand cancelled automatically, once the institution loses its University affiliation or Recognition by the Regulatory Council, as the case may be.

In case the undertaking submitted by the institution is found to be false then the accreditation given by NAAC is liable to be withdrawn. It is also agreeable that the undertaking given to NAAC will be displayed on the college website.



Date:  
Place: NAGPUR

**DR. SANJAY CHARALWAR**  
Shri M. Mohota College of Science,  
Nagpur

*Our Mission*

We are committed to 'Excellence in Education' and 'All Round Development of the Students.'

**Section F: Annexure**  
**ANNEXURE – I**  
**Approval of Courses by the affiliating University**



**RASHTRASANT TUKADOJI MAHARAJ NAGPUR UNIVERSITY**  
 (Established by Government of Central Provinces Education Department by Notification No.513 dated the 1<sup>st</sup> of August 1923 & presently a State University governed by M.U. Act, 1994)

**Re-accredited b NAAC 'A' Grade**

**BOARD OF COLLEGE & UNIVERSITY DEVELOPMENT**

Mahatma Jyotiba Pule Education Campus, Amravati Road, Nagpur-440 033 (INDIA)

Dr. Shrikant Komawar  
Director, BCUD

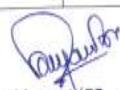
Phone No.2042962

No.BCUD/2015/G/ 819  
Date: 23 .07. 2015

TO WHOM SO EVER IT MAY CONCERN

This is to certify that, **Shri Mathuradas Mohota College of Science Umred Road, Nagpur-440009** is affiliated to the Rashtrasant Tukadoji Maharaj Nagpur University since 1949 and recognized by the University Grants Commission. The following Courses/Subject are taught in the said college as per approval.

Sr. No.	Courses/Subject	Duration of the course	Affiliation (Permanent/Temporary)	Validity period
1.	(B.Sc. I,II,III)	3 Year	*Permanent	Permanent
2.	Bachelor of Science (Computer Science )	3 Year	Temporary	2014-2015
3.	Master of Science (Mathematics, Physics, Chemistry, Botany)	2 Year	Temporary	2014-2015
4.	Ph.D. (Recognized centre for higher learning and research) Chemistry, Physics	5 Year	Temporary	2013-2018

  
**(Dr. Shrikant Komawar)**  
**Director**

Board of College & University Development  
 Rashtrasant Tukadoji Maharaj  
 Nagpur University, Nagpur

- \* **Note:1.** Certified on the basis (1)University letter No. Ac/C.o./ dated 1<sup>st</sup> March1980
- 2.** Resolution of Govt. of Maharashtra, Department of Education & Employment, No.UN F 3868-Y, dated 28<sup>th</sup> September,1967

ANNEXURE – II

UGC Recognition under section 2(f) and 12 (B) of UGC Act

दूरभाष : 3318628, 3322455  
Phone : 3314116, 3322485  
3313486, 3318437  
3312723, 3319059



तार : यूनिग्रान्ट्स टेलिग्राम : 31-65913  
GRAM : UNIGRANTS Telex : 31-65913

विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002

UNIVERSITY GRANTS COMMISSION  
BHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

All communications should be addressed to the  
Secretary by designation and not by name

संख्या \_\_\_\_\_  
No. F.E-101/93(CPP-I)

June, 1996

The Principal,  
Mathuradas Mohota College  
of Science,  
Umrer Road,  
Nagpur-440009.

Sub: Inclusion of College under Section-2(f)  
of the UGC Act, 1956.

Sir,

With reference to your letter No.SC/578/95-96 dated  
14.3.96 on the above subject, I am directed to inform you  
that the college is already included under Section-2(f)  
of the UGC Act, 1956 and also eligible to receive  
assistance from the UGC and other central sources under  
Section-12(B) of the UGC Act, 1956.



Yours faithfully,

*(Signature)*

( D.D. MEHTA )  
Section Officer

**ANNEXURE – III**  
**UGC XII Plan General Development Grants Copy from UGC**

**UGC XII Plan General Development Grants Copy from UGC**

विश्वविद्यालय अनुदान आयोग  
 पश्चिम विभागीय कार्यालय  
 गणेशखिंद, पुणे - ४११००७  
 University Grants Commission  
 Western Regional Office  
 Ganeshkhind, Pune – 411007.



दूरभाष Phone: कार्यालय OFF:- 020 – 2569689  
 020 – 2569117

फॅक्स Tele Fax.: 020 – 2569147  
 Website – www.ugc.ac.

F. No 7-53/13(WRO)

Date: 28.03.2014

The Principal,  
 Shri Mathuradas Mohota College Of Science,  
 Umrer Road,  
 Nagpur - 440009.

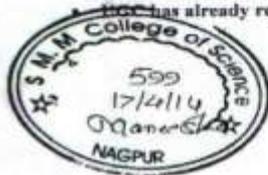
Subject: XII Plan allocation under General Development Assistance to Colleges.

Sir/Madam,

I am directed to convey the approval of the UGC to Shri Mathuradas Mohota College Of Science, Nagpur- 440009 the XII plan allocation of Rs.2972200/- under the "General Development Assistance" for the development of undergraduate and postgraduate education. The UGC in the XII Plan has decided to provide grants under General Development Assistance as 'Block Grant'. The college will have the flexibility to incur expenditure under the following heads as per the needs of the college. Accordingly, grant allocated under GDA to the college is under two object heads viz. Grant-in-aid General (31) and Capital Assets (35).

Capital Assets (35) 80% of total allocation	Grant-in-aid General (31) 20% of total allocation	Total
Rs.2377760/-	Rs.594440/-	Rs.2972200/-

- The above mentioned allocation is meant for the development of undergraduate and postgraduate education.
- The college has to constitute a Planning Board with Principal as Chairman and Heads of departments, IQAC Coordinator, Librarian & Bursar/Senior person from the Accounts department as members
- The Planning Board will finalize allocation to Undergraduate and Postgraduate departments after identifying the heads and deciding on priorities of departments.
- The eligibility criteria for Undergraduate and Postgraduate departments to get assistance under the scheme is given in the XII plan guidelines for Development grant to colleges.
- The Planning Board may refer to the guidelines before finalizing allocation to Undergraduate and Postgraduate departments
- After finalizing the budget allocation for Undergraduate and Postgraduate education, the Planning Board should submit the details as per Annexure – I and Annexure – II in the XII plan guidelines to the UGC (WRO), Pune latest by 30<sup>th</sup> June 2014.
- Expenditure on construction, extension, and renovation of building should not exceed 50% of the total grant under GDA. The college must inform the requirement of funds or otherwise for construction, extension, and renovation of building before 30<sup>th</sup> June, 2014 to enable further release of grant under the scheme.
- It has already released adhoc on account grant to the college against this XII Plan allocation.



- The concept of Merged Schemes introduced during the XI Plan has been done away with and no separate grant under the Merged Schemes will be provided during the XII Plan.
- It is also mentioned here that the following schemes which were earlier part of Merged Scheme now will be implemented independently by a dedicated cell of UGC at Head Quarter, New Delhi and separate grant will be provided by UGC under these schemes.
  - (i) Equal Opportunity Cell.
  - (ii) Remedial Coaching for SC/ST/OBC (non-creamy layer) and minority community students.
  - (iii) Coaching for NET for SC/ST/OBC (non-creamy layer) and minority community students.
  - (iv) Coaching Classes for Entry into services for SC/ST/OBC (non-creamy layer) and minority community students.
  - (v) Scheme for persons with disabilities.

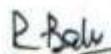
Yours sincerely,

  
[Dr. (Mrs.) Renu Batra]  
Joint Secretary.

Copy to:

1. The Director BCUD/CDC University of Nagpur
2. The Director, Higher Education, Govt of Maharashtra, Central Building Pune-1.
3. Account General, Govt of Maharashtra state, 101, Maharshi Karve Marg, Mumbai -20.
4. Guard file.



  
[Dr. (Mrs.) Renu Batra]  
Joint Secretary.

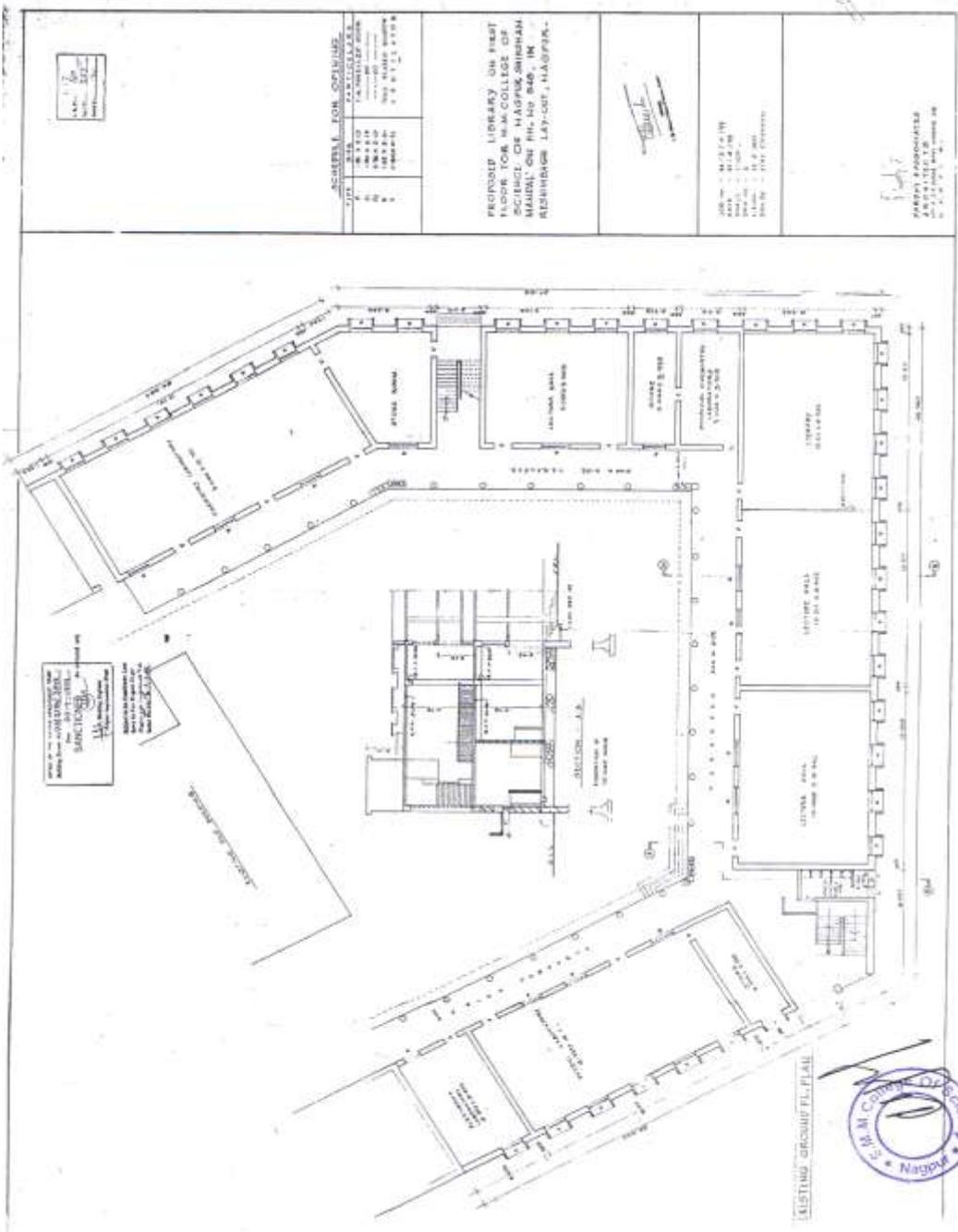
ANNEXURE – IV  
NAAC First Cycle Assessment and Accreditation Certificate

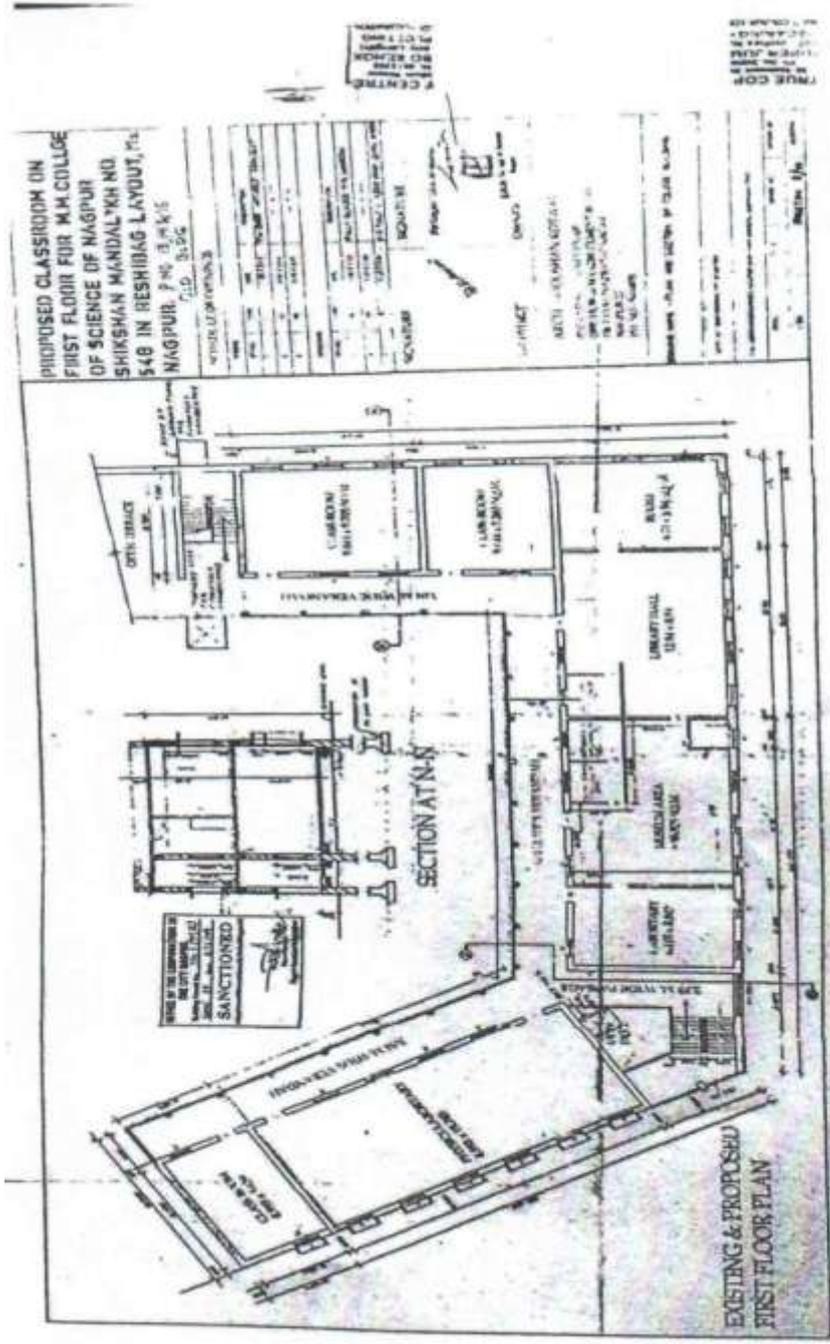


ANNEXURE – V  
NAAC Second Cycle Assessment and Accreditation Certificate











**ANNEXURE – VII**  
**List of Subjects - Syllabus Revision**

Syllabus of subjects Chemistry, Botany, Zoology, Physics, Mathematics, Computer Science, Geology, Electronics, Industrial Chemistry and Languages at UG level are revised and the semester pattern implemented from academic year 2013-14 as per the Direction no.2/2015.

- ✓ Scheme of Credit Based System (CBS) and awarding grades to the post graduate courses in the faculty of Science, implemented from academic year 2014-15 as per the Direction no.14/2012.
- ✓ Scheme of Choice Based Credit System (CBCS) and awarding grades to the post graduate courses in the faculty of Science, implemented from academic year 2015-16 as per the Direction No. 10 of 2015.

**ANNEXURE – VIII****Participation of Teachers in Orientation/ Refresher courses in last five years****Orientation course**

<b>Sr. No.</b>	<b>Name of Faculty</b>	<b>Title of course</b>	<b>Duration</b>	<b>Conducted by</b>
01	Ms. S. D. Khalatkar	UGC Sponsored Orientation course	19/02/2014 to 18/03/2014	ASC, RTM Nagpur University, Nagpur
02	Ms. Dr. R. S. Saha	UGC Sponsored Orientation course	19/02/2014 to 18/03/2014	ASC, RTM Nagpur University, Nagpur
03	Dr. N. V. Palande	UGC Sponsored Orientation course	28/01/2015 to 24/02/2015	ASC, RTM Nagpur University, Nagpur
04	Mr. S. T. Rathod	UGC Sponsored Orientation course	24/09/2011 to 21/10/2011	ASC, RTM Nagpur University, Nagpur

**Refresher course**

<b>Sr. No.</b>	<b>Name of Faculty</b>	<b>Title of course</b>	<b>Duration</b>	<b>Conducted by</b>
01	Dr. M. G. Dhonde	Environmental Science (Chemistry)	04/11/2011 to 24/11/2011	ASC, RTM Nagpur University, Nagpur
02	Dr. S. G. Goswami	IT Application (Physics)	18/10/2012 to 07/11/2012	ASC, RTM Nagpur University, Nagpur
03		IT Application (Physics)	21/11/2013 to 11/12/2013	ASC, RTM Nagpur University, Nagpur
04	Dr. N. D. Meshram	IT Application (Electronics)	06/02/2012 to 26/02/2012	ASC, RTM Nagpur University, Nagpur
05		IT Application (Electronics)	21/11/2013 to 11/12/2013	ASC, RTM Nagpur University, Nagpur
06	Dr. N. V. Palande	Life Science (Zoology)	01/10/2015 to 21/10/2015	ASC, RTM Nagpur University, Nagpur
07	Dr. P. U. Gajbe	Life Science (Zoology)	04/03/2011 to 24/03/2011	ASC, RTM Nagpur University, Nagpur
08		Life Science (Zoology)	05/03/2014 to 25/03/2014	ASC, RTM Nagpur University, Nagpur
09	Dr. Ms. A. M. Sawane	Life Science (Botany)	06/02/2012 to 26/02/2012	ASC, RTM Nagpur University, Nagpur
10	Mr. S. T. Rathod	Mathematics	05/11/2013 to 25/11/2013	ASC, University of Madras, Chennai
11	Dr. S.S. Bhonsale	Physical Education	05/03/2014 to 28/03/2014	ASC, RTM Nagpur University, Nagpur
12	Dr. Mrs. U. R. Sonparote	Life Science (Zoology)	06/02/2012 to 26/02/2012	ASC, RTM Nagpur University, Nagpur

## ANNEXURE - IX

## List of Major and Minor research Projects (Completed &amp; ongoing)

## Major Research Projects

Sr. No.	Name of the Staff Member	Duration Year From To	Title of the project	Total grant in Rs.		
				Sanctioned	Received	Grant Received till date
1.	Dr. A. A. Fulzele	2015-18 (DAE & BRNS) (Ongoing)	Enhancement -- ---- <i>Aspergillus terreus</i>	24,75,000/-	12,00,000/-	12,00,000/-
2.	Dr. Mrs. R. S. Saha	2013-16 (U.G.C.) (Ongoing)	Biological ---- Nagpur	9,52,800/-	5,98,800/-	5,98,800/-
3.	Dr. M. G. Dhonde	2011 - 14 (U.G.C.) (Completed)	Microwave ---- Thiobarbituric acid	12,82,867/-	11,89,460/-	11,89,460/-

**Minor Research Projects (U. G. C.)**

Sr. No.	Name of the Staff Member	Duration Year From To	Title of the project	Total grant in Rs.		
				Sanctioned	Received	Grant Received till date
1.	Dr. S. K. Giri	2013-15	'Detection ----- students health'	1,00,000/-	65,000/-	65,000/-
2.	Dr. J. A. Janbandhu	2010-12	"Bernard ---- Fictive World"	60,000/-	55,000/-	55,000/-
3.	Dr. S. P. Joshi	2013-15	'Integrated ---- techniques'	1,35,000/-	1,02,500/-	1,02,500/-
4.	Dr. M. B. Bhagat	2009-11	'Calcareous ---- district'.	1,30,000/-	80,000/-	80,000/-
5.	Dr. E. B. Raut	2010-12	'The impact --- region	60,000/-	51,171/-	51,171/-
6.	Dr. N. D. Meshram	2010 -12	'EMR: ---facility'	1,30,000 /-	1,30,055 /-	1,30,055 /-
7.	Dr. Mrs. U. R. Sonparote	2009-11	Investigation --- <i>fossilis</i> (Bloch)	30,000/-	15,000/-	15,000/-
8.	Dr. Mrs. R. S. Saha	2009-11	Study ---Brinjal	1,45,000/-	1,25,000/-	1,25,000/-
9.	Dr. M. S. Atone	2009-11	Effect--- Phosphor	1,50,000/-	1,25,000/-	1,25,000/-
10.	Dr. J. N. Ramteke	2009-11	Ultrasonic--- fluids	1,00,000/-	75,000/-	75,000/-
11.	Dr. V. V. Soman	2009-11	Effect---Polymer	1,35,000/-	1,07,500/-	1,07,500/-
12.	Dr. D. V. Nandanwar	2009-11	Synthesis--- materials	1,10,000/-	87,500/-	87,500/-
13.	Dr. S. G. Goswami	2009-11	Molecular --- Techniques	1,25,000/-	97,500/-	97,500/-
14.	Dr. M. G. Dhonde	2009-11	Synthesis --- applications.	2,00,000/-	1,05,000/-	1,05,000/-
15.	Dr. S. S. Sakhare	2009-11	Economic ---- other cities.	1,05,000/-	57,500/-	57,500/-
16.	Dr. C. B. Masram	2009-11	Analytical --- systems	1,20,000/-	85,000/-	85,000/-
17.	Mr. S. T. Rathod	2009-11	Smaradachae notions in Mathematics	30,000/-	20,000/-	20,000/-

**ANNEXURE – X**  
**Peer Team Reports –NAAC 1<sup>st</sup> & 2<sup>nd</sup> Cycle**

PEER TEAM REPORT (DRAFT)

OF

**SHRI MATHURADAS MOHOTA**  
**COLLEGE OF SCIENCE,**  
**NAGPUR, (MAHARASHTRA)**

**JULY 29<sup>TH</sup> AND 30<sup>TH</sup>, 2002**



**राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद्**

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान, बंगलूर

**National Assessment and Accreditation Council**

*An Autonomous Institution of the University Grants Commission, Bangalore*  
2/4, Dr. Rajkumar Road, P. O. Box No.1075, Rajajinagar, Bangalore - 560 010, India

**DRAFT REPORT OF THE PEER TEAM ON INSTITUTIONAL  
ACCREDITATION OF  
SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE,  
NAGPUR, MAHARASHTRA**

**SECTION - 1**

**INTRODUCTION**

Nagpur Shikshan Mandal that runs educational institutions manages Shri Mathuradas Mohota College of Science, established in 1949, situated in Umrar road, Nagpur, Maharashtra. It is one of the oldest and premiere co-educational institution serving the educational needs of Nagpur region. The college is affiliated to Nagpur University. It offers eight U.G programmes viz B.Sc. (Physics, Mathematics, Botany, Zoology, Chemistry, Geology, Electronics and Industrial Chemistry). The college is offering a UGC approved vocational subject, Industrial Chemistry at the degree level since 1999. The institution has got UGC recognition under 12B and 2f in 1959. At present the college has about 650 students (boys and girls) admitted in various courses of study.

The college has qualified permanent teaching staff strength of 33. The college has an adequate team of non-teaching staff. (Administrative staff 16 and technical staff 37). The Peer team consisting of the Chairperson Prof. K.K. Dwivedi and Prof. K. Santhanam and Prof. B.G. Mulimani as members visited the institution for two days from 29<sup>th</sup> to 30<sup>th</sup> July 2002 alongwith Dr. Geeta Iyengar, Academic Consultant, NAAC who effectively coordinated the visit.

The team carefully analysed the self-study report submitted by the institution. During the institutional visit the team went through all the relevant documents, visited

the departments and verified the facilities and interacted with the Management, Principal, Teaching faculty, non-teaching staff, Students, Parents and Alumni of the institution. Based on the above exercise, and keeping in mind the criteria identified by NAAC, the Peer Team has come to an assessment of the institution that includes its commendable features as well as areas of concern listed in the following pages.

## SECTION 2 - CRITERION WISE ANALYSIS

### CRITERION I - CURRICULAR ASPECTS.

As an affiliated College of Nagpur University the college follows the syllabi prescribed by the University for all the courses at the UG level in the annual pattern. Most of the courses offered in the colleges are traditional ones, preparing the students to enter into general and professional walks of life. To introduce a new program within the regulations of the university system the college takes approximately one year. In 1999 the college introduced job-oriented vocational course\* in Industrial Chemistry.

Though there is limited scope for introducing innovative subjects or structural changes in the syllabi as it is designed by the university, the teachers of the college indirectly contribute to the framing of the syllabus by being members of the Board of Studies of Nagpur University.

The college - industry neighborhood networking has been established in Chemistry, Botany, Zoology and Geology departments in that students taking these subjects visit various industries, research centres, mines regularly as part of their academic programmes. On many occasions, experts from industries are invited to give lectures to the students especially on subjects like Industrial Chemistry and Zoology. The programmes offered in the college are broadly in conformity with the mission, goals and objectives of the institution.

## CRITERION II - TEACHING, LEARNING AND EVALUATION

Admissions to various courses are made through the student's past academic record and personal interviews. The college follows the reservation policy of Government of Maharashtra in admission. Thus with the existing freedom under the present system students have flexibility to pursue a programme with different elective options.

The general goal of the college is to give training in personality development and community work through NSS, NCC, Rotaract Club, Students Council, Student Seminar etc. Being a Science college, the college assesses the student's knowledge and skill to the programmes admitted through Tests, Viva-Voce and practical classes. At the beginning of the academic year, evaluation methods adopted in the college are communicated to the students and a teaching plan is drawn up by each department which is strictly followed. The college supplements lecture method of teaching with learner-centered methods like conducting seminars, and the use of OHP, audio visual aids to the extent possible for making teaching interactive. Being a Science College offering science subjects other learner-centered methods like conducting quiz, debates and excursions are also adopted. The college has to be appreciated for using teaching aids even though there is no centralized media facility to augment teaching. The teachers update knowledge and skills by attending in service training through refresher/Orientation courses, national level seminars and conferences. (14 teachers have attended National/International level conferences in the last two years). Various association activities conducted in the college provide ample scope for co-curricular and extra curricular learning. The college has total of 33 teaching staff, 10 Post Graduates, 4 MPhil's and 14 Ph.D's. The recruitment of teachers into institutions is done by a duly constituted Selection Committee and the candidates with proper qualification are selected, according to the reservation policy of the Maharashtra

Govt. The college facilitates the faculty to update the professional expertise by allowing them to pursue research and participate at National /International seminars.

### **CRITERION III - RESEARCH, CONSULTANCY AND EXTENSION**

The Management of the college encourages the teachers to pursue research by giving them study leave, and adjustments made in teaching schedule. As many as 14 teachers have Ph.D and 4 teachers have M.Phil as their qualifications. A few teachers are engaged in some research activities, publishing research articles and attending National/International conferences.

Being a Science college, the institution also adopts other learner-centered methods by conducting compulsory students excursion, study tours within and outside the state of Maharashtra and conducting viva voce and submission of tour report and field diary by the students at the time of annual practical examinations.

The college monitors the overall performance of the students to ensure the course objective through Practical classes, Tests, Examinations and Seminars in their respective subjects.

The various extension activities carried out in the college with the help of NGO's and GO's cover Health and Hygiene Awareness, Adult Education and Literacy, HIV/AIDS Awareness, Blood Donation Camps, Environmental Awareness, and Social work. There are different associations to promote co-curricular and extra-curricular activities with a view to promoting the all-round development of personality of the students. The college has encouraged cultural activities by conducting dance, drawing competitions, celebrating Teacher's day, Rose day, conducting Kavisammelan and other music competitions.

The NCC, NSS, Rotaract Club, and Students Council are engaged in carrying out extension activities in the college. The Peer Team is of the opinion that more staff members should update their qualifications by getting research degrees as part of the professional advancement. Further the college should try to tap the creative potential of the students by motivating them to take greater part in social and extension activities in the college.

#### **CRITERION IV - INFRASTRUCTURE AND LEARNING RESOURCES**

The college has adequate infrastructure in terms of buildings, laboratories, library, staff rooms, office rooms and common rooms for the students. The maintenance is carried out by government grants. The college ensures optimum utilisation of its infrastructure by conducting classes in two shifts. The college encourages the use of academic facilities by external agencies for the conduct of various programmes. The campus is kept beautiful and clean. There is an advisory committee for the library. The college office, Physics/Electronics, Chemistry, Botany/Zoology/Geology departments and Library have computer facilities and the maintenance of the computers is carried out on contract basis.

The college has desired sports facilities available for the students. The college received a grant from Department of Sports and Youth Affairs to set up a multi-gym. The college encourages outstanding sportspersons by giving blazer, meeting their traveling and daily expenses when they participate in various sports meets conducted outside Nagpur.

#### **CRITERION V - STUDENTS SUPPORT AND PROGRESSION**

Sufficient information about the college is published in the prospectus annually giving details of admission procedures, duration of terms, programmes offered,

timings, tuition fees, rules and regulations and a list of co-curricular and extra-curricular activities. These materials are updated annually.

Financial aid in the form of merit Scholarships, Loan scholarships, merit-cum-means scholarships, Government of India scholarships are provided to deserving students. It is commendable that many prizes are instituted in the college to encourage the students for performing well in various subjects in University examinations. 99% of the students appear for the final examination after the minimum period of study. About 10 to 15% of the students go to higher studies (PG) and employment. The alumni of this college have distinguished themselves by working as Doctors, Engineers, Professors, Principal and Vice-chancellor. An Alumni Association has recently been constituted in the college.

The teachers offer informal academic and personal counseling to the students. Admission of students to various courses is done as per merit and other norms as laid down by the University, Government and Management. Admission Rules and Procedures are notified to the students through the college notice board before the commencement of admission. The various recreational and leisure time facilities available in the college include: Indoor and Outdoor games, Nature and Debate Clubs, Cultural Programmes, Wall Magazine, college magazine and Dance Music Competitions.

#### **CRITERION VI - ORGANISATION AND MANAGEMENT**

With a view to ensuring proper management of administrative and academic functions there are committees in the organisational structure of the college like Management Committee, Local Managing Committee, the College Council and various other committees to look into various activities in the college. The Local Managing committee is constituted as per the requirement of the statutes of

Maharashtra University Act, 1994, comprising representatives of the management, teachers, non-teaching staff and members of the other eminent bodies. The College Council headed by Principal consists of Heads of Departments which meets regularly to provide guidelines for the smooth functioning of the college. The college has devised an in-built mechanism to check the work efficiency of the non-teaching staff. Loans from the Employees Co-operative Credit Society and General Provident Fund are made available to the teaching and non-teaching staff. Professional development programmes for the non-teaching staff are also conducted. There is an internal audit mechanism in the college. A formal Grievance Redressal Mechanism should be established in the college to settle any issues affecting the teaching and non-teaching staff.

### CRITERION VII - HEALTHY PRACTICES

The college has been trying to maintain internal quality checks through the meetings of Local Managing Committee that gives general directions, conducting regular departmental staff and faculty meetings that helps in sharing views among the members of the staff. Regular faculty meetings with the Principal have helped the college administration to use latest managerial concepts such as strategic planning, team work, participatory approach in decision making process. The college imparts value education to the students by arranging guest lectures, conducting various programmes through NSS, NCC, Rotaract Club, celebrating functions like Gandhi Jayanthi, Independence Day, Republic Day etc. The college strives to promote communal harmony by taking of oath on *Sarva Dharm Maitri Bhava* and pledge for national integration. By arranging many co-curricular activities, viz. quiz and debating competitions and through the activities of various societies, the institution tries to develop the all round personality of the learners. The college by frequently arranging social and cultural activities like Kavi Sammelan, Folk Dances, Street Plays, Blood Donations has brought in community orientation in its activities.

strategic planning methods, team work and participatory style in decision making process.

- (8) Voluntary donations from teachers and staff members for supporting students and other developmental activities are appreciated.

However, the Peer Team is of the opinion that excellence is a continuous process and with this in mind the team offers the following suggestions.

- (1) The college may explore the possibility of introducing career-oriented course options like Computer Science, Computer Applications, I.T , Bio- Informatics, Bio-Technology and Environmental Sciences keeping in mind the modern trends and societal needs.
- (2) The teachers be encouraged to obtain research degrees and undertake research projects.
- (3) The college may take steps for establishing linkages with national institutions especially located in the city of Nagpur.
- (4) Formal mechanism of getting feedback from the students on the professional skills of the teachers may be initiated.
- (5) The college may take steps for establishing a Placement Cell to provide placement services and to offer career counseling to the students.
- (6) Steps may be taken to provide internet, photocopying, book bank facilities in the library.
- (7) More use of computers by the staff and students at different levels should be encouraged.
- (8) The college may take appropriate steps to install more computers so as to enable teachers, students and office staff for effective use.
- (9) Library automation may be completed on priority basis.
- (10) Professional development programmes be conducted for the non-

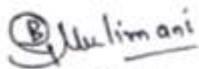
teaching staff.

- (11) A Grievance Redressal Cell be established for the redressal of grievances of the students.
- (12) College Management may take necessary steps to improve the financial resources in order to offer new programmes and to strengthen the infrastructure and research programme.

The Peer Team observed that the college continues to improve academic standard in order to fulfill its aims and objectives and enjoys high public image. The cordial atmosphere in the college campus is praiseworthy.

  
(Prof. K.K. Dwivedi)  
Chairman

  
(Prof. K. Santhanam)  
Member

  
(Prof. B.G. Mulimani)  
Member

  
(Dr. T.S.V. Naidu)  
Principal

Date : July 30, 2002.

**PEAR TEAM REPORT ON**  
***Institutional Re-accreditation of***  
**SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE**  
**Place: NAGPUR - 440 009      State: MAHARASHTRA**

<b>Section I: GENERAL</b>	<b>Information</b>
1.1 Name & Address of the Institution:	Shri Mathuradas Mohota Collge of Science Umer Road, Nagpur – 440 009 (Dist- Nagpur), Maharashtra
1.2 Year of Establishment:	1949
1.3 Current Academic Activities at the Institution (Numbers):	
• Faculties/ Schools:	1
• Departments/ Centres:	9
• Programmes/ Courses offered:	1 (UG), 1(PG), 1 (Add-on courses)
• Permanent Faculty Members:	29
• Permanent Support Staff:	52
• Students:	364 (UG); 27 (PG)
1.4 Three major features in the institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none"> <li>• The college caters to the needs of economically and socially weaker section</li> <li>• Large number of highly qualified staff with research publication</li> <li>• Spacious building and effective utilization of facilities by operating academic programmes in two shifts</li> </ul>
1.5 Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure):	August 30 – September 01, 2010
1.6 Composition of the Peer Team which undertook the on- site visit:	
Chairperson	<b>Prof. K.M. Kaveriappa</b>
Member Co-ordinator	<b>Prof. Madan Mohan Chaturvedi</b>
Member	<b>Prof. Varinder Kaur Thind</b>
NAAC Officer:	<b>Dr. Ganesh Hegde</b>

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## NAAC for Quality and Excellence in Higher Education

Section II: CRITERION WISE ANALYSIS	Observations (Strengths and/or Weaknesses) on Key-Aspects <i>(Please limit to three major ones for each and use telegraphic language. It is not necessary to indicate all the three bullets each time; write only the relevant ones)</i>
<b>2.1 Curricular Aspects:</b>	
2.1.1 Curricular Design & Development:	<ul style="list-style-type: none"> <li>• Curriculum designed is in conformity with institutional goals and objectives</li> <li>• Being affiliated to Nagpur University, it has to follow curriculum designed by the University</li> <li>• Currently, four of the faculty members are in the boards of studies</li> </ul>
2.1.2 Academic Flexibility:	<ul style="list-style-type: none"> <li>• Academic flexibility is limited as it is a single faculty college</li> <li>• College offers 9 programmes in B.Sc. and M.Sc. in Chemistry</li> <li>• Add-on course in Solar Energy</li> </ul>
2.1.3 Feedback on Curriculum	<ul style="list-style-type: none"> <li>• Feedback from students is regularly obtained</li> <li>• The feedback from other stakeholders, like, alumni and other peers requires some initiative</li> </ul>
2.1.4 Curriculum Update	<ul style="list-style-type: none"> <li>• The curriculum is being updated once in three to five years by the University</li> <li>• The faculty of the college has limited role to play in the curriculum update</li> <li>• No interdisciplinary course is introduced</li> </ul>
2.1.5 Best Practices in Curricular Aspects (If any):	<ul style="list-style-type: none"> <li>• Introduction of eco-friendly add-on course in Solar Energy</li> </ul>
<b>2.2 Teaching-Learning &amp; Evaluation:</b>	
2.2.1 Admission Process and Student Profile	<ul style="list-style-type: none"> <li>• Admission process is made known to students mostly through the college prospectus, website and notification in college notice board</li> <li>• To attract more students to the college, advertisement in local news papers and notification in prominent nearby places should be done</li> <li>• Institution ensures due representation to students belonging to different categories and gender</li> <li>• Admission is based on the marks obtained in the qualifying examinations.</li> </ul>
2.2.2 Catering to the Diverse Needs:	<ul style="list-style-type: none"> <li>• Caters to the needs of students from economically and socially weaker sections</li> </ul>

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## NAAC for Quality and Excellence in Higher Education

	<ul style="list-style-type: none"> <li>• More than 50% students are girls</li> <li>• Only informal mentoring system exists</li> </ul>
2.2.3 Teaching-Learning Process:	<ul style="list-style-type: none"> <li>• Conventional method of teaching is largely followed</li> <li>• A beginning has been made in the use of computers and LCD projector, but more LCD projectors and computers have to be provided</li> <li>• Field-work is being conducted as a part of teaching curriculum</li> <li>• Motivation is required to make the teaching-learning process more effective</li> </ul>
2.2.4 Teacher Quality:	<ul style="list-style-type: none"> <li>• Recruitment of faculty is as per UGC and University norms</li> <li>• 17 out of 29 teachers hold Ph.D. degree and 8 are registered for Ph.D.</li> <li>• To augment their knowledge, the faculty members regularly attend /hold conferences , workshops, and seminars</li> </ul>
2.2.5 Evaluation Process and Reforms:	<ul style="list-style-type: none"> <li>• Preparatory exams are conducted before annual examination</li> <li>• Evaluation and reform processes are transparent, but controlled by the University</li> <li>• Student's grievances regarding evaluation results are forwarded to the University for further action</li> </ul>
2.2.6 Best Practices in Teaching-Learning and Evaluation (If any):	<ul style="list-style-type: none"> <li>• Large number of seminars are organized / attended by teachers</li> <li>• Many teachers have acquired research degree as additional qualification</li> <li>• Some teachers have got national / conference awards</li> </ul>
<b>2.3 Research, Consultancy &amp; Extension:</b>	
2.3.1 Promotion of Research:	<ul style="list-style-type: none"> <li>• Six faculty members are recognized as Ph.D. guides of Nagpur University</li> <li>• Research laboratories are being set up in four departments</li> <li>• Large number of teachers are encouraged to present papers and participate in the conferences/seminars</li> <li>• There is scope for initiating collaboration with other research organizations / industries</li> </ul>
2.3.2 Research and Publications Output:	<ul style="list-style-type: none"> <li>• Nine UGC funded minor research project completed</li> <li>• Fourteen UGC funded minor research project ongoing</li> <li>• There is no major research projects</li> </ul>

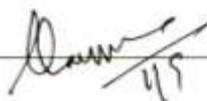
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## NAAC for Quality and Excellence in Higher Education

	<ul style="list-style-type: none"> <li>• Thirty eight research papers published in national journals and 30 in foreign journals; 14 books</li> <li>• Three teachers have received awards for presentation in conferences</li> </ul>
2.3.3 Consultancy:	<ul style="list-style-type: none"> <li>• Honorary informal consultancy offered by the departments like, Botany, Physics, and Chemistry</li> </ul>
2.3.4 Extension Activities:	<ul style="list-style-type: none"> <li>• Extension activities are routinely organized by NCC and NSS</li> <li>• NSS is organizing local camps and is involved in activities beneficial to the students and the society</li> <li>• Establishing partnerships with community and NGO should be encouraged</li> </ul>
2.3.5 Collaborations:	<ul style="list-style-type: none"> <li>• Informal collaboration exists between the college and National level institutions, like NEERI and NPL.</li> <li>• More collaborations will be helpful for research and extension activities</li> </ul>
2.3.6 Best Practices in Research, Consultancy & Extension (If any):	<ul style="list-style-type: none"> <li>• Large number of teachers possess research degrees</li> <li>• Good number of research publications in National and Foreign journals</li> </ul>
<b>2.4 Infrastructure and Learning Resources:</b>	
2.4.1 Physical Facilities for Learning:	<ul style="list-style-type: none"> <li>• College has 5.59 acres of land in heart of Nagpur city with 4174.65 sq meters built-in area with 13 classrooms and 13 moderately equipped laboratories</li> <li>• Departments of Geology, Zoology, and Botany have good museums</li> <li>• Sport facilities including indoor games and gymnasium are in place</li> </ul>
2.4.2 Maintenance of Infrastructure:	<ul style="list-style-type: none"> <li>• Only moderate provision has been made in the budget for maintenance of infrastructure</li> <li>• Extra efforts are needed to strengthen the sport facilities</li> <li>• Library requires additional space and rearrangements of facilities in the existing space</li> </ul>
2.4.3 Library as a Learning Resources	<ul style="list-style-type: none"> <li>• There are -15268 titles and 26957 volumes of books and text books; and 20 national (recently subscribed since last three years) and one foreign journal in the library</li> </ul>

  
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	<ul style="list-style-type: none"> <li>Library resources are augmented every year with newer editions and titles using UGC and college funds</li> <li>Library is partially computerized, and internet and reprographic facilities are available</li> </ul>
2.4.4 ICT as Learning Resources:	<ul style="list-style-type: none"> <li>Limited use of ICT facilities</li> <li>More computers are required</li> <li>VSAT facility in collaboration with Everonn is being developed</li> </ul>
2.4.5 Other Facilities:	<ul style="list-style-type: none"> <li>Adequate staff-rooms</li> <li>Canteen facility for students</li> <li>Parking space needs proper development</li> <li>A few quarters are available for non-teaching employees</li> </ul>
2.4.6 Best Practices in the development of Infrastructure and Learning Resources (If any):	<ul style="list-style-type: none"> <li>Optimum utilization of building and infrastructure facilities by organizing academic programmes in two-shifts</li> </ul>
<b>2.5 Student Support and Progression:</b>	
2.5.1 Student Progression:	<ul style="list-style-type: none"> <li>Majority of students from the college go for higher studies</li> <li>Average pass percentage ~50%, which is comparable to the average pass percentage of the University</li> <li>Some students have been benefited through a recently constituted placement cell</li> </ul>
2.5.2 Student Support:	<ul style="list-style-type: none"> <li>Institutional informations are displayed on the notice board and also provided in the college prospectus</li> <li>Students are benefited mainly by the scholarship/free ship schemes of the Government</li> <li>A compound wall needs to be constructed for proper security</li> </ul>
2.5.3 Student Activities:	<ul style="list-style-type: none"> <li>College organizes periodic cultural activities</li> <li>Indoor games facilities are available, but the outdoor sports facilities need to be strengthened</li> </ul>
2.5.4 Best Practices in Student Support and Progression (If any):	<ul style="list-style-type: none"> <li>College is admitting students mostly from economically and socially weaker sections</li> </ul>
<b>Available, 2.6 Governance and Leadership:</b>	
2.6.1 Institutional Vision and Leadership:	<ul style="list-style-type: none"> <li>Vision and mission are in tune with the objectives of higher education</li> </ul>

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	<ul style="list-style-type: none"> <li>Relationship between the employees and the management is cordial and supportive</li> <li>Principal adopts participatory and transparent system of governance</li> </ul>
2.6.2 Organizational Arrangements:	<ul style="list-style-type: none"> <li>The governance of the college is done by the local management committee where the Principal and the teachers are members</li> <li>Anti-ragging committee is active and there is no incidence of ragging</li> <li>Management of the college is decentralized and is done through constitution of various committees</li> </ul>
2.6.3 Strategy Development and Deployment:	<ul style="list-style-type: none"> <li>College should develop perspective plan document and evolve strategic action plan for future development</li> </ul>
2.6.4 Human Resource Management:	<ul style="list-style-type: none"> <li>Planning and deployment of manpower for older departments are adequate</li> <li>For new departments, like Computer Science and Chemistry, regular teaching and non-teaching staff are required</li> <li>Loan facility available to teaching and non-teaching employees through cooperative society</li> <li>Training programmes for instrument handling and computer operation are organized for non-teaching staff</li> </ul>
2.6.5 Financial Management and Resource Mobilization:	<ul style="list-style-type: none"> <li>The college largely depends on funding from state government</li> <li>The institution should take initiatives for mobilization of resources from public and philanthropists to meet the fund requirement of opening new courses.</li> </ul>
2.6.6 Best Practices in Governance and Leadership (If any):	<ul style="list-style-type: none"> <li>Efforts taken to prevent ragging</li> <li>A cordial relationship exists among the management, faculty, non-teaching staff and students</li> </ul>
<b>2.7 Innovative Practices:</b>	
2.7.1 Internal Quality Assurance System:	<ul style="list-style-type: none"> <li>There is an IQAC, which is functioning satisfactorily</li> <li>UGC assistance for IQAC should be availed</li> </ul>
2.7.2 Inclusive Practices:	<ul style="list-style-type: none"> <li>The institution attracts students from lower strata of the society including OBC and SC &amp; ST</li> <li>More than 50% students are girls</li> </ul>

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## NAAC for Quality and Excellence in Higher Education

2.7.3 Stakeholder Relationships:	<ul style="list-style-type: none"> <li>• A cordial relationship exists between the college and the stakeholders , such as parents and alumni</li> <li>• During interaction, the students have expressed their satisfaction about the teaching, infrastructure and the facilities available in the college</li> <li>• Alumni association is only informal , and it should be properly organized and registered</li> </ul>
<b>Section III: OVERALL ANALYSIS</b>	
<i>Observations (Please limit to five major ones for each and use telegraphic language) (It is not necessary to denote all the five bullets for each)</i>	
3.1 Institutional Strengths:	<ul style="list-style-type: none"> <li>• The college caters to the needs of economically socially and weaker section</li> <li>• Spacious building and effective utilization of facilities</li> <li>• A cordial relationship exists among the management, faculty, non-teaching staff and students</li> <li>• Large number of teachers with doctorate degree and the research publications</li> </ul>
3.2 Institutional Weaknesses:	<ul style="list-style-type: none"> <li>• Single faculty college and lack of interdisciplinary programmes</li> <li>• Low students pass percentage is apparently due to inadequate motivation</li> <li>• Inadequate career oriented programmes</li> <li>• Inadequate personality development programmes and communication skills</li> <li>• Lack of participation in sports and games</li> </ul>
3.3 Institutional Opportunities:	<ul style="list-style-type: none"> <li>• More collaboration and partnerships with institutions is required</li> <li>• Faculty should submit major project proposals to funding agencies</li> <li>• Involvement of alumni association in the development of the college is needed</li> <li>• Resource should be mobilized particularly from philanthropists and industries to manage new programmes</li> </ul>
3.4 Institutional Challenges:	<ul style="list-style-type: none"> <li>• Proper motivation of students to face future challenges</li> <li>• Starting of interdisciplinary and career oriented courses to meet the challenges of globalization</li> </ul>

*Signature*  
4/5

*Signature*  
10/9/10

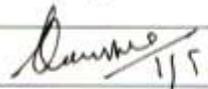
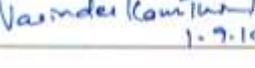
<b>Section IV: Recommendations for Quality Enhancement of the Institution</b>	
(Please limit to <b>ten major ones</b> and use telegraphic language) <i>(It is not necessary to indicate all the ten bullets)</i>	
<ul style="list-style-type: none"> <li>• Starting of interdisciplinary and career oriented courses to meet the challenges of globalization</li> <li>• Since the departments have well qualified faculties who are specialized in different areas, courses like, Medical Lab Technology, Organic Forming, Food Preservation, Communicative English,</li> <li>• To improve the personality of students, literary association, cultural association, sports and games activities should be in place</li> <li>• Alumni association should be properly organized and registered</li> <li>• Apply for various UGC schemes, like remedial coaching, coaching for competitive examination, financial support for IQAC for development of the college and students</li> <li>• Resource mobilization particularly from philanthropists and industries to manage new programmes</li> <li>• Proper and effective mentoring system for proper counseling of students to enable them to concentrate in studies</li> <li>• Proper maintenance of buildings and other facilities has to be done</li> <li>• Send proposals for major research projects to various funding agencies like UGC, DST, DBT, ICMR, ICAR etc.</li> <li>• Since the college has large number of girls and considerable number of women staff, an effective and regular "Women Cell" should be in place, for which special funds from UGC can be availed</li> <li>• For newer departments, like Chemistry, Computer sciences and Electronics teachers have to be appointed on regular basis</li> </ul>	

*I have read the report and agree with the Observations of the Peer Team as mentioned in this report.*



Signature of the Head of the Institution  
**DR. S.G. CHARALWAR**  
 PRINCIPAL  
 SHRI MATHURADA MOHOTA  
 COLLEGE OF SCIENCE  
 NAGPUR

Signatures of the Peer Team Members:

Name	Designation	Signature with date
Prof. K.M. Kaveriappa	Chairperson	 1/5
Prof. Madan Mohan Chaturvedi	Member Co-ordinator	 1/5/2010
Prof. Varinder Kaur Thind	Member	 1-9-10
Dr. Ganesh Hegde	Assistant Adviser	

Place: Nagpur

Date: September 01, 2010

**ANNEXURE – XI**  
**Audited Accounts (2014-15)**

**SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE, NAGPUR**  
**"SENIOR COLLEGE"**  
**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2015**

EXPENDITURE	AMOUNT (Rs.)	AMOUNT (Rs.)	INCOME	AMOUNT (Rs.)	AMOUNT (Rs.)
<b>To,</b>			<b>By,</b>		
<b>SALARIES :</b>			<b>FEES AND FINES:</b>		
Teaching Staff	1,37,03,650		Laboratory Fees	1,54,755	
Non-teaching Staff	71,36,696		Library Fees	52,080	
VI Pay Awards	2,32,953		Duplicate Transfer Certificate Fees	28,170	
License fee paid to Principal	18,800	2,12,97,289	Other (College) Fees	86,509	
			Gymkhana and Sport Fees	1,37,660	
<b>GRADE PAY:</b>			Term Fees	1,62,130	
Teaching Staff	26,04,000	40,40,590	College Magazine Fees	64,525	
Non-teaching Staff	31,78,530		Registration fee	13,040	
			Postage Fee	25,750	
<b>DEARNESS ALLOWANCE :</b>			Parent Teacher Association Fee	13,910	7,39,525
Teaching Staff	1,61,70,504				
Non-teaching Staff	31,62,494	2,43,33,326	<b>INTEREST:</b>		
Less: Recovery of Salary	2,43,42,998		On Savings Bank Account		1,12,247
	3,072				
<b>DEARNESS PAY :</b>			<b>GOVERNMENT GRANTS:</b>		
Teaching Staff			Salary Grant	5,61,34,185	
			Ad : Grant receivable	15,070	
			(Transferred to balance sheet)		
<b>EXTRA REMUNERATION TO TEACHING</b>		5,92,040	Medical Reimbursement Grant	5,61,48,361	5,62,51,641
<b>OTHER ALLOWANCES :</b>					
<b>(A) Teaching Staff :</b>			Non-Salary Account		2,04,820
House Rent Allowance	31,62,754				
C.L.A.	79,580		<b>OTHER RECEIPTS:</b>		
Transport Allowance	6,03,805	38,91,803	Sale of Prospectus & Admission Forms	16,938	
Special Pay to Principal	24,000		Library Chart Fee	1,35,000	
Medical Reimbursement	21,554		Miscellaneous Receipts	190	
Interest on Stipendium Increment			College Examination Fees	63,380	
			Donor Management Fee	310	
<b>(B) Non Teaching Staff :</b>			Student Welfare Fund	155	
House Rent Allowance	15,92,808	19,96,193	Student Medical Aid Fund	155	
C.L.A.	1,54,000		Student Union Fee	145	
Medical Reimbursement	83,835		Right to Information Charges Recovered	430	
Transport Allowance	1,62,469		University Annual Fee	5,285	
Cash Allowance			University Game Fee	1,032	
			Seminar Entry Fee for staff	1,20,338	
<b>MANAGEMENT CONTRIBUTION TO I.F.E.</b>			University Medical Exam form	155	
<b>NON TEACHING</b>			International Seminar 150-2015	377	
<b>RENT TAXES AND INSURANCE :</b>					
Corporation Taxes	52,540	55,545	<b>TOTAL C/F</b>	<b>3,24,690</b>	<b>5,73,28,637</b>
Insurance on College Building	4,005				
<b>TOTAL C/F</b>	<b>5,63,08,472</b>				





## Audited Accounts (2013-14)

K. K. MANKESHWAR & CO.  
CHARTERED ACCOUNTANTS  
KING'SWAY NAGPUR-440 001

SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE, NAGPUR  
"SENIOR COLLEGE"  
INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2014

EXPENDITURE	AMOUNT (Rs.)	AMOUNT (Rs.)	INCOME	AMOUNT (Rs.)	AMOUNT (Rs.)
<b>To:</b>			<b>By:</b>		
<b>SALARIES:</b>			<b>FEES AND FINES:</b>		
Teaching Staff	1,99,47,164		Laboratory Fees	4,34,205	
Non-teaching Staff	75,47,690		Library Fees	1,17,650	
VI Pay Arrears	1,88,268		Duplicate Transfer Certificate Fees	19,060	
License Fee paid to Principal	11,200	2,76,94,822	Other (College) Fines	36,897	
			Gymkhana and Sport Fees	1,48,266	
<b>GRADE PAY:</b>			Term Fees	98,515	
Teaching Staff	1,06,30,413	1,22,76,291	College Magazine Fees	58,100	
Non-teaching Staff	14,45,078		Registration fee	11,760	
			Degree Fee	1,400	
<b>DEARNESS ALLOWANCE:</b>			Postage Fee	14,680	9,55,483
Teaching Staff	1,39,56,904		Patent Teacher Association Fee	14,950	
Non-teaching Staff	79,36,986				
Less: Recovery of Salary	2,17,93,888	2,07,89,878	<b>INTEREST:</b>		
	10,04,018		On Savings Bank Account		2,48,857
<b>DEARNESS PAY:</b>					
Teaching Staff		54,600	<b>GOVERNMENT GRANTS:</b>		
			Salary Grant	6,72,31,948	
<b>OTHER ALLOWANCES:</b>			Less: Unpaid salary Grant	5,68,070	
a) Teaching Staff:			(Transferred to Balance sheet)		
House Rent Allowance	33,80,303		Medical Reimbursement Grant	6,66,63,878	6,66,13,878
Transport Allowance	72,712				
Special Pay to Principal	3,85,822				
Interest on Stagnation Increment	34,000				
	88,543	39,61,380			
b) Non Teaching Staff:					
House Rent Allowance	16,27,592				
C.L.A.	1,58,602		<b>OTHER RECEIPTS:</b>		
Medical Reimbursement	1,50,000		Identity Card Fees	15,125	
Transport Allowance	99,513		Sale of Prospectus & Admission Forms	92,400	
Cash Allowance	1,280		Miscellaneous Receipts	10,250	
			College Examination Fees	59,020	
<b>MANAGERS CONTRIBUTION TO P.F.</b>			Disaster Management Cell	170	
<b>NON TEACHING</b>			Student Welfare Fund	189	
Student Union Fee	284		Student Nodal Aid Fund	189	
Right to Information Charges Recovered			Student Union Fee	173	
University Annual Fee			Right to Information Charges Recovered	200	
University Game Fee			University Annual Fee	7,775	
University Immigration Fee			University Game Fee	1,000	
			University Immigration Fee	25	
<b>TOTAL C/F</b>		<b>6,68,70,073</b>	<b>TOTAL C/F</b>	<b>1,46,516</b>	<b>6,85,92,43</b>



**K.K. MANKESHWAR & CO.**  
**CHARTERED ACCOUNTANTS**  
**KING'SWAY NAGPUR-440 001**

TOTAL B/F	10,04,146	6,70,37,547	TOTAL B/F	6,89,27,472
Internet Networking	92,471			
Stationery for computer	1,39,067			
University Medical Exam Form Expenses	2,400			
Books Binding Charges	740			
Continuing Adult Education & Extension A/C	895			
Continuation Fee for New Course	36,600			
Farrash Charges	41,100			
Internet Facility charges	12,023			
Revenue Stamp	1,300			
Amount Paid to Cycle Stand Committee	65,760			
University Enrolment Fee	4,874			
Breakages of Laboratory Apparatus	10,270			
LIC Fine	125			
Professional Tax Fine	2,220			
Security Service Expenses	19,045	14,82,100		
University Practical Exam Expenses	49,564			
Expenses by the institution on Various Minor Research Projects		7,051		
<b>Surplus to be Carried over to Balance Sheet</b>		4,00,774		
<b>TOTAL</b>		<b>6,89,27,472</b>	<b>TOTAL</b>	<b>6,89,27,472</b>

As per books of accounts produced.

*Shripad Tole*  
**Shripad Tole**  
 Partner  
 Membership No. 033481  
 For & on behalf of  
**K. K. Mankeshwar & Co.**  
 Chartered Accountants  
 FRN 106609W  
 Nagpur Dated the 31st July 2014



## Audited Accounts (2012-13)

K. K. HANDESHWAR & CO. CHARTERED ACCOUNTANTS KING'SWAY NAGPUR-440 001		SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE, NAGPUR "SENIOR COLLEGE" INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2013			
EXPENDITURE		AMOUNT	INCOME	AMOUNT	AMOUNT
<b>TO, SALARIES I.</b>			<b>FEES AND FINES:</b>		
Teaching Staff	1,46,54,675		Laboratory Fees	3,52,410	
Extra remuneration to teaching staff	3,69,360		Library Fees	59,505	
Non-Teaching Staff	71,41,183	2,23,53,986	Duplicate Transfer Certificate Fees	15,210	
VI Pay Arrears	1,88,768		Other (College) Fines	86,605	
<b>GRADE PAY:</b>			Gymkhana and Sport fees	84,520	
Teaching Staff	38,31,958	51,85,477	Term Fees	52,630	
Non-Teaching Staff	13,53,509		College Magazine Fees	27,550	
<b>DEARNESS ALLOWANCE I</b>			Registration fee	11,120	
Teaching Staff	1,03,23,784		Degree Fee	400	
Non-Teaching Staff	25,13,123		Postage Fee	13,710	
	1,55,38,907	1,55,06,546	Parent Teacher Association Fee	13,810	7,17,270
Less: Recovery of Salary	32,361				
<b>OTHER ALLOWANCES I:</b>			<b>INTEREST:</b>		
a) Teaching Staff :			On Savings Bank Account		1,21,674
House Rent Allowance	42,11,800		<b>GOVERNMENT GRANTS:</b>		
C.L.A.	79,959		Salary Grant	4,97,39,375	
Transport Allowance	4,52,074		Less: Recovery of Salary	32,361	
Leave Travel Concession	6,930		Medical Reimbursement Grant	4,97,07,014	
Medical Reimbursement	24,794	48,09,557	LTC Grant	1,52,523	4,98,74,739
Special Pay to Principal	34,000			15,202	
b) Non Teaching Staff :			Non-Salary Grant		4,73,429
House Rent Allowance	15,44,198				
C.L.A.	1,55,716		<b>OTHER RECEIPTS:</b>		
Medical Reimbursement	1,27,229		Identity Card Fees	14,560	
Transport Allowance	1,02,812	19,40,527	Sale of Prospectus & Admission Firms	77,600	
Car, Typing, Allowance	1,800		Miscellaneous Receipts	7,263	
Leave Travel Concession	8,272		College Examination Fees	54,790	
			Disaster Management Cell	1,180	
<b>MANAGERS CONTRIBUTION TO PF</b>			Student Welfare Fund	653	
<b>NON TEACHING</b>			Student Medical Aid Fund	653	
<b>RENT TAXES AND INSURANCE I:</b>					
Corporation Taxes	53,890	56,961			
Insurance on College Building	3,371				
<b>TOTAL C/F</b>		<b>4,98,53,332</b>	<b>TOTAL C/F</b>		<b>5,11,87,113</b>



	TOTAL B/F		4,99,16,614	TOTAL B/F	5,13,74,752
Amount Paid to Cycle Stand Committee					
Revenue Stamp		62,400			
Expenses on Avishkar 2013		1,100			
Continuation Fee for New Course		5,081			
Fairrash Charges		38,200			
Recovery of Income Tax		28,700			
Breakages of Lab Apparatus		8,950			
Surplus to be Carried over to Balance Sheet		22,149	13,53,098		
<b>TOTAL</b>			<b>1,05,040</b>	<b>TOTAL</b>	<b>5,13,74,752</b>

As per books of accounts produced.

*(Signature)*  
**Shripad Tole**  
 Partner

M.No.033481  
 For & on behalf of  
**K. K. Mankeshwar & Co.**  
 Chartered Accountants  
 FRN 106009W



*(Signature)*  
 Principal  
**S.M.M. College of Science, Nagpur**



NAGPUR  
 Date : 28th July 2013



TOTAL B/F	369,224.00	41,705,533.00	TOTAL B/F	47,372,485.00
College Examination Expenses	13,000.00			
College Magazine Expenses	26,479.00			
Cybernetics & Sports Expenses	54,409.00			
Other Petty Contingencies	57,544.00			
Extra Curricular Activity Expenses	240.00			
Binding Charges	2,000.00			
Renewal of L.P.G. Gas N.O.C.	1,000.00			
Renewal of Alcohol Licence	4,848.00			
Quarterly I.T. Return Expenses	55,983.00			
Botanical Garden Expenses	21,559.00			
Water Charges	14,080.00			
Conveyance	5,000.00			
University Affiliation Fees	720.00			
Washing Allowance	30,822.00			
Bank Charges	10,340.00			
T.A. & D.A. To Staff (teaching & non-teaching)	2,556.00			
Insurance for Furniture & Equipments	41,030.00			
Functions & Festivals	764.00			
Conference & Seminar	364.00			
Fidelity Insurance	23,576.00			
Miscellaneous Expenses	10,146.00			
Maintenance on Electricity	950.00			
College Scholarship	2,607.00			
NET Ground Rent	2,000.00			
Administration Charges Paid to Nagpur	6,000.00			
Allowance Paid to Vice Principal	31,550.00			
Cleaning Charges	85,496.00			
Internet Networking				
University Examination Forms	19,335.00			
Advertisement expenses	1,912.00			
Telephone charges	61,600.00			
New Course Applied Fee to University	29,375.00			
Environment Science Expenses	20,000.00			
NAAC Fee	16,486.00			
University Practical Exam Expenses	2,000.00			
Refresher Course Fee		1,005,786.00		
Laboratory Apparatus				
Breakages Written Off		49,889.23		
			Deficit to be Carried over to Balance Sheet	189,723.23
<b>TOTAL</b>		<b>42,761,208.23</b>	<b>TOTAL</b>	<b>42,761,208.23</b>




**Swarindra Sahasrabudhhe**  
 Partner  
 M.No.102421  
 For & on behalf of  
**K. K. Mankeshwar & Co.**  
 Chartered Accountants  
 F.R.N. 106005W  
**NAGPUR**  
 Date : 14.09.2012

## Audited Accounts (2010-11)

K.K. MANKESHWAR & CO.  
CHARTERED ACCOUNTANTS  
KING'SWAY NAGPUR-440 001

SHRI MATHURADAS MOHOTA COLLEGE OF SCIENCE, NAGPUR  
"SENIOR COLLEGE"  
INCOME & EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31st MARCH, 2011

EXPENDITURE	AMOUNT	AMOUNT	INCOME	AMOUNT	AMOUNT	AMOUNT
<b>To,</b>			<b>By,</b>			
<b>SALARIES : (including arrears)</b>			<b>FEES :</b>			
Teaching Staff	12,558,075.00		Laboratory Fees	123,190.00		
Extra Remuneration To Teaching Staff	148,577.00	19,531,232.00	Library Fees	24,838.00		
Non-Teaching Staff	6,823,580.00		College Magazine Fees	22,400.00		
			Gymkhana & Sports Fees	46,194.00		
<b>DEARNESS PAY :</b>			Term Fees	35,828.00		
Teaching Staff	2,924,946.00	4,291,327.00	Duplicate Transfer Certificate Fees	14,870.00		
Non-Teaching Staff	1,366,378.00		College fines	52,370.00		
			Registration Fees	10,890.00		370,372.00
<b>DEARNESS ALLOWANCES :</b>						
Teaching Staff	6,635,462.00	8,168,447.00	Human right Seminar Grant	44,000.00		
Non-Teaching Staff	2,532,985.00		Collection Of Registration Fee	41,101.00		
			Sub Total	85,101.00		
<b>OTHER ALLOWANCES :</b>			Less: Expenses on Human right seminar	61,870.00		23,231.00
Teaching Staff :						
House Rent Allowance	3,027,494.00		<b>INTEREST :</b>			
C.L.A.	85,766.00		On Saving Bank Account			123,460.00
Transport Allowance	398,343.00					
Special Pay to Principal	24,000.00					
<b>Non-Teaching Staff :</b>			<b>GOVERNMENT GRANTS :</b>			
House Rent Allowance	1,762,171.00		Salary Grant			37,369,423.00
C.L.A.	144,323.00		Non-Salary Grant			169,554.00
Cash, Typing, Washing Allow.	1,800.00		Medical Reimbursement grant			-11,263.00
Transport Allowance	80,031.00					
Medical Reimbursement Expenses	11,716.00					
Leave Travel Concession	19,836.00					
Management Contribution To P.F.			<b>OTHER RECEIPTS :</b>			
			Identity Card Charges			-11,244.00
			Sale of Prospectus & Admission Forms			38,110.00
			Miscellaneous Receipts			2,375.00
			College Examination Fees			-44,357.00
			Right Information Fees			1,000.00
			Contribution from University for practical exam			21,980.00
			Un. Medical Exam Forms			886.00
			Disaster Management Cell			-4,906.00
<b>TOTAL C/F</b>		<b>37,648,571.00</b>	<b>TOTAL C/F</b>			<b>38,212,280.00</b>

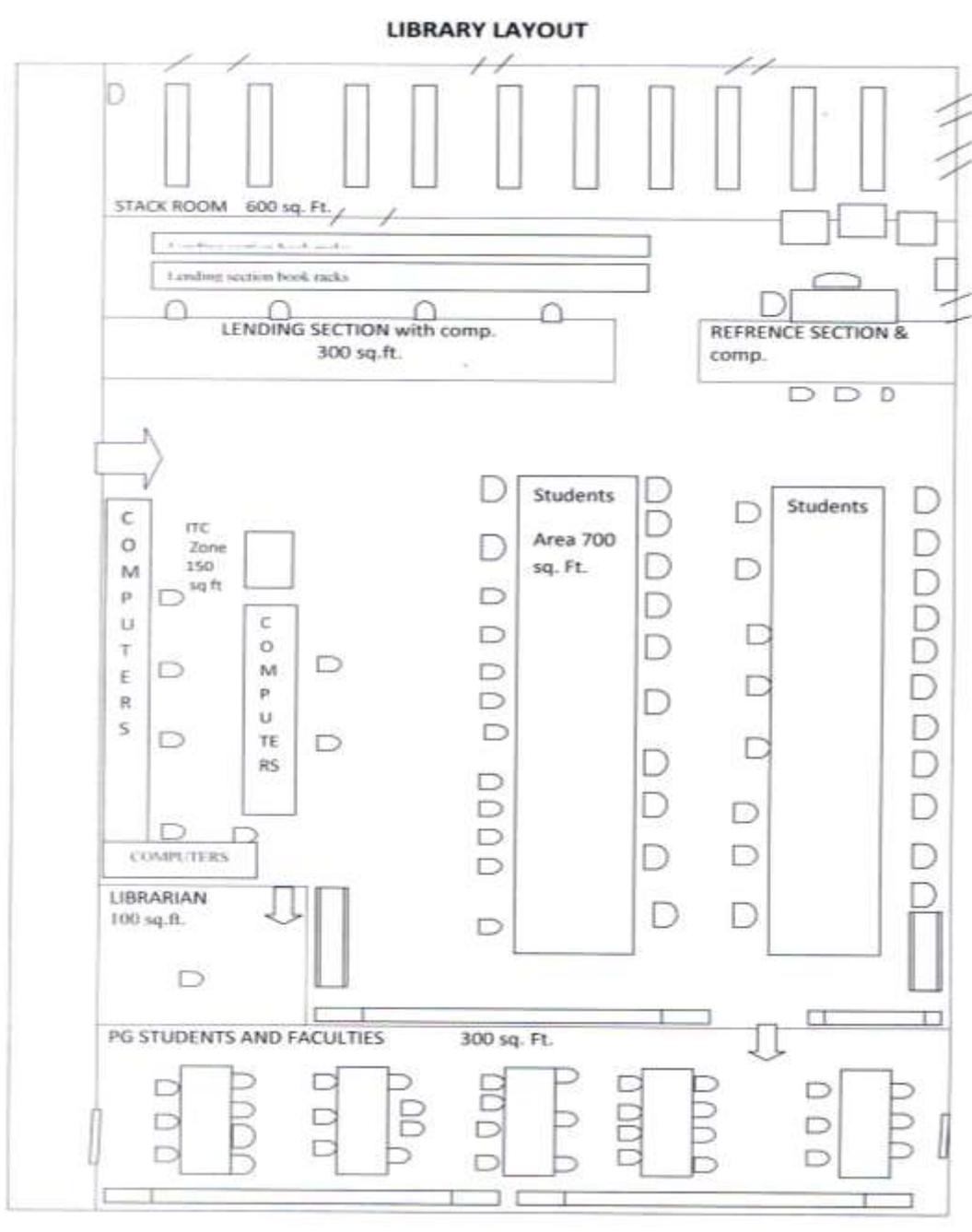


TOTAL B/F	39,144,556.08	TOTAL B/F	38,214,745.00
NAACC Expenditure	242,858.00		
Legal Expenses	10,000.00		
University Union Fee	365.00		
Student Welfare Fund	555.00		
Student Medical Aid Fund	555.00	254,333.00	
<b>GAMES &amp; SPORTS ACTIVITIES :</b>			
Games, Sports & Ground Maint.		1,30,877.00	1,525,445.47
<b>EXTRA CURRICULAR ACTIVITIES :</b>			
Extra Curricular Activities Exp.	39,736.00		
Function & Festivals	48,939.00	88,675.00	
<b>OTHER HEADS :</b>			
College Scholarship	900.00		
Administration Charges Paid to Nagpur Shikshan Mah	2,000.00		
Maintenance of Electricity	55,202.00		
T.A. & D.A. to Staff	3,877.00		
Washing Allowance	720.00		
Renewal of L.P.G. Gas N.O.C.	2,000.00		
Renewal of Alcohol Licence	1,000.00		
NIT Ground Rent	1,737.00	104,713.00	
Cleaning charges	37,277.00		
<b>Laboratory Apparatus Breakages Written Off</b>		17,036.39	
<b>TOTAL RS.</b>	<b>39,740,190.47</b>	<b>TOTAL RS.</b>	<b>39,740,190.47</b>



  
**SWARENDRA SAHASRABUDDHIE**  
 Partner  
 M.No. 102421  
 For & on behalf of  
**K. K. MANKESHWAR & CO.**  
 CHARTERED ACCOUNTANTS  
 NAGPUR  
 Date : 28/07/2011

**ANNEXURE – XII**  
**Layout of Library**



## ANNEXURE – XIII

## Report of All India Survey on Higher Education

Basic Reports - Report 2

College Report (DCF - II)

Survey Year: 2014-2015

Name Of The State	Maharashtra					
Name Of The District	Nagpur					
Name Of College/Institution	Mathuradas Moha Science College, Nagpur					
Address	SAKKARDARA SQUARE, UMRER ROAD, NAGPUR					
Website	www.mohotasci.edu.in					
Area (in acres)	5.79					
Year of Establishment	1949					
Location	Urban					
Type	Affiliated College					
Whether Autonomous	No					
Affiliating University	Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur					
Year of Affiliation	1980					
Recognising Statutory Body	University Grants Commission					
Management by	Private Aided					
An evening college	No					
Specialised	No					
Only for Girl	No					
Number of Faculties or Schools	0					
Number of Departments or Centres	12					
Number of Teachers	Male	25	Female	10	Total	35
Number of Students						
Regular Students	Male	277	Female	562	Total	839
Distance Students	Male	0	Female	0	Total	0
On Roll Students (Distance)	Male	0	Female	0	Total	0
Foreign Students	Male	0	Female	0	Total	0
Total	Total	277	Total	562	Grand Total	839
Number of Staff Quarter	30					
Teaching Staff	5					
Non-teaching Staff	25					
Number of Hostel		Number		Intake Capacity		Residing
Boys		0		0		0
Girls		0		0		0
Others		0		0		0
Total		0		0		0



## Criterion II: Teaching-Learning and Evaluation



**Principal Dr. S. G. Charalwar Receiving Eminent Researcher Award (ICSET-2015)**



**Visit to NEERI, Nagpur**



**Felicitation of Toppers**



**Workshop on Instrumentation**



**Projects made by students**

**Criterion III: Research, Consultancy and Extension**



**Avishkar-2012**



**Placement Cell**



**Stress Management Workshop on International Women's Day**



**International Yoga Day**



**Tree Plantation**



**Short Term Course on Cybercrimes**

#### **Criterion IV: Infrastructure and Learning Resources**



**Well-equipped Gymnasium**



**Spacious Ground**



**Spacious Library**



**Equipped Laboratories**

**Criterion V: Student Support and Progression**



**Principal Dr. S. G. Charalwar  
interacting with students**



**Principal and Teacher in-charge  
flagging off Voter's Day Cycle  
Rally**



**'Book Exhibition' organized by  
Library and Information Centre**



**Cultural Event at 'College Day'  
function**

**Criterion VI: Governance, Leadership and Management**



**Lecture on Sexual Abuse at Workplace by IWSA**



**NSS Rally**



**No Addiction Programme by Shri Kharate Maharaj**



**Blood Donation Camp**

**Criterion VII: Innovations and Best Practices**



**Cleanliness Programme at *Panchavati* Old Age Home conducted by CAEE**



**One day inter-college symposium ETAE-15 for students**



**NSS activities**



**Short Term Courses**

# ACTIVITIES AT A GLANCE





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