

## Konkan Education Society's ANANDIBAI PRADHAN SCIENCE COLLEGE

Permanently Affiliated to University of Mumbai & Recognized by U.G.C Uder 2(f) and 12(B)

### RE-ACCREDITATION REPORT (III-Cycle)

Submitted to,

## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGLORE



Bapusaheb Deshpande Educational Complex At-Nagothane , Tal Roha, Dist - Raigad Pin : 402106, Maharashtra State, India

> MARCH 2017

Website: http://www.apcnagothanc.edu.ir E-mail- principalapsc@yahoo.co.ir

।। क्वंत कर्न सखं दःखं गणवेत्रात्मवावरः ।।।



At-Nagothane, Tal- Roha, Dist.- Raigad , Pin: 402106, Maharashtra State

### RE-ACCREDITATION REPORT



**Submitted To** 

## NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

**Bangalore** 

**MARCH -2017** 

### Vision:

"Avail the facility of education in the down trodden Community for development of Society."

### Mission:

"Education for all"

## Goals and Objectives of the Institution:

The following objectives are identified to fulfill the Vision and Mission of the College:

- \* To uplift the youth with good education.
- \* To serve the student community who are poor, needy, socially and economically weaker in this region.
- To develop transformation in youth into educationally, morally, culturally and spiritually good citizens with greater employment opportunities.
- To be a pioneer of a higher education model that may or may not be the best in the world but the best of the world delivering social, economic and intellectual value for excellence.
- To provide access to quality higher education to all the sections of the society.



।। कृतेन कर्म सुरत दुःसं मधावैद्यास्यवाद्यः ।। ।। मनरवी कार्याची व्यक्तिने कार्य क्रतीत असलता सुख्य दुःसाची पर्वा करु नवे ।।

Konkan Education Society's

### ANANDIBAI PRADHAN SCIENCE COLLEGE, NAGOTHANE

Bapusaheb Deshpande Educational Complex, Nagothane

Tal. Roha, Dist. Ralgad. Pin 402 106. (Maharashtra)

Founder: Adv. Datta Patil & Prabhakar Patil

President : Shri. Sanjay Datta Patil

Principal: Dr. Sandesh S. Gurav (8149375082)

Phone: (02194) 222562 Fax No.: (02194) 223699

Web site: www.apcnagothane.edu.ir Email: principalapsc@yahoo.co.in

Permanently affiliated to the university of Mumbai & Recognized by the Government of Maharashtra Accredited by NAAC and included under section 2(F) & 12 (B) of the U.G.C. (Reaccredited by NAAC with 'B' Grade)

Ref. No. APSCN / 877/2016-17

Date: 30/03/2017

To.

The Director.

National Assessment and Accreditation Council (NAAC),

P.O.Box. 1075, Nagarbhavi,

Banglore - 560 072, Karnataka (India).

Subject :- Submission of Reaccreditation Report.

Dear Sir.

We take this opportunity to submit our Reaccreditation Report for the third cycle to the National Assessment and Accreditation Council (NAAC) for assessment and accreditation. This Report is prepared by us with honesty and sincere efforts as per the directive guidelines formulated by NAAC.

In this report, we have highlighted our strengths and achievements in which we have succeeded within the last five years of our college. It is a privilege and matter of great pride for us to get Reaccredited by an esteemed body like NAAC.

Hope that our Reaccreditation Report will satisfy your requirements and expectations, we will be grateful to you if you convey your useful suggestions.

Thanking you,

Constitution of the consti

Yours faithfully

Stylean

Dr. Sandesh S. Gurav Principal

PRINCIPAL
K.E.S. A. P. Science College
Nagothane, Dist. Raigad (M.S.)

For Reference

1. Email ID

: principalapsc@yahoo.co.in

2. Website

: http://www.apcnagothane.edu.in

3. Track ID

: MHCOGN13963

### **INDEX**

	Part I : Preface	
Sr. No.	Particulars	Page No.
	*Preface	06
	* NAAC Steering Committee	07
	*Executive Summary	08-14
	PART II: INSTITUTIONAL DATA	
A. PROFILE	C OF THE INSTITUTION	15-23
B. CRITERI	A-WISE ANALYTICAL REPORT	
1.	Criterion I : Curricular Aspects	24-42
2.	Criterion II: Teaching-Learning and Evaluation	43-81
3.	Criterion III: Research, Consultancy and Extension	82-118
4.	Criterion IV: Infrastructure and Learning Resources	119-140
5.	Criterion V : Student Support and Progression	141-179
6.	Criterion VI: Governance, Leadership and Management	180-204
7.	Criterion VII: Innovations and Best Practices	205-216
Recomm	nendations of Previous peer team and action taken	217-219
C. INPUTS I	FROM THE DEPARTMENTS	
1.	Department of Chemistry	220-229
2.	Department of Physics	230-234
3.	Department of Botany	235-239
4.	Department of Zoology	240-244
5.	Department of Computer Science	245-250
6.	Department of Information Technology	251-256
ANNEXURE	E –I to VII	
ANNEXURE -	- I CERTIFICATE OF COMPLIANCE	258
ANNEXURE -	· II DECLARATION BY HEAD OF INSTITUTE	259
ANNEXURE -		260
ANNEXURE -	· IV AFFILIATION LETTER FROM UNIVERSITY	261
ANNEXURE -	-V GRANT LETTERS	262-267
ANNEXURE	VI AUDIT REPORTS	268-273
ANNEXURE -	· VII MASTER PLAN OF THE INSTITUTION	274-277

### **Preface**



It is my pride privilege to present the Re-accreditation Report for the third cycle of the college to the National Assessment and Accreditation Council, Banglore. We have tried at level best to fulfil the recommendations and suggestions made by the earlier peer team. By doing so we are also fulfilling the aspirations and the need of the students, educationalists, citizens and leadership. College is permanently affiliated to the University of Mumbai form 2004-05 and recognized by UGC, under 2(f) & 12 (B) from the year 2007. The various measures adopted in the college are implementations of restructured curriculum (CBSGS), innovations introduced to make the learning process student centered and the adaptations of the best practices. Attempt has been made to satisfy the expectations of all the stakeholders. Activities in the college have been extended beyond the curriculum which aimed at the overall personality development of the students. Some of them are Avishkar Research Conversation, Interdisciplinary conference Science Association, Career Guidance and Placement Cell, Women Development Cell, Nature Club, Consultancy services of the departments etc.

In last five years we have developed the additional infrastructure to cope up with the increasing demands. Teachers have improved their qualifications and many of them are working on research projects and have published papers in the National/international journals. Internet center, LCD Projectors, TV, Computers, elibrary are some of the amenities which are made available to the students in the college.

The college has received the grant of Rs. 1700000/- from DST- FIST for the development of infrastructure for research and also received sanction of Rs. 800000/- from MPCB to maintain two NAMP points at MIDC, Dhatav, Tal-Roha, Dist-Raigad. The college has enhanced the intake of the P.G. Course (M.Sc.) in Organic Chemistry from 10 to 20 from the academic year 2014-2015.

Due to effective student support we are also doing well in the cultural, sports, N.S.S. and extension activities. Many of our students have brought the laurels to the college. Through N.S.S. and DLLE activities we are reaching to the community and making an effort to contribute in their development and social upliftment of this hilly and rural area. Alumnies take the pride privilege to visit the college at various occasions like society day, N.S.S. Camp, Degree distribution function etc.

Leadership given by our President, Hon. Sanjay Datta Patil, guidance of our Secreatary, Mr. Ajit P. Shah, and directors of K.E.S., co-operatrion from LMC members Mr. Narendra Jain, Mr. Anil Kale & Mr. Abbas Nagothanawala make our path of development hurdle free.

At this stage volunteering ourselves for third cycle of re-accreditation is not the benchmarks of our development but it is redefining us for progress in future after knowing our strengths, our weaknesses, our opportunities and our threats.

I welcome the members of NAAC peer team and look forward to useful interaction with them about our progress.

Dr. Sandesh S. Gurav Principal

### **NAAC Steering Committee and IQAC Committee of Institution:**

<ol> <li>Dr. Sandesh S. Gurav Principal / Chairperson</li> <li>Hon. Vinayak D. Khopkar Member Governing Bod</li> <li>Mr. Narendra P. Jain External Expert</li> <li>Mr. Anil K. Kale External Expert</li> <li>Dr. Dinesh V. Bhagat IQAC- Coordinator</li> <li>Dr. V.S.N Raghav Rao Teacher-Member</li> </ol>	1
<ol> <li>Mr. Narendra P. Jain External Expert</li> <li>Mr. Anil K. Kale External Expert</li> <li>Dr. Dinesh V. Bhagat IQAC- Coordinator</li> </ol>	•
4. Mr. Anil K. Kale External Expert  5. Dr. Dinesh V. Bhagat IQAC- Coordinator	ody
5. Dr. Dinesh V. Bhagat IQAC- Coordinator	
6. Dr.V.S.N Raghav Rao Teacher-Member	
7. Dr.Kurra Sarada Teacher-Member	
8. Dr. Satish D. Patil Teacher – Member	
9. Dr. Vijay S. Chavan Teacher – Member	
<b>10.</b> Dr. Shrikrishna D. Tupare Teacher – Member	
11. Dr. Vilas R. Jadhavar Teacher – Member	
12. Mr. Vikas S. Shinde Teacher – Member	
13. Mr.Hemant F Jadhav Librarian-Member	
14. Adv. Mrs. Sonal H. Jain Alumni Nominee	
15. Mrs. Nilam V. Mahale Alumni Nominee	

### **Executive Summary**

We are very happy and proud to submit this Re-Accreditation Report (RAR) for the third cycle of accreditation which consists of the progress and developments took place in the college in post re-accreditation phase. Recommendations and suggestions given by peer committee at the time of re-accreditation earlier are utilized as the base for the changes and developments in the college in post accreditation phase. The management and IQAC of the college has tried at their level best to improve and to achieve the goal as per the objectives and Vision - Mission statement.

Management of the college and college as whole realizes the importance of need base regional, national and global level studies. We believed in thinking globally and acting locally. We try to achieve the following core values through the education system of the college.

#### 1. Contributing to National Development:

The College is simulated in rural area in hilly region. Students are mostly first generation learners with catchment area stretching to a radius of 20 km. For these students education is not just a means of employment but a process of socio economic empowerment 175 students enter each year with undefined learning objectives. During the course years of stay, the students are exposed to community through NSS and DLLE activities and leadership qualities are developed through organization of routine college programs. The institutional vision of 'societal development of down trodden communities' gets truly justified.

During these formative years students are groomed with better understanding of the world and improved life skills. This is a small contribution the institution makes to national development. The College is proud to cherish such social change.

### 2. Fostering Global Competencies among Students:

The College runs Post Graduate course on M.Sc. in Organic Chemistry and B.Sc. Information Technology. In terms of the location of the college, this is a brave step to provide cutting edge technologies in higher education to students. In addition, an in-house Information technology department automatically upgrades the general efficiency of college administration.

The College faculty has an international presence, this is proved through the paper presentations of the faculties during the last five years.

The College is located among several chemical companies. Being sensitive to the needs of the students as well as the proximity, the college started post graduate programs in Chemistry in the year 2008-2009 and by considering the increasing demand of the industries the intake of M.Sc. Organic chemistry has been increased from 10 to 20 from the academic year 2014-2015.

### 3. Inculcating a Value System among Students:

The college NSS units have 250 volunteers out of the total student population of 498. Within the curriculum the Foundation Course papers taught at First and second year levels of degree help in providing input on value system and NSS and DLLE activities provide them the field experience.

The College collaboration with five NGOs for its extension activities have provided exposure to the community in the direction of protection of girl child, health and hygiene environmental conservation among other vital issues of community interest.

#### **4.** Promoting the Use of Technology:

With Computer Science and IT laboratories, the college is able to permeate use of technology by computerization of various college processes. In addition, these departments sphere head, training, usage, and up gradation of hardware/software and soft-skills of the users. There are 46 computers for use between students and college. Extensive use of internet and usage of multimedia for undergraduate projects by students help in keeping abreast with technology.

### 5. Quest for Excellence:

Humble tasks are difficult to accomplish. Dealing with fist generation leaner beloing communities to develop through education, thus promoting change needs excell ugh participation. Excellence in the local context is expanding the reach of ed....... The institution is providing forward integration through PG course. Excellence is empowering students with life skills. It can be seen in terms of extension activities and campus placements.

The different multidimensional aspects of higher education realized by the college are:

- ➤ Social- political-economic aspect
- > Science and technology-rational scientific thinking aspect.
- ➤ Universal knowledge- skills-global competencies-employability aspects.
- > Cultural, sports, endemic and ethnic knowledge.
- ➤ Higher education, management aspect.
- Personality development, value skill based education, empowerment aspect.

Accordingly the college has adopted the courses with the curriculum that covers basic, applied and professional aspects with emphasis on knowledge skills, community development and employability. It has internalized the innovative steps of teaching learning and evaluation. Equal importance has been given to research and extension activities. It has developed essential infrastructural facilities and learning resources. It ensures student facility and support. It has several innovative practices in all the activities. The activities and achievements of the college in all these facets are summarized below.

### **Criteria I : Curriculum aspects:**

The curriculum for the programmes offered to the students is designed by University of Mumbai centrally. The faculty members become a part of curriculum designing by offering suggestions to the Board of Studies of the University in workshops and seminars specially organized for the purpose by University. The Curriculum is integrated with Intuition's goals and objectives by adding value added Courses and effective conduct of co-curricular and extracurricular activities. The institution has established various Associations to take care of different social and Industrial requirements with the great involvement of students. The students are provided with computer education, e-learning resources, Internet and optimum infrastructure. Along with curriculum, the activities of Associations groom the students by developing moral and ethical values and also employable skills.

The institution has developed a scientific and effective 'Ten Point Evaluation System (TPES)' and 'Fifteen Point Infrastructure and Library Evaluation System (FPILES)' to obtain feedback from stakeholders. The scientific benchmarking system has proved effective and become instrumental to develop healthy teaching-learning environment in the institution.

### **Criteria II: Teaching Learning and Evaluation:**

The institute has an effective mechanism to admit students for the degree programme, which consist of admission committee. This committee strictly adhere to admission rules framed by University of Mumbai and Government of Maharashtra. High degree of transparency is maintained by displaying the merit list and publishing the same on college website. For UG and PG Programmes students are admitted purely on merit basis with the provision of SC, ST, OBC, Women, Differently able and defense quotas.

The institution bridges the knowledge gap of the enrolled students by offering bridge up lectures and also conducting remedial classes. The Internal Quality Assessment Cell (IQAC) determines the teaching learning needs in the interest of students. The data is collected, discuss with stakeholders, the plans are prepared and executed in a time frame to nurture critical and creative thinking among students. With the help of ICT tools the student are explored advanced learning opportunities. The teachers are recruited strictly as per the guidelines of UGC and Government of Maharashtra. They are provided with different facilities to promote research, to attend workshops, seminars and to live quality life. The student performance is evaluated by adapting varieties of methods such as presentations, group discussions, brain storming sessions and semester examinations.

### **Criteria III: Research, Consultancy and Extension:**

The institution always encourages to students and teachers to initiate research. The teachers avail different facilities to conduct Minor Research Projects. The collaborations are made with C K Thakur College, Panvel, D. G. Tatkare College, Tala, Bahusaheb Nene college, Pen with the industries Reliance Industries NMD Ltd. Nagothane, Sudarshan Chemicals Pvt. Ltd. Roha, Supreme Petrochemicals Pvt Ltd. Amdoshi, Roha Dye Chem Pvt. Ltd Roha, Vidhi Dye Pvt. Ltd. Roha.. Sadhana Nitro chem. Ltd., Roha.Rathi Dye Chem (P) Ltd, Roha, Nilicon Pvt Ltd. Roha, Aqua care Solution and Engineering Ltd. Roha.etc In consultancy and extension

activities the projects of social interest like construction of Bandhara-, Toilet Blocks, Soak pits, Compost pits etc and Yoga workshop, Self employment programs for girls, Rod Safety Drive, Cleanliness Drive, Blood donation Drive, Anti-addiction drive and ,self defense for girls are introduced to provide earning source to the students. The institution has published its policy statement "EDUCATION FOR All" with the motive to encourage student and faculties to promote research and consultancy.

### Criteria IV: Infrastructure and Learning Resources:

The institution has developed well planned and systematic building structure with specious classrooms, seminar hall, laboratories, botanical garden, library and administrative office. The computer education is provided through B.Sc. Computer Science and Information Technology courses and also Internet facilities are provided for completing their curriculum. The modern library resources such as e-Journal, e-books, CD/DVDs, OPAC and N-LIST Database are made available. Virtual classroom is in development stage in collaboration with University of Mumbai will have LCD Projector, Screen, Television, and Video-Conferencing facilities. Due care is taken to upkeep and maintain building and campus.

### **Criteria V: Student Support and Progression:**

Every year the institute publishes prospectus containing accountability towards stakeholders by providing information about scholarships, fees structure, skill development facilities, courses, Associations, infrastructural facilities and examination rules and regulations. The institution provides sport facilities, gymnasium, NSS and DLLE. The Women Development Cell conducts various programmes for the development of girl's students. The student council of institute is very active and organizes fresher's party- annual day programme-"Spring fest", Traditional Day Celebration, Send-off party for last year students etc. They take part in day to day activities of institution at different levels. The IQAC of the institute works as mentor for the faculty members to make academic plan for holistic development of the students. They extend their support to slow learner by conducting additional lectures etc. for improvement in their study and examination marks. Advance learners are supported by giving extra guidance as per their needs.

Alumni always visits and extends their support in the development activities. Our students are placed in the various Government Departments and private sectors such as Industry, Politics, MPSC, Banking, Police, Army, etc.

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

The top management consists of Board of Directors of the Society, Standing Committee and Local Managing Committee. The Principal of the institution has a role as facilitator between society and institution. In Governance and Leadership activities justice is given to all stakeholders by discussing certain issues. The institution has developed a culture of participative management by placing the students, parents and faculties on different committees. The grievances and complaints are attended immediately and resolved through Grievance Redressal Cell to promote better stakeholders relationship. An effective feedback mechanism TPES and FPILES analyses student's feedback on institution and faculties, which

is communicated to concern agencies for better performance. The institution undertakes internal and external audit for effective financial management. The Government grant is the main source of receipt for institution along with income from self financing courses. IQAC of the institution is a guiding source to the stakeholders, the required training programmes are organized by. the members of IQAC. The alumni always contribute in effective functioning of IQAC through suggestions and active support.

#### Criteria VII: Innovation and Best Practices:

Though the formal green audit is not conducted by the institution, the campus is surrounded with trees and plants. The botanical garden cultivates and maintains ornamental, medicinal plants and other plants for undergraduate botanical studies. The institution takes due care of energy conservation, water harvesting, carbon neutrality, hazardous waste management and plantation. Several innovative practices within the capacity of the institution are introduced for the benefit of faculties, students and institution.

- In the year 2012-13 a purposeful attempt was made by the institution to undertake two best practices viz. Women development cell and research and Consultancy services. Both these practices are implemented successfully with high degree of consistency in achieving the objectives of practices. As a result of the efforts of Women development Cell the strength of girl's students has shown successive increase from 56.85% in the year 2011-2012 to 64.06% in the year 2016-17. Parents have faith in the secured and safe atmosphere of college campus.
- The efforts made in the research area have resulted into the DST-FIST program 2014 grant of Rs.1700000 received for the infrastructural development of research activities in the institute. The number of research exposure publications & MRPs are increased in this post re-accreditation period. Number of Research publications Our staffs has published are 40 research papers in National & International Journals along with the 11 number of MRPs. The college and university of Mumbai have jointly organized a interdisciplinary state level conference on science for Sustainable development on 19<sup>th</sup> Dec 2016.

### **SWOC** Analysis of the Institution

The institute always evaluates by SWOC Analysis techniques and prepares itself for facing upcoming challenges and tries to pay attention on weaknesses.

### **Strengths of the institute:**

- ➤ The clear Vision and Mission with established policies and procedures provide directions to teachers and stakeholders to achieve goals.
- ➤ Infrastructure of the institute is well planned with ample space of classrooms and well equipped laboratories with modern equipment's.
- Experienced, Dedicated, Competent board of trustees.

- ➤ Qualified and experienced teaching staff having good rapport with students who are devoted to impart value based quality education.
- ➤ Participation of faculty and students at all levels of governance.
- Scientific and tested feedback mechanism TPES to gauge students' perception about teachers.
- ➤ The college encourages faculty for participation in seminars, workshops, conferences and research conventions.
- Research facilities are provided to the students under mentorship of teachers by making available equipments, chemicals, stationary and so on.
- > Student Engagement in co-curricular and extracurricular activities through science association, nature club, cultural association, Marathi Vangmay Mandal, NSS, DLLE etc.,
- ➤ Career Guidance and Placement Cell is established to get placement to the students through various competitive examinations.
- ➤ Grievance Redressal System is developed to resolve the problems of girl students, examinations and teachers.
- ➤ A Mega unit of NSS consisting of 250 students explores social service opportunities to students at local, state and national level.
- ➤ High standard of discipline has moulded the mind of parents to enroll girl wards in our college.
- ➤ Nature Club runs innovative programs like Bio-fertilizers,, environment conservation, tree plantation, research on medicinal plants and water harvesting provide strength to the college.
- ➤ Well-equipped library with e-resources and modern library services adds strength to the college by encouraging students to get information of every corner.
- > Good academic results having large number of distinction holders in Science stream.
- ➤ Well-equipped Computer laboratory with separate server, sufficient computers and Internet Facility.
- ➤ Well triggered Women Development Cell encourages girls students to conduct their independent activities as well as for their versatile development.

#### ❖ Weaknesses:

- ➤ The Institute is situated in rural and hilly area.
- > Temporary teachers in self finance courses.
- ➤ Limited collaboration with professional institutions.
- > Fund limits for innovative programs.

### **\*** Opportunities:

- The institute has an opportunity to start PG courses.
- ➤ The institution has an opportunity to run professional courses by considering high degree of inflow in admissions.

### **\*** Challenges:

- > Migration of families to mega cities like Mumbai, Pune may hamper student strength.
- > Rural background of students having less exposure to modern developments is another challenge before the institution.
- > The inferiority complex, passive approach and problem of speaking English are challenges faced every year among first year students.

### **PART II: INSTITUTIONAL DATA**

### A. PROFILE OF THE INSTITUTION

### 1. Name and Address of the College:-

Name:	Konkan Education Society's Anandibai Pradhan Science College, Nagothane.				
Address:	Bapusaheb Deshpande Educational Complex, Nagothane.				
City:Nagothane	Tahasil: Roha District: Raigad, Pin : 402106 State :Maharashtra				
Website:	http://www.apcnagothane.edu.in				

### 2. For communication:

### **Office**

Name	Area / STD code	Tel. No.	Fax No.	E-mail
Principal: Dr. S. S. Gurav	02194	222582	222329	sandeshsgurav@gmail.com
Steering Committee Coordinator: Dr. D.V. Bhagat	02194	222582	222329	bhagat.dinesh72@gmail.com

### Residence

Name	Area/ STD code	Tel. No.	Mobile No.
Principal:  Dr. S. S. Gurav	02194	222582	8149375082
Steering Committee Coordinator :  Dr. D.V. Bhagat	02194	222582	9960455356

### 3. Status of Institution: i. Af filiated Collegeii. Constituent CollegeIii. 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. Is it a recognized minority institution? Yes No 6. Sources of Funding:i.Government

ii.Grant-in-aid

iv.Any other

iii. Self-financed

### 7. a) Date of establishment of the college:

Date	Month	Year
21	03	1992

**b**) University to which the college is affiliated (If it is an affiliated college)

**University of Mumbai** 

or which governs the college (If it is an constituent college)

NA

### c) Details of UGC recognition:

<b>Under Section</b>	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f)	29/08/2007	recognition
ii. 12 (B)	29/08/2007	recognition

(Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act is enclosed)

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

### 8. Does the University Act provide for autonomy of Affiliated/ Constituent Colleges?

ies No	Yes [	✓	No	
--------	-------	---	----	--

If yes, has the college applied for autonomy?

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 *	Hilly and Rural
Campus area in sq. mts	16187.424 sq.m.
Built up area in sq. mts.	1800 sq m

<sup>(\*</sup> 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.

Library	✓	01
Seminar hall	✓	01
Playground	✓	01
Gymkhana	✓	01
Canteen	✓	01
Audio-Visual Room	✓	02
Bank	✓	State Bank of India
Biological waste disposable	✓	01
First aid box	✓	04
Generator	✓	01

### 12. Details of programmes offered by the institution: (Give last year's data)- (2015-2016):-

Sr. No.	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned Student Strength	Number of students admitted
i)	Under- graduate	B. Sc.	3 years	H. S. C.	English	120	111
ii)	Under- graduate	B. Sc. Comp. Sci.	3 years	H.S.C.	English	48	21
iii)	Under- graduate	B. Sc. (I.T.)	3 years	H.S.C.	English	60	30
iv)	Post- graduate	M. Sc. Organic Chemistry	2 years	B. Sc.	English	20	20

13.	Does	the	college	offer	self-fi	inanced	<b>Programme</b>	s?
-----	------	-----	---------	-------	---------	---------	------------------	----

YES	✓	No	
		·	

If yes, how many UG -02 courses PG -01

14. New programmes introduced in the college during last five Years.

Yes	No	$   \overline{\mathcal{Q}} $	Number	00

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	Program me Level	Name of the Programme	Departments		
	Under-graduate	B. Sc.	Chemistry, Physics, Botany, Zoology,		
Science	Onder-graduate	Б. 5с.	Mathematics, Foundation Course.		
	Under-graduate	B. Sc.	Computer Science, Chemistry,		
Science	Officer-graduate	Comp. Sci.	Physics, Foundation Course.		
Science	ence Under-graduate B. Sc. (I.T.)		Information Technology,		
Science Doct graduate		M.Sc.	Chemistry		
	Post-graduate	Organic Chemistry			

16. Number of Programmes offere
---------------------------------

(Programme means a degree course like BA, BSc, MA, M.Com...)

a.	Annual system	00
b.	Semester system	04
c.	Trimester system	00

### 17. Number of Programmes with:-

a.	choice based credit system	04
b.	Inter/multidisciplinary approach	00
c.	Any other, specify	00

18. Does the college offer UC	G and/or PG programmes in Teacher Education?
Yes	No ✓
19. Does the college offer UC	G and/or PG programmes in Physical Education?
Yes	No 🗸

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

Positions		Teaching Faculty						Non-		Technical	
	Professor		Associate Professor		Assistant Professor		0		Staff		
	*M	*F	*M	* <b>F</b>	*M	*F	*M	*F	*M	*F	
Sanctioned by the UGC / University / State Government Recruited	0	0	1	1	8	3	9	2	0	0	
Yet to recruit	0	0	0	0	1.5	0	0	0	0	0	
Sanctioned by the Management/Society or other authorized bodies Recruited	0	0	0	0	0	11	1	1	0	0	
Yet to recruit	0	0	0	0	0	0	0	0	0	0	

### \*M-Male \*F-Female

### 21. Qualifications of the teaching Staff:-

Highest	Profes	sor	Associ Profes		Assistan	t Professor	Total
	Mala	Famala			Male	Formala	
Qualification	Male	Female	Male	Female	Maie	Female	
Permanent teach	ers						
D.Sc./D.Litt	-	-	-	-	-	-	-
Ph.D.	-	-	02	01	05	00	08
M.Phil.	-	-	-	-	02	02	04
PG	-	-	-		02	01	03
Temporary Tea	chers						
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	•	-	-	•	-	-
PG	-	-	-	-		11	11
Part -time teach	iers						
Ph.D.	-	-	-	-	-	-	-
M.Phil.	-	-	-	-	-	-	-
PG	-	-	-	-		-	-

### 22. Number of Visiting Faculty /Guest Faculty engaged with the college.

### 23. Furnish the number of the students admitted to the college during the last four academic years.

Categories	20	12-13	2013-14		2014-15		2015-16	
	Male	Female	Male Female		Male	Female	Male	Female
SC	10	15	11	16	17	13	20	15
ST	1	0	1	0	0	1	2	2
OBC	75	129	68	120	83	145	78	144
General	70	87	75	135	53	112	70	137
Others	6	3	8	3	10	7	10	12
Total	162	234	163	274	163	278	180	310

### 24. Details on students enrolled in the college during the current academic year (2016-17)

Type of Students	UG	PG	M. Phil.	Ph.D.	Total
Students from the same state where the college is located	459	39	00	00	498
Students from other states of India	00	00	00	00	00
NRI Students	00	00	00	00	00
Foreign Students	00	00	00	00	00
Total	490	450	00	00	490

### 25. Dropout rate in UG and PG (average of the last two batches)

UG 1% PG 0%

### 26. Unit Cost of Education:-

 $(Unit\ cost = total\ annual\ recurring\ expenditure\ (actual)\ divided\ by\ total\ number\ of\ students\ enrolled)$ 

### (a) including the salary component

Aided	102818.75/-		
Un-aided	21629.19/-		

### (b) excluding the salary component

Aided	26281.81/-	
Un-aided	16602.92/-	

		Yes		No		$\checkmark$		
	Prov	ide Teacher-s	tudent ratio for	each of the prog	ramm	e / Course	e offered:	
	1	D C C	1.12.2					
	2	B.SC I.T.	1:13.2 1:25.8					
	3	B. SC C.S.	1:25.66					
	4	M.Sc.	1:80					
ycl R	e-Ass	sessment: le 1refers to fine	Cycle 2	Cycle and Cycle 2, Cyc		d Cycle 4	Cycle 4  refers to re-	
•	re	-assessment or	nly)	e for Cycle 2, Cyc				
	•			Accreditation Outo				
		ndly enclose c xure.	opy of accredit	ation certificate(s	) and j	peer team	report(s) as	an
•	Num	ber of workin	g days during (	the last academic	year.			
			219					
•	Num	ber of teachin	g days during	the last academic	year			
	(Teadays)	•	ıns days on whic	ch lectures were ei	ngaged	excluding	the examinat	ion
			191					
_	<b>D</b> (	e 4 11: 1	ant of Intorno	l Quality Assura	maa C			

26/04/2006 (dd/mm/yyyy)

34. Details regarding submission of Annual Quality Assurance Reports (AQAR) to NAAC.

AQAR (i) 28/09/2013 (dd/mm/yyyy)

AQAR (ii) 08/04/2014(dd/mm/yyyy)

AQAR (iii) 10/10/2016 (dd/mm/yyyy)

AQAR (iv) 25/03/2017 (dd/mm/yyyy)

35. Any other relevant data (not covered above) the college would like to include. (Do not include explanatory/descriptive information) ------

### Criterion - I

### CURRICULAR ASPECTS



### 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:

- \* "Avail the facility of education in the down trodden Community for development of Society."
- The vision of our institution aims at educating the youth for the development of society. The emblem of the Konkan Education Society encompasses the message that "Self respecting human being has nothing to do with the sorrows and Joys, whatever will be the outcome of his well doing."
- ❖ As depicted in the emblem the institution is working at encouraging exuberance and values in the youth so that the students of our institution become self respecting human being.

### **Mission:**

- ❖ "Education for all" is the mission of Konkan Education Society and vis-à-vis College.
  - 1. The college is committed to provide quality higher education, particularly in science to bring about the social change in this rural area.
  - 2. The college renders access to education to the students coming from humble background and the first generation learners.
  - 3. The Konkan Education Society has a tradition of providing education in rural area for last 100 years and, strives to offer equal opportunities to the students of rural and hilly area and thus, mentor independent, responsible and healthy minded citizens for the country.

### Goals and Objectives of the Institution:

The following objectives are identified to fulfill the Vision and Mission of the College:

- ❖ To uplift the youth with good education.
- ❖ To serve the student community who are poor, needy, socially and economically weaker in this region.
- To develop transformation in youth into educationally, morally, culturally and spiritually good citizens with greater employment opportunities.
- ❖ To be a pioneer of a higher education model that may or may not be the best in the world but the best of the world delivering social, economic and intellectual value for excellence.
- To provide access to quality higher education to all the sections of the society.

#### **Communication to Stakeholders:**

The vision and mission are long term objectives of the institution where as goals and objectives are short term in nature. They need to be communicated effectively among stakeholders of the institution such as students, parents, teachers, non-

teaching staff and various factors of the society. All out efforts are made to imbibe these mission statements, goals and objectives among all stakeholders so as to work with unity in single direction to reach to our vision. Therefore, the mission and vision of the institute are displayed at/on:

- ❖ Principal's Cabin, Administrative Office and in all Departments
- ❖ Main entrance of the institution
- Library
- Institute prospectus.
- First year introduction program
- Institution website
- Parent meetings

The continuous interface of vision, mission statements and goals and objectives by displaying the same at different locations make the stakeholders to remember it all the time. This reflects in the behavior of all concerned members while conducting sports activities, social activities, teaching-learning process, extension activities, research activities, co-curricular, extracurricular and overall management. In addition to this in each and every program that we organize throughout the year, we make an announcement about our vision and mission. This will automatically communicate to the students, teachers, staff and others stake-holders about our vision and mission.

## 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).

The institute meticulously plans for effective implementation of the curriculum. The detailed process is as given below:

### Planning for the term:

- Curriculum and term period are prescribed by the University and on the basis of which Academic Calendar is prepared at the beginning of academic year.
- ❖ In the last week of previous academic year, the syllabus (if revised) is made available through library and the teachers are requested to submit their requirements in respect of laboratory equipments, chemicals, reference books, laboratory handbooks, assignment books, journals and teaching aids. Resource planning is done after the stock verification of laboratories, identifying the instruments which require repairing, the need of new equipments, demonstration kits for the laboratories, etc. Library acquires new books as per recommendation from faculty members and weed out obsolete resources. Mean while, an approval is sought from purchase committee and Management.
- ❖ At the beginning of the every academic year, the time-table committee prepares comprehensive time-table as per government staffing pattern, allotment of lectures, availability of rooms and laboratories, number of students and teachers.

- On the basis of time-table and Academic Calendar all the faculty members submit semester plan which incorporates topics to be covered and number of lectures to be engaged in every month.
- ❖ Design and implementation of seminar, projects, study tours, group discussion etc. activities to be performed by each department separately.
- ❖ Preparation of Laboratory Manual is done after taking into account the compulsory experiments to be conducted in that subject. Incorporating detailed procedures for conduction of experiments and adequate safety precautions to be taken in the laboratory.
- ❖ Allocation of the subjects to the faculty members is done after taking into consideration the faculty priority choice; number of times subjects taught and experience. The subject distribution is planned and communicated well in advance for preparation.
- ❖ For every class, the detail attendance is taken by the teacher and brief information about the lecture and practical are entered into the attendance sheet and submitted through the head of department to the principal.
- ❖ Feedback is conducted at the end of each academic year and the same feedback is conveyed on basis of analysis to the faculty for corrective measures.
- ❖ Every teacher is made compulsory to prepare Course dairy and the teachers maintain it with teaching plan, date, day, the class notes, teaching material, power point presentation used.
- Regular telephonic conversation with parents of those students who remain frequently absent is taken care of by the concern teacher. Also, letters are sent to the parents about the absence/non-conformance of their ward in theory/practical sessions. For this purpose, defaulter list is prepared.
- ❖ Academic Monitoring Committee regularly monitors the classes by verifying dairy and takes a review of the teaching in the class, academic progress of the students, feedback if any, and conveys it to the Principal for corrective measures.
- ❖ The progress of syllabus coverage, list of nonconforming students at the end of each month are prepared by class teacher and monitored by Principal. Follow up of the nonconforming students is done by counseling and sending attendance reports to their parents.
- ❖ Teachers are encouraged beforehand (in advance) to impart the curriculum through innovative teaching methods such as presentations, assignments, discussions, workshops, seminars, industrial visits, audio-video aids apart from regular/traditional teaching methods.
- ❖ On the basis of suggestions from Academic Monitoring Committee, the remedial classes, additional lectures and practical plan are prepared by the faculty members and the students are informed accordingly.
- ❖ 10 points feedback report is obtained from every student and the performance of the teachers in 4 point scale has been measured every academic year. This mechanism has helped the teachers to maintain the performance in case of high points and to improve the performance in case of low scaling points.

- ❖ Faculty meetings are organized at the end of each semester to develop an action plan of the subsequent semester.
- ❖ The curriculum content is given wide publicity through notice board and website.
- ❖ The departmental meeting and the meeting of the faculty with Principal also contributes to the effective implementation of 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?

- Faculty members participate in the meetings conducted by BOS of the University for Syllabus Revision and revised syllabus is implemented in the curriculum in the subsequent year. The faculty suggests peer reviewed changes in the subject topics if necessary. These workshop or seminar proved helpful for effectively translating the curriculum and improving the teaching practices.
- ❖ The University supports through Board of Studies as the detailed topic wise syllabus for theory subject and practical is given.
- ❖ The institute encourages the teachers to participate in the Orientation Programme /Refresher Courses/ Workshops/ Seminars organized by the college/affiliating University to update the knowledge and to improve the teaching practices.
- ❖ The institute bears all the expenditures of travelling including registration/participation fees, etc.
- ❖ The institute provides ample books, other teaching and reference material like journals, magazines, teaching models, software and internet facility to enable its teachers to ensure effective delivery of curriculum.
- \* Active participation of IQAC for quality improvement.
- ❖ The institute provides laptops and LCD projectors; teachers can make use of these facilities whenever required.
- ❖ Internet connectivity is available in the institute premises at free of cost for the access of e-journals, e-books and learning materials through INFLIBNET N-list programme.
- ❖ When the syllabus is changed, the University itself arranges workshops for translating the curriculum. The faculty of the institute can discuss their issues or problems, if any, while participating in the meetings of Board of Studies.
- ❖ The teachers are encouraged with limited financial support to organize workshops.
- ❖ The syllabus prepared by the university is send to colleges well in advance to facilitate the teachers to get acquainted with the content.
- ❖ As per the workshop attended by the faculty, respective all faculties prepare notes by referring different reference books so that students can update the new syllabus given by University.

## 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.

The institute has been implementing the curriculum of the University of Mumbai. Following initiatives have been taken up by the institute for the effective curriculum delivery and transaction.

- ❖ The faculty is trained by the institute to make them familiar with the use of computers so that they are able to use the modern technological resources, that isinternet, projector, etc.
- ❖ The Internet facility is available in the college Library for all staff and students.
- ❖ In addition to the regular subject classes, the institute organizes special lectures by inviting experts from various fields to share their knowledge with the students.
- ❖ Personality Development Programmes are arranged for the students, which include meditation techniques, stress relief, time management, communication skills and writing skills. It helps in effective delivery of curriculum.
- To make curriculum more interesting and understandable, the students are taken out for educational tours such as, industrial visits, exhibitions etc. so as to provide them a firsthand knowledge related to the subject matters.
- The faculty members are allowed to participate in seminars and workshops to cope up them with recent developments in their subject.
- For effective implementation of the curriculum, the extra lectures are conducted by the teachers apart from regular classes.
- ❖ Notes and study material are given to the students in advance.
- Slow learners are provided special coaching whereas intensive guidance is provided to bright students.
- ❖ PG students are encourage to prepare Power point presentations for their seminar topics so as to involved them in the subject syllabus and for the purpose special training is given by computer science and I.T. department.
- Departments prepare study material and question banks.
- Library provides print as well as non-print material to the student.
- **Students** are required to maintain assignment books for every subject.
- ❖ Faculty members are also encouraged to organize workshop at the college level by inviting members of the board of studies and experience senior faculty from other institution to interact with the faculty members.
- Any new equipments and infrastructure facility needed for the effective implementation of the curriculum are made available by the college.

## 1.1.5 How does the institution network and interact with beneficiaries such as industry, Research bodies and the university in effective operationalization of the Curriculum?

Our institution has developed its network with beneficiaries as under:

#### **!** Industry:

- The institute has set up a Career Guidance and Placement Cell which maintains professional relations with the representatives of industry. College invites the local industries for campus interviews at the fag end to the academic year.
- ➤ The HR managers of various companies are invited in the institute to interact with the students.
- ➤ The students of various departments of the institute are taken for industrial visits from time to time to keep them abreast of the latest developments in the field.
- ➤ The industries visited are.
- Reliance Industries NMD Ltd. Nagothane,
- Sudarshan Chemicals Pvt. Ltd. Roha
- Supreme Petrochemicals Pvt Ltd.Amdoshi
- Roha Dye Chem Pvt. Ltd Roha,
- Vidhi Dye Pvt.Ltd.Roha.
- Sadhana Nitro chem. Ltd., Roha.
- Rathi Dye Chem (P) Ltd., Roha,
- Nilicon Pvt Ltd.Roha,
- Aqua care Solution and Engineering Ltd. Roha.etc

#### \* Research Bodies:

- ➤ To keep the research temper alive in the campus, research scholars from various fields are invited to the institute to motivate the students to take up research projects in their further studies.
- Also the faculty members of the institute are motivated to take up research projects for which grants are given by the affiliating university. Faculty members, on their own, keep on interacting with various research bodies and participate in various research projects.

#### **University:**

The faculty members of the institute are regularly in touch with their counterparts at the affiliating university and get latest information in respective subjects. They keep on visiting the Parent University website time to time to keep themselves abreast of the latest trends in their field of study.

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.)

- Though the institute has no scope to modify the syllabus on its own, the parent University has a system in place to get recommendations from its affiliated colleges through Board of Studies. Our teachers participate in the discussions relating to the curriculum design. Whenever they find that the syllabus needs to be modified to meet the present trends, they communicate their ideas to their respective Members of Board of Studies through the Principal of the college or by writing letters directly.
- ❖ Dr.Dinesh Bhagat,Head,Department of Chemistry is the member of Chemistry Syllabus Committee of the University from last three years.

- ❖ Dr.V.S.N.Raghav Rao, Head of Department of Zoology is a member of syllabus committee of zoology and there by effective communication with various academic authorities with regards to curriculum design takes place.
- ❖ The members of the faculty brain storm and discuss amongst themselves the relevance of the syllabus designed by the University. While recommending or forwarding the suggestions to the Board of Studies, our teachers normally take into consideration the present need of the Industry along with the students' feedback.
- ❖ It has been a regular practice of the faculty members to meet the students in the class rooms exclusively and informally outside the class room to get their informal feedback. Outcome of parent-teacher meetings as well as report from the administration are also taken into consideration while forwarding suggestions to the Board of Studies.
- ❖ Student interaction and exposure during industrial visit also contributed to the curriculum development. The experience of the students with industry during project preparation also contributes to curriculum development.
- 1.1.7 Does the institution develop curriculum for any of the courses offered (other than those under the preview 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.

Yes

Taking into account the present need the institute has designed the curriculum for the following two courses.

Sr. No	Title of Course	No. of Participants	Designed & Developed by	Assessment	Relevance of courses to curriculum
01	A Certificate Course in Computer Applications	40	Asst. Prof. Mrs.Nilam Mahale & Asst. Prof. Mrs.Pranjali Konde	Test, Viva-voce & Practical	Regular B.Sc. and M.Sc. Students from all classes.
02	A Certificate Course in Water Analysis	25	Dr.V.R.Jadhavar Dr.D.V.Bhagat Prof.Mrs.C.S.Patil Prof.Miss.P.A. Muddebihalkar	Written Test, Viva and Practical	Selected Students from all classes.

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

The institution has formed communication channels among all stakeholders to ensure that the objectives of the curriculum are achieved in the course of implementation. The institution ensures that the objectives of each curriculum are achieved by its faculty and all the stakeholders and properly implemented. Along with this, the institution has developed its own mechanism as under:

❖ Departmental Associations: Objectives of each course are mentioned clearly along with the syllabus given to the teachers as well as the students. Each department plans a series of activities through the Associations, which complement the syllabus and help the students to achieve the objectives of the program. Uses of ICT tools in class rooms, interaction with experts play an important role in the delivery of curriculum.

- ❖ Student Performance: Various modes of assessment are formulated by the faculty in order to ensure that the stated objectives are achieved (Quiz Competitions, Group Discussions, Assignments, Posters, Power point presentations and Seminars).
- Quality Enhancement of Faculty: Regular enhancement of the professional skills along with the theoretical inputs through participation in national and international workshops, seminars, conferences and discussions are always aimed at enriching the quality of faculty.
- ❖ Awareness Programme: The awareness program like 'Swaccha Bharat', Digital India, Social issues, Safety Environmental Issues and Women Empowerment, etc. are arranged and interlinked with curriculum in respective subjects.
- ❖ **Discharging Social Obligations**: Conducting outreach activities such as Blood Donation, Environment Awareness Programmes through NSS, and various associations in order to serve the society which result in achieving objectives of the institute.
- ❖ To achieve stated objectives of curriculum, the faculty organizes seminars, workshops, educational trip, exhibition and industrial visit to implement practical knowledge with their course into reality.
- ❖ Feedback system is taken to monitor the faculty performance and the status of syllabus completion. Interactive and participative methods conducted by faculties in their regular lectures by asking queries related to the subject, Proper guidance and counseling given by faculty provides students to meet the objectives of the curriculum. Lecture plans made by faculties in the beginning of each semester for their respective subjects are followed through the semester ends.

Thus, all the faculties prepare academic planning of the syllabus to achieve the stated objectives whereas the students are asked to fill up feedback forms which are analyze to ensure the objectives of the curriculum. Apart from these assignments/projects / tests are taken to see how the students are coping with the syllabus.

### 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.

The Skill development courses offered by the institution have following goals and objectives

- ❖ To serve the student community who are poor, needy, socially and economically weaker in this region.
- ❖ To develop transformation in youth into educationally, morally, culturally and spiritually good citizens with greater employment opportunities.
- ❖ To be a pioneer of a higher education model that may or may not be the best in the world but the best of the world delivering social, economic and intellectual value for excellence.
- ❖ To provide access to quality higher education in all the sections of the society.
- ❖ In order to meet these goals and objectives the following soft skill courses are offered by the institute are as under:
  - Basics in computer literacy

- Basic communication skill.
- Basic in chemical analysis
- In addition to this a batch of top 10 students is guided through extra sessions to improve their performance.

### 1.2.2 Does the institution offer programmes that facilitate twinning /dual degree?

❖ Being an affiliated college the structure of the programme designed by the university needs to be followed. Hence as of now there is no facility for twinning/dual degree,but it provides two certificate courses In addition to 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

❖ In the faculty of Science, high degree of flexibility can be seen at first and second year B.Sc. programs as Physics, Botany, Zoology, Foundation Course and Mathematics subjects are offered along with Chemistry.

At third year B.Sc. level entire Chemistry subject is offered by considering the employment needs of surrounding industries for regular courses.

### **\*** Choice Based Credit System and range of subject options:

■ From the academic year 2011-2012, University of Mumbai has implemented Choice Based Credit system for F.Y. classes, and from the academic year 2012-2013, it is implemented for S.Y classes, and from the academic year 2013-2014, it is implemented for T.Y. classes. The range of subject options is listed below. Also, the university has implemented semester system for F.Y, S.Y and T.Y. classes.

### **Under graduate courses**

- ➤ F.Y.B.Sc. –PCM(Physics, Chemistry, Mathematics)
  - CBZ(Chemistry,Botany,Zoology)
  - Computer Science
  - Information Technology
- ➤ S.Y.B.Sc.- PC(Physics, Chemistry)
  - CB(Chemistry, Botany)
  - CZ(Chemistry, Zoology)
  - Computer Science
  - Information Technology
- ➤ T.Y.B.Sc.- Chemistry
  - Computer Science
  - Information Technology
- **Post Graduate course**
- ➤ M.Sc. Organic Chemistry

### > Courses offered in modular form:

Courses are provided unit wise and are arranged in the modular form at department level by academic committees by the University of Mumbai.

> Credit transfer and accumulation facility:

In the new choice based credit system, there is a facility available for credit transfer and accumulation

### **Enrichment courses:**

The existing courses are enriched by preparing the students to design small projects and presentations related to theory work. The lectures by the experts are also organized time to time to update the knowledge of our students.

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

Yes.

- ❖ The institute has following permanently unaided courses.
- ➤ B.Sc. (Computer Science), Intake capacity of 48 students.
- ➤ B.Sc. (Information Technology), Intake capacity of 60 students.
- ➤ M.Sc.(Organic Chemistry) Intake capacity of 20 students.

  Admission norms, curriculum, fees structure, qualification of teachers and salary are as prescribed by Government of Maharashtra and University of Mumbai.

## 1.2.5 Does the college provide additional skill oriented programmes, relevant to Regional and global employment markets? If "yes" provide details of such programme and the beneficiaries.

**Yes.** The institute provides following skill oriented programmes relevant to regional needs:

Sr.	Name of the Course	Duration	No. of Students		
No.			Participated		
1	Tailoring	1 day	150		
2	Rangoli	1 days	150		
3	Beauty Parlour	1 week	150		
4	Folder & Purse Making	2 days	150		
5	Flower Decoration	1 day	150		

The institute regularly conducts additional skill oriented Programmes relevant to global employment market as mock interviews, General Knowledge Tests etc. which enhance the IQ level and communication skills of the participants. The institute also invites guest speakers from the industry which provides information about regional and global employment opportunities for the students. Through Career Guidance and Placement Cell; the institute provides the guidance for Banking, MPSC and UPSC, Staff Selection Commission examinations, etc.

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 university does not allow the flexibility of combining conventional face to face and 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 programmes and Institution's goals and objectives are integrated?

The institute aims to impart such knowledge which is necessary for the all-round development of the students thereby making them capable to cope with highly competitive job markets. For reaching out to the goals and objectives, the institution has evolved additional inputs in the syllabi to face the current trends in competitive areas. A series of Focused Group Discussions among faculty members at the Departmental level throws light on the limitations in the syllabus. To make up any deficiency, the institute supplements the university's curriculum by imparting special programme like Personality Development, Coaching Classes for various Competitive Examinations like Banking, MPSC and UPSC, Staff Selection Commission, etc.

The following efforts are made by the institute:

- ❖ The academic calendar is prepared every semester to run the programs smoothly and effectively.
- ❖ Teachers prepare semester wise teaching plan.
- ❖ Independence Day, Republic Day and Maharashtra Day are celebrated by the institute where the students become aware of the importance of these days.
- ❖ In the curriculum of Foundation Course, the study of value based education is includ ed. The Principal makes sure that the curriculum framed by the university is supplemented in such a way that it reflects "the Mission and the Vision" of the institute.
- ❖ NSS and DLLE play vital role in the overall personality development of the students.
- \* Recruitment of required faculty member to teach the syllabus.
- Conduct of seminars and workshops for the students and teacher.
- ❖ Well equipped laboratory and library facilities are provided.
- Periodical tests and tutorials are conducted.
- ❖ As per the guidelines given by the University and Government of Maharashtra, Sexual Harassment Prevention Cell is established for lady teachers under the women development cell in the institute.
- ❖ For overall development of girl students, Women Development Cell is active in our institute.
- ❖ The extension activity like Annual Social Gathering and Annual sports week within the institute brings communal harmony and a sense of unity in diversity.
- ❖ Access to disadvantaged: The aided and non-aided programmes have nominal fee structure for the disadvantaged students and they are supported by prizes and scholarships of the institute.

- ❖ Equity in admission process: The institute fully implements the state government reservation policy giving due weightage to SC, ST, OBC, Ex- serviceman, physically challenged, Sports persons etc.
- ❖ Environmental and Industrial need: A compulsory paper on environmental and Industrial chemistry has been introduced in S.Y.B.Sc. Chemistry curriculum to create awareness about ecological balance, the way to prevent environmental pollution, need for energy conservation so as to conserve our 'Mother Earth.

## 1.3.2 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 efforts made by the institutions to modify, enrich and organize the curriculum at various levels are as follows

### **❖** Management Level

Recent economic development has compelled to cope up with dynamic market requirements. The industry, private and government agencies require smart enough and active students as their employees. Therefore, efforts are made by the Management to provide financial support to the institute to develop the infrastructure to cater the needs of dynamic employment market.

### **❖** Departmental level

In the institute the various associations are formed and linked with departments, which organize different activities every year by considering dynamic employment market needs. The departments are:

### > Department of Chemistry, Computer science and Information Technology

All the major department in college, through Career Guidance and Placement Cell, the expert lectures and workshops are organized in the subject of basic elements of Science, scope of research in science and scientific approach for the B.Sc. and M.Sc. students. Industrial visits are organized to understand the latest technology and advances in the field.

### > Self employment

N.S.S, D.L.L.E, Placement cell, Women Development Cell organized the motivational activities such as Tailoring, Mehandi Design, Folder and Purse making, Flower Making, Annapurna Yojana, book binding etc. This has supported the students for self-employability and they enterprenership.

### Faculty Level

Though the affiliated colleges are not authorized to modify curriculum, the faculty members obtain feedback which is studied and analyzed through discussion by the faculty in the departments of the subject concerned. Accordingly, necessary recommendations are communicated through the principal / faculty of the institute attending the meeting in the affiliating university or through members of Board of Studies for the modification of the curriculum

In addition to this college also takes-

- > Feedback on curriculum from industries.
- > Interaction with alumni.

> Feedback from stakeholders.

These feedbacks are analyzed and the recommendations are communicated to university from time to time.

1.3.3 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?

#### **Gender Equality:**

- ➤ The college undertakes strong measures to attract more girls towards higher education which has resulted in a substantial increase in the strength of female student over the years. The current strength of the female student is 64% higher than the statutory quota viz. 33 percent.
- ➤ The atmosphere in the college premises is safe to the women and this helps to increase the admission of the girl students year by year.
- ➤ WDC of the college in association with NSS conducts programmes like health camp, physical fitness and self defense for female.
- > Statutory committees such as Anti Ragging committee and committee for prevention of Sexual harassment are active though no issue has been reported till date.
- ➤ WDC organizes lectures by women who have reason to possession of repute in society. The activities carried out under this programme are-
  - Yoga for girls
  - Mehandi competitions
  - Poster exhibition
  - Lectures by advocates, Gynecologist, etc.
  - Self-defense training

#### **Climate Change and Environmental Education:**

The beautiful green campus always reminds its dwellers of the beauty of nature and of the responsibility to preserve it.

- ➤ The college is located on hilly area with many trees within the premises as a measure of environment awareness among students.
- ➤ NSS unit of the college has one of the major activities as tree plantation, and maintenance of cleanliness in the campus.
- Campus is plastic free and conscious of the spirit of 'Swacch Bharat', clean India campaign.
- ➤ Along with academic activities, the institute arranges cultural events, sports competitions, N.S.S. and D.L.L.E. activities to make the students community aware of climate change.
- ➤ In curriculum of S.Y.B.Sc., there is a compulsory paper on the study of Environmental and Industrial Chemistry.
- ➤ Nature Club has been formed by the institute which undertakes the following programmes:
  - Tree Plantation Program
  - Field visits(Goat farm, fish farm, animal husbandry)
- ➤ Issue with climate change, environmental degradation pollution, ecology and ecosystem are taught in syllabus of Foundation Course.
- ➤ The institute offers plant lets instead of bouquet and flowers to felicitate and welcome guests in the programmes.

➤ NSS students have built check dams (Vanrai Bandhara) for water conservation in the adopted village.

#### **\*** Human Rights:

- Anti-ragging cell is active in the institute.
- > Indian constitution and Human Right are integral part of the Curriculum.
- ➤ Indian Constitution day is observed every year.
- The preamble of Indian Constitution is displayed at the institute entrance.
- ➤ Lectures are organized on Human Rights.

#### \* ICT:

- ➤ ICT has become part and parcel of delivery of knowledge and information in this institution. The institute has LCD projectors, computers and internet connectivity.
- The institute runs certificate course in Computer Application of one week.
- > Computer Laboratory is available for students with internet connection.
- ➤ Digital library and power point presentations on various topics are some of the efforts taken by the institution.

### 1.3.4 What are the various value-added courses/enrichment programmes offered to ensure holistic development of students?

#### Moral and ethical values:

The students should develop good moral characters. To impart this, the institute conducts value added programs in the campus at various occasions.

- ➤ On 5<sup>th</sup>September, Teacher's Day is celebrated by the students every year.
- Independence Day and Republic day are celebrated by the institute every year.
- > Science Day is celebrated by Science Association of the institute every year.
- ➤ The NSS team regularly visits surrounding areas and villages where the people are provided awareness on social, moral, ethical principles and ways of life.
- ➤ Women Development Cell organizes the functions of 'Women's Day'.
- NSS unit of the institute exhibits the values such as self-discipline, obedience, national integration, respect for others, obey with smile, and help to others.
- ➤ Birth anniversary of Indian freedom fighters and leaders are celebrated.
- > Sadbhavna Din is celebrated every year.
- Moral and ethical values are the part of syllabus.
- Anti-addiction and anti-ragging boards are displayed in the institute campus.
- > Students and teachers are involved in cleaning the campus.

#### **\*** Employable and life skills

- ➤ The institute understands that the need of communication skills is vital for the students for better career options.
- ➤ Therefore, the institution arranges debate competition ,essay writing competition recitation of poetry competition, etc.
- ➤ It is a regular practice of the institution to invite expert resource persons to deliver the lecture on the development of communication competence among the students.
- Also, the Students are allotted the different responsibilities in organizing various events and activities such as cultural programmers, competitions, seminars, workshops, welcome function, farewell function etc. In this way, they improve their team-building and organizational skills.
- The NSS unit of the institute organizes various lectures during the seven days NSS camp at the adopted village every year.

#### **\*** Better career options

- The various departments/associations of the institute organize lectures of the resource persons on best career options.
- ➤ Career Guidance and Placement Cell invites guest speakers to give guidance for competitive examinations, such as MPSC, UPSC, IBPS, SSC, Police, Military force etc., to the students. Also, it provides books to the students for various competitive exams.
- Career Guidance and Placement Cell ensures the participation of students in Job Fair.
- ➤ The teachers of the institute informally interact and advice students about better career opportunities.

#### **\*** Community Orientation

- ➤ NSS,Women development Cell and DLLE Associations arrange the following programmes every year in the college:
- 'Road Safety Program'
- ➤ 'Voter's Day' rally
- ➤ Anti-drug/anti-addiction campaign
- Cleaning campaign
- > Literacy awareness
- > Gender equality programme
- ➤ Blood donation Drive
- ➤ AIDS awareness programmes
- > Awareness on save electricity
- ➤ Helping mentally retarded children
- > Donation drive to Ashram shala children
- > Awareness on environmental issues
- Awareness among farmers about the use of bio-fertilizers.
- Assistance to Lions Club of Nagothane, Andhhashraddha Nirmulan Samiti Nagothane, police station Nagothane, Tahashil office of Roha,etc for organizing programmes.

- Assistance to police department in local electron, Ganesh Festival, Dahi Handi, Navratri, etc. by our NSS unit every year.
- Apart from NSS activities our college also celebrates the birthdays of great legends like Dr. Radhakrishnan, Mahatma Phule, Dr. Babasaheb Ambedkar, Savitribai phule, Mahatma Gandhi, Chhatrapati Shivaji, Sardar Patel ,Dr.S.R Ranganathan etc. for creating awareness among the students their devotion and patriotism.
- ➤ Guest Lecturers are invited to deliver lectures on social harmony & community development.
- ➤ Our college Students also participate in various activities like Leadership camp, Avhan disaster management state level camp, National Integration camp, State level theme based camp, state level Utkarsh Festival, Udaan festival, Pre and state level SRD,NRD every year.
- ➤ In the year 2016-17, our N.S.S. volunteer, **Mr.Suraj Sadanand Mhashelkar** is selected for State Republic day Parade and for State Utkarsh Festival also.

### 1.3.5 Citing a few examples enumerate on the extent of use of the feedback from Stakeholders in enriching the curriculum?

The institution has various channels to collect and store the responses on curriculum from the stakeholders.

#### **\*** Feedback from the students:

- ➤ The institute collects written feedback forms from the student annually and analyses the data.
- > Oral responses are also considered.
- > Suggestion box is also provided.
- The opinions of student are taken at the time of results, distribution of mark sheets of the various examinations after the completion of the degree.

#### **❖** Feedback from Alumni:

- Feedback and suggestions are taken from alumni at the time of alumni meet.
- > Feedback is received from the former students informally when they visit the institute.

#### **\*** Feedback from Parents:

- Feedback from parents is obtained during the time of parent teacher meeting. Parent teacher meeting are organized to discuss various issues such as student attendance, discipline, exam pattern, academic performance and other facilities.
- > Parents usually visit the college in the mid-term regarding the progress of their ward
- > Some parents provide the feedback through telephonic conversation etc.

#### **\*** Feedback from Community:

- ➤ The Principal and the faculty members frequently interact with the parents at the village and obtained feedback.
- At the time of social events such as Ganesh Festival, Holi, Navratri, Dahi Handi, Iftar Party, the faculty members informally interact with the community.

#### **Feedback from the Teachers/Mentors:**

Feedbacks are also collected from senior teachers from other institute and educationists.

#### **Feedback from the Industries:**

Feedback from employers is received when they visit the institute and also at the time of industrial visit.

### 1.3.6 How does the institution monitor and evaluate the quality of its enrichment programs?

The institute has mechanism to monitor and evaluated the quality of its enrichment program by taking the feedback from the stakeholders. The feedback in the form of interactions, discussions and suggestions is analyzed by a specially constituted committee and report is submitted to each department.

#### 1.4Feedback System

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

- ❖ Dr.D.V.Bhagat,Head of the Chemistry Department of our college is a member of Board of the studies of University and hence plays a vital role in contribution to the design and development of the curriculum.
- ❖ Department of chemistry had Organized a District Level One day Workshop on Revised Syllabi in Chemistry for S.Y.B.Sc. on Tuesday,28<sup>th</sup> April 2015.
- ❖ Department of Physics had Organized a District Level One day Workshop on Revised Syllabi in Physics for F.Y.B.Sc. on 1 Sept 2015
- ❖ Dr.S.D.Tupare, Assist. Professor, Dept. of Chemistry is a member of Board of the studies of University and RR Committee at Dr.Babasaheb Ambedkar Technological University, Lonere, Dist. Raigad and hence plays a vital role in contribution to the design and development of the curriculum and research.
- ❖ The University of Mumbai has a good practice in respect of revision, design and development of curriculum. Prior to revision of syllabus, the Board of Studies conduct workshops in different regions in collaboration with the colleges, where the teaching staff members in respective subject attend those workshops. They give their views and suggestions in those workshops and seminars by considering feedback of students, market requirement and the suggestions collected from experts from different fields. Thus, the teachers directly take part in designing and development of curriculum.
- ❖ The institution conducts regular interaction with all stakeholders and the feedback received is analyzed and recommendations are forwarded to the university and Society office of college.
- ❖ The recommendations of the senior faculties from neighboring institutes are also considered and communicated to university.
- ❖ The feedback received from students based on their interactions during industrial visits and project preparations are also communicated to the university.

- ❖ The experience of NSS students during the Residential camp in tribal village plays a vital role in the upliftment of tribal population.
- ❖ Our NSS Programme officer Dr.S.D.Tupare has been working as an area coordinator for Raigad district and hence plays role in the design of various NSS activities of the university since last three years.

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.

- ❖ The institution is having a regular practice of collecting feedback from the students regarding the syllabus.
- ❖ In informal feedback, the teachers always interact with students through the Student Council, meetings of other associations, and farewells. Students also give feedback through suggestion boxes.
- ❖ The University introduced Credit based semester and grading System (CBSGS) during the Year 2011-12.
- ❖ Whenever there is a need of changing the syllabus or introducing new paper, the curriculum is revised by university. Details are as follows.
  - First year B.Sc. syllabus is revised from academic year 2014-15.
  - Second year B.Sc. syllabus is revised from academic year 2015-16.
  - ➤ Third year B.Sc. syllabus is revised from academic year 2016-17.
  - First year B.Sc. Regular, Computer Science and Information Technology syllabus is revised from academic year 2016-17.

## 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?)

During the last four years no new courses are introduced in the institute even though following additional batch for M.Sc. organic chemistry courses is introduced from academic year 2014-15 considering the need of industry in the Raigad District which is a chemical zone.

Any other relevant information regarding curricular aspect which college would like to introduce.

- ➤ The college plans to initiate the efforts to mobilize funds from industry/ corporate sector to support more soft skill program for the benefit of students in the college.
- > To motivate teachers to undertake research projects with financial support from University and U.G.C
- ➤ College plans to organize the national conference on interdisciplinary research.

### **Criterion - II**

# TEACHING-LEARNING AND EVALUATION





K.E.S.

## CRITERION II: TEACHING LEARNING & EVALUATION

#### 2.1 Student Enrollment and Profile

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

Anandibai Pradhan Science College established in 1991 with the dream of providing quality education to the rural, hilly and marginalized sections of the Society in the Konkan region. The college ensures publicity and transparency in the admission process in the following way:

#### **Publicity:**

The institution ensures wide publicity towards the admission process.

- The University uploads admission schedule on the university website and sends it by post to every institution and declares in regional and national newspaper and also on television.
- The admission schedule is displayed on notice board in the institution, nearby junior colleges and public places like ST Stand, Railway Station, Market, Highway Corners etc. through flex and banners. As our college is located in rural hilly area, these places suits to public.
- The schedule is also uploaded on college website http://www.apcnagothane.edu.in
- The students approach the institution's office and collect prospectus and admission form.
- The prospectus includes intake capacity, eligibility, duration of courses, fee structure, mode of payment, concession available to the socio-economically disadvantaged students from reserved categories such as SC, ST, NT, OBC, SBC etc. It also caters the information of subjects offered involving courses. Further, it also includes activities conducted in the college, achievements of the previous year, various rules and regulations not only in respect of admissions but also about examinations and conduct in the college and so on.
- Admission committee members of our institute visit nearby junior colleges and distribute information broachers of the courses offered by the college and also motivate students for seeking admission in our college.

#### **\*** Transparency:

- The admission schedule is given by the University of Mumbai and the college strictly adheres to the Government rules and the guidelines of the affiliated university in respect to eligibility and reservations.
- ➤ Online registration on University of Mumbai website is mandatory.
- The admissions forms along with online registration forms are collected on the given dates of submission.
- These forms are segregated on the basis of marks and reservation categories.
- First merit list is displayed as per the provisions of University of Mumbai and Government of Maharashtra on scheduled date.
- This merit list is uploaded on institution website and also displayed on the notice board.

- The students who appear in merit list take admission and their information is counter uploaded on University of Mumbai website for the eligibility and enrollment purpose.
- Further, second and third merit lists are displayed on scheduled dates and the procedure is then followed as per the first merit list.

# 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 programs of the Institution.

The Principal of the institute forms admission committee which consists of In-charge, six teaching faculties and one non-teaching staff. The admission committee prepares merit lists and admits students on the basis of merit lists. Institute also intimate admission status of students by phone calls, SMS, e-mail and college website.

The admissions are transparent and strictly merit based with total adherence to norms laid down by University of Mumbai / Government of Maharashtra. There is neither any provision of common entrance test nor interview for admissions to the courses we have in our institution. Physical presence of the candidate with the parent is mandatory at the time of admission.

In our institution, there is overwhelming response of students to seek admission as we have gained reputation and fame through collective efforts of teachers and management in this locality. Hence, the admission forms sold are more than the intake capacity. There is no alternative to prepare a merit list and admit the students category-wise strictly on merit basis.

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

The minimum percentage of marks for admission at the entry level is as per the directions of university.

The student passes 12<sup>th</sup> Science Examination with Physics, Chemistry and Biology subjects is eligible to take admission for F.Y.B.Sc. (CBZ Group).

The student passes 12<sup>th</sup> Science Examination with Physics, Chemistry and Mathematics subjects is eligible to take admission for F.Y.B.Sc. (PCM Group).

The student passes 12<sup>th</sup> Science Examination with Physics, Chemistry and Mathematics subjects is eligible to take admission for F.Y.B.Sc.(Computer Science).

The student passes 12<sup>th</sup> Science Examination with Physics, Chemistry and Mathematics subjects with minimum 45% marks for General Category and 40% marks for Reserved Category is eligible to take admission for F.Y.B.Sc.(Information Technology).

TT 11 1 .			•	4	e	marks: 2016-17
I ahla chawing	minimiim	and	mavimiim	narcantaga	Λt	marke ////////////////////////////////////
I ADIC SHOWING	IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	anu	IIIaxiiiiuiii	DELCEILAZE	W	111a1 NS. 4V1V-1/
				F		

Name of the college	Courses offered							
	F.Y.B.Sc.		F.Y.B.Sc. F.Y.B.Sc. (Comp. Sci.)		F.Y.B.Sc. (Info. Tech.)		M.Sc. (Part – I)	
	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	%	%	%	%	%	%	%	%
Our Institute	47.67	82.00	45.50	74.15	47.50	72.70	49.67	87.58
Paliwala College, Pali	35.00	64.58	-	-	-	1	48.00	72.25
Doshi Vakil College,	49.00	73.17	-	-	-	-	-	-
Goregaon								
D.G. Tatkare College,	35.00	75.00	-	-	-	-	-	-
Mangaon								
Dr. B. R. Ambedkar	35.00	77.54	-	-	-	-	47.00	85.50
College, Mahad.								

## 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?

- As the institute's admission process comes under online process through the University of Mumbai; institute follows rules, regulations, reservation policies and guidelines set up by the State Government and the University of Mumbai.
- ➤ The institute analyses students profile in terms of percentage. The Admission Committee is formed for the admission process. It provides counseling to the students in respect of subject selection, depth of subject etc.
- Admission Committee jointly with Career Guidance and Placement Cell and Examination Committee review the admission process and student profiles annually. The review of student profiles is carried out by comparison of current semester marks percentage with percentage of previous semester or current year's marks percentage with percentage of previous year. The report based on analysis is submitted to the Principal for necessary steps. This exercise help to identify the lacunas in the admission process and also the academic performance of students' and accordingly necessary remedial measures are taken.

#### Outcome

- Review of the admission process is discussed with the Principal and senior teachers of the departments for the suggestions and the improvements are brought about in the next academic year. The following points are discussed which contribute to the input of admission process:
  - Total number of category wise applications received.
  - Total number of category wise students admitted.
  - Category wise maximum and minimum marks at entry level.
  - Ratio of boys and girls.

- Students from socio-economically weaker sections.
- Number of students having more than 60 % marks in the qualifying examination.
- ➤ The outcome of such efforts result in bringing out transparency, streamlining and systematizing the admission process, following up reservation policy strictly as per the provisions of State Government
- 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

The admission policy of the institution is designed and published through prospectus in a way that student profiles demonstrate / reflect the national commitment to diversity and inclusion by adopting the strategies to increase / improve access of the students. The facilities available to the following category students are highlighted effectively in prospectus. The category wise facilities are:

#### **\*** SC/ST:

There is a provision of Maharashtra Government Scholarship for them at the time of admission. We give admission to SC/ST/VJ-NT students on payment of nominal fee of Rs.300/-.

#### **OBC:**

There is also a provision of Maharashtra Government scholarship.

It is a matter of pride for our institution that the total strength consists of large number of OBC students whereas its very rare that SC, ST, DT/NT seats are left vacant. The number of OBC students consists of about 50% of the total strength.

#### **\*** Women:

As every year, the number of applications received and number of girl students admitted are about 60%. So no separate reservation is required for women. Also number of prizes and scholarships announced by donors are mostly to the girl students.

#### **&** Economically Weaker Section:

- > Freeships and other concessions are available to the students from economically weaker section.
- ➤ The institute in co-ordination with Department of Student Welfare, University of Mumbai provides financial support. Five students are availing this facility.
- > There are some scholarships / prizes announced by donors for economically backward students.
- Few of our staff members pay the fees of some needy students, if required.
- ➤ The institution provides partial/full concession in fees to few deserving candidates, if required.

#### **Differently abled:**

The institute makes sure to admit each and every differently abled student who applied for the admission. Three differently abled students for UG course and one for

PG course are admitted during last 4 years. In year 2016-2017, institute has communicated to University and taken permission for admission of one differently abled student for PG course.

#### **Sports:**

The institute also gives admission to the students who played at state or national level. In year 2016-17, two students are admitted from sports quota.

## 2.1.6 Provide the following details for various programs offered by the institution during the last four years and comment on the trends i.e. reason for increase/decrease and actions initiated for improvement.

Sr. No.	Program	Year	Number of applications (Y)	Number of students admitted (X)	Demand ratio (X/Y)
1.	B.Sc.	2016- 2017	374	110	1:3.4
		2015- 2016	378	111	1:3.4
		2014- 2015	442	102	1:4.3
		2013- 2014	555	117	1:4.7
		2012- 2013	480	112	1:4.3
2.	B.Sc. (Comp.	2016- 2017	23	11	1:2.1
	Sci.)	2015- 2016	34	20	1:1.9
		2014- 2015	31	13	1:2.4
		2013- 2014	31	08	1:3.9
		2012- 2013	28	08	1:3.5

Sr. No.	Program	Year	Number of applications (Y)	Number of students admitted(X)	Demand ratio(X/Y)
3.	B.Sc.	2016-	59	36	1:1.6
	(Info. Tech.)	2017			
		2015-	48	30	1:1.6
		2016			
		2014-	42	24	1:1.8
		2015			

		2013-	53	22	1:2.4
		2014			
		2012-	32	10	1:3.2
		2013			
4.	M.Sc.	2016-	39	19	1:2
	(Organic	2017			
	Chemistry)	2015-	59	20	1:3
		2016			
		2014-	40	20	1:2
		2015			
		2013-	24	10	1:2.4
		2014			
		2012-	26	10	1:2.6
		2013			

### **❖** The reasons for increase/ decrease and actions initiated for improvement:

- ➤ The demand ratio of Basic Science Stream is highly satisfactory as compared to self financing courses. But due to limited infrastructure institute has not given admissions for extra students. By considering increasing demand ratio for these courses the sincere efforts are made to increase additional strength by improving infrastructural facilities in the period of last two years.
- ➤ The demand ratio for PG course is also highly satisfactory. So institute has taken efforts to increase the strength from 10 to 20 students from year 2014-2015.
- The overall demand ratios of all available programs are highly satisfactory as compared to other surrounding colleges. The main reason for increase in demand ratio is greater percentage results of our institute compared to results of university and other surrounding colleges.
- Fewer numbers of the women students admitted in one of the self –financed college at the Taluka headquarters.

#### 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?

The institution has already made a provision to extend privileges to the differently abled students to cater their needs. The facilities as per requirement are available as under:

- ➤ Differently abled students are always given priority in admission, library facility, administrative work etc.
- Ramp Facility.
- ➤ Comfortable seating arrangement in class room and laboratory.
- ➤ Provision of seating arrangement at ground floor during examinations.

- > Writers and additional time during examinations.
- ➤ Providing necessary assistance to perform practical if he/she express his/her inability to arrange for the same.
- ➤ The NSS volunteers, faculty members and non-teaching staff are very much conversant to attend physically disable student.

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

In order to assess students' needs college has adopted following methods:

- The qualifying marks and the overall ranking in the merit list of the student give an idea about the knowledge of the student, which is known as entry level analysis.
- ➤ Induction programs are conducted for the first year students to enable them to get acquainted with their program.
- ➤ Before the commencement of program, syllabus plan is provided.
- At the start of course, the first two lectures of each subject are devoted to discuss with student to understand their special needs.
- Librarian takes orientation program for newly admitted students to get knowledge about library resources and available technology.
- ➤ Principal of the institute organize orientation program for newly admitted students on rules and regulations of the college.
- Examination Committee In-charge organize orientation program for newly admitted students on rules and regulations of Examination system such as pattern of internal and external examinations, passing criteria, credit and grading criteria, ATKT rules, SGPA, CGPA etc.
- ➤ Department of Chemistry, Botany, Zoology, Physics, Computer Science and Information Technology organize orientation program for newly admitted science students on safety measures and instrument handling.

## 2.2.3 What are the strategies drawn and deployed by the institution to bridge the knowledge gap of the enrolled students to enable them to cope with the program of their choice? (Bridge/Remedial/ Add-on/Enrichment Courses, etc.

- The institute carefully considers the content of syllabus which the students studied till 12<sup>th</sup> standard. All the lecturers devote their initial lectures to revise the basics of their respective subjects and especially use vernacular language to create rapport with them.
- ➤ For further studies, the institution identifies the gaps between the university curriculums which are to be bridged to understand the higher level topics of the subjects. Lecturers also introduce and explain new dimensions of the syllabus at the beginning of each term. At the same time the difference between approach up to Higher Secondary level and Higher education is briefed by the teachers.
  - The institute arranges bridge/remedial lectures to bridge these gaps.

- ➤ The institute organizes training program by Principal and Examination Incharge to bridge the knowledge gap of the newly enrolled students to enable them to cope with the program of their choice and also enable them to understand the Credit and Grading Examination pattern. So that enrolled students feel comfortable with the program of their choice.
- ➤ The institute organizes interdisciplinary paper and project competitions for the student and also depute/send students to such competitions at inter-collegiate level.
- **❖** Institute has following Bridge/Remedial/ Add-on/Enrichment Courses:
- Basics in Chemistry
- > Basics in Physics
- Basics in Botany
- Basics in Zoology
- ➤ Basics in Computer Science
- Basics in Information Technology
- Institute has following Certificate Courses:
- ➤ Water Analysis
- > Computer Applications

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

To create awareness on serious issue the efforts of institution are:

- ➤ Gender Issues: A separate Women Development Cell is established, through which the exhibitions, workshops, rallies, street plays, lectures by social activists such as Doctors / Lawyers / Police Officers are organized. Involvement of boys in such programs created friendly and healthy environment amongst boys and girls. A separate Grievance Redressal Cell is established.
- ➤ **Inclusion efforts**: For inculcating healthy environment among boys and girls, senior students organize a welcome party of fresher's for the first year students.
- ➤ Efforts for Healthy Social Environment: Annual Social Gathering is organized where in boys and girl students take active participation. A farewell party is organized every year to see off last year students. Moreover, excursions, tours, industrial visits, residential NSS camps promote healthy and cordial relations among students of the institution.
- ➤ Environment and Ecology: In respect of pure environment, the various associations undertake activities such as composting plant, tree plantation, no plastic rally and save electricity awareness campaign, etc.
- ➤ Drugs Addiction and Alcoholism: The institution organizes expert lectures on drug addiction, alcohol and tobacco consumption. In addition to this, students perform street play 'To say no to any addiction'. Counseling Cell has a great role in this respect.

Staff issues: The institute provides equal opportunity to women and men for all the activities and process which include administrative participation, curricular, co-curricular, extra- curricular and sports participation, deputation to the courses, programs, higher studies, new appointments and committees. Staff welfare club celebrates birthday of every teaching and non-teaching staff member, where all staff members meet in staff room for celebration. The institute organizes special training programs on value, ethics and moral for teaching and non-teaching staff.

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

Our teachers have a very good rapport with students; therefore, advanced learner students are identified easily through day to day interaction. They are taken special care by promoting them:

- To be convergent with reference books, e-journals, ICT facilities etc.
- > To participate in workshops, seminars and conferences.
- ➤ To perform research, write and present paper in seminars and conferences.
- > To participate in intercollegiate and university level academic, co-curricular and extra-curricular competitions.
- ➤ To write articles in college magazine.
- > To lead the group of students and guide them in resolving their personal and academic issues.
- To participate and present research in Indian Youth Science congress.
- ➤ To organize and prepare the students to take part in 'Avishkar Research Convention' conducted by the University of Mumbai.
- ➤ Every teacher pays special attention to such advanced learners to appear for their university examinations.
  - These advanced learners are duly felicitated by offering them memento and certificates at annual prize distribution function. Every year we give Mr. and Miss. A.P.S.C.N. awards for best boy and best girl who have adjudged the overall performance.
- 2.2.6 How does the institute collect, analyze and use the data and information on the academic performance (through the program duration) of the students at risk of drop out (students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker sections etc.)

Sr No	Methods and Process for Assessment	Periodicity	Administering Authority
1	University Examination Result Analysis	01/Semester	University of Mumbai and Examination Committee of the College
2	Course Diary maintained by Faculty / Department Reflecting attendance / Class Tests / Assignments / syllabus completion	01/Semester	Principal and Head of Departments
3	Students Feedback on Teaching - Learning Process	01/Year	Principal and Librarian

4	Teaching Guardian / Mentor Meet	01/Year	Principal and Counselors
5	Parents Feedback	01/Year	All Faculty
6	Alumni Feedback	Regular Basis	In-charge, Alumni Association Committee
7	Industrial Visit	01/Class/Year	All Faculty
8	Academic Experts Lectures / Talks	01/UG Class/Year 06/PG Class/ Year	Principal, Head of Departments and PG Co- ordinator
9	Assignments	01/Theory Subject/Semester	All Faculty
10	Question Bank Solving/ Problem solving session/ Tutorial	01/ Month	All Faculty
11	Remedial Classes	After declaration of results	All Faculty

The above given table makes it clear that:

- ➤ The Institute carries out university result analysis for the different programs and it gets the information about academic performance of students at the risk of dropout.
- ➤ Internal evaluation tests of the institute also help to get the information about students from the disadvantaged sections of society, physically challenged, slow learners, economically weaker students.
- A teacher guardian conducts/interacts with students and finds out the academic performance of student and probable reasons for the same. He/she co-relates the result with the categories of the student viz. section of society, physically challenged, slow learners & economically weaker students.
- The institute conducts parent meet to prevent drop out of the students.

#### Support for Physically Challenged

The institution takes special care of physically challenged students with the help of teaching staff through:

- Frequent Counseling of the physically challenged students to resolve their problems.
- ➤ Understanding curricular needs of the physically challenged students and providing them necessary facilities.
- Reservation in higher studies.

The non-teaching staff and student volunteers are very well trained to extend all possible help to the physically challenged students in respect of using ramp, assistance in paper writing and performing practicals, assistance in completing notebooks /assignments.

#### **Support for Slow Learners**

- ➤ The institute has provision for additional tutorials, remedial classes for slow learners where the individual attention is given to each one of them.
- In these classes, the teacher navigates through the teaching content at a low pace so as to meet the requirements of slow learners. A regular interaction with parents of slow

- learners helps in understanding the requirements of these students and bringing in a gradual improvement in their learning capabilities.
- ➤ Class room material for such students is prepared in an elaborate and cohesive, by manner detailing all the points so as to enable easy understanding of the subject by the students.
- ➤ Teacher prepares specially designed notes for slow learners to understand the content easily.
- Every teacher in the institution is shouldering the responsibility of a counselor who is always ready to undertake counseling and necessary tests for their improvement.

#### **Support for the Students from Economically Weaker Section**

- > The institution implements schemes adopted by the Government of Maharashtra.
- ➤ The institution provides information about government and NGO aids, scholarship, etc.
- ➤ The institution provides partial/full concession in fees to few deserving candidates.
- Scholarships / prizes announced by donors for socially and economically backward students
- > Sometimes our staff members help to pay the fees of some needy deserving students.

#### **Support for Students from Disadvantaged Sections of the Society:**

- > SC/ST/OBC/Minority students are given benefits of reservations in admission.
- ➤ The benefits of government and NGO Scholarship and welfare schemes are extended to the underprivileged students.
- The institution has a teaching and administrative staff, who is well versed with the rules and regulations, related to Social Welfare Schemes and provide guidance to the students to apply for these schemes in the proper formats as per statutory requirements.

#### 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.)

- > Term of every academic year starts in the month of June.
- ➤ The Head of the concerned department conducts the meetings with faculty and discusses the syllabus of the program and invites the subject preferences from the faculty. The Head of the concerned Department and Principal of the institution then uses these details to distribute the workload. Also, In-charge of different committees conducts meetings with members and plans the activities to be conducted in the academic year. Then Principal, Heads of Departments and In-charge of different committees prepare the academic calendar of the institution which is in concurrence with the University calendar. This includes the academic programs, examination schedules, co-curricular and extra-curricular activities, dates of N. S. S. residential camp of 7days at the adopted village, annual sports and cultural days, extension activities, holidays etc. The calendar is provided in the prospectus to the students at the time of admission. It is also displayed on the notice board and made available on the college website. While preparing this academic calendar, utmost care is taken to

- fulfill the condition of minimum 180 teaching days of six days week, laid down by the Department of Higher Education, Government of Maharashtra
- The faculty prepares Course Diary and file which includes detailed course plan, attendance sheet, continuous evaluation sheet, class tests, seminars with evaluation scheme and result, notes and other study material, experimental write ups, previous year university question papers, assignments, e-learning material etc.
- ➤ The Course Diary and file is initially evaluated by Head / In-charge of concerned department and finally by Principal of the institute.
- ➤ The students are informed about time table, teaching plan and academic calendar well in advance.
- ➤ The institute conducts unit tests, assignments and seminar presentations in the semester. It gives feedback to students and parents about the performance.
- ➤ Teacher guardian counsels the students about the academic performance. The practical demonstrations and viva-voce are also conducted and performance of the students is evaluated and informed to all concerned.
- At the end of term institute and university conduct semester end examinations and evaluate the student's performance and offer the marks sheet for the same.
- > The institute organizes co-curricular and extra-curricular activities to supplement the curriculum.
- ➤ The institute carries out result analysis and keeps the record of the same and seeks the guidelines from it for further improvements.

#### 2.3.2 How does IQAC contribute to improve the teaching-learning process?

IQAC plans and supports effective implementation of Total Quality Management for Teaching – Learning and Evaluation process for all stakeholders. All college activities are done under IQAC to insure holistic development and the students can face global competences with greater efficiency.

The IQAC of institution ensures continuous improvement in the entire operations of the institution through:

- ➤ Regular assessment of students and teachers requirements in respect of library books, computers, LCD projectors, laboratory equipments and infrastructure facilities.
- ➤ Periodically review of technological developments in the field of teaching material and library software.
- Monitoring the teaching-learning process by organizing teachers -students interaction.
- Understanding ground level problems of teachers and students in the promotion of research.
- ➤ Organization of more guest lectures, workshops etc. to bring awareness on academic and administrative matters.
- > Developing mechanisms and procedures for ensuring the following:
  - a) Timely, efficient and progressive performance of academic, administrative and financial tasks.
  - b) The relevance and quality of academic and research programs.
  - c) Equal access and affordability of academic programs to various sections of society.

- d) Optimization and integration of modern methods of teaching and learning.
- e) The credibility of evaluation procedures.
- f) The adequacy, maintenance and proper allocation of supportive infrastructure and services.
- g) Research sharing and networking with other institutions in India and abroad.
- 2.3.3 How learning is 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?
  - > By considering the learning abilities of the students, the lecturers make use of different activities to make the learning student centric.
  - ➤ In the classes, the lectures are delivered with the aim that the average student will be able to assimilate the concepts of Science and Technology.
  - The students are taught how to arrange and link different aspects consistently so as to convey the exact sense while appearing for theory and practical examinations.
  - > During practical and field work, they are taught to integrate understanding of the subject and hands on skills to achieve desired results.
  - ➤ Through the Science Association activity, the students from each class prepare and present the bulletins on current topics of Science and Technology.
  - The institute notes academic background, intellectual level, soft skills & additional skills of students and accordingly lecturers have been developed.
  - ➤ The institute provides question bank, assignment to students as per the requirements.
  - Additional library and laboratory hours to the students.
  - ➤ The institute has professional development session which helps to develop the personality of the students and interactive learning.
  - ➤ The institute has computer laboratory. Faculty uses the ICT for active and collaborative learning.
  - ➤ The institute conducts problem solving sessions/ tutorial/ question bank solving sessions for students which offer platform for students.
  - > The institute finds out the specific academic needs of the students. If the need is not covered in curriculum, then additional lectures are conducted for the students.
  - ❖ The institute conducts following participatory activities:
    - Assignments, seminar, written competitive tests, and quiz programs.
    - > Group discussions and debates.
    - > Paper presentation, poster presentation and exhibition.
    - Participation in elocution, Rangoli, sports and cultural competitions.
    - > Study tour, industrial visits and field surveys.
    - > Training programs on :
      - ✓ Self Defense
      - ✓ Social Awareness
      - ✓ Fire and Safety
      - ✓ Yoga
      - ✓ Skill Development
      - ✓ Disaster Management
      - ✓ Financial Investments Management
    - > Street plays and rallies on different social and environmental issues
    - The annual magazine entitled "Vikas" which encourages the students and staff to contribute articles, poems, essays and other skills.

❖ The institute provides students with extra hours for preparation of Avishkar Research Convention, Youth Festival, UDAAN Festival, UTKARSHA Festival, Inter Collegiate Sports competitions of University of Mumbai.

## 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?

The institution is aware of nurturing critical thinking so as to imbibe creative and scientific temper among the students to make them life-long learners. Accordingly, the steps initiated by the institution are:

- The institute organizes different events every year such as:
  - Workshops, Seminars and conferences.
  - > Publication of Science Bulletin.-'Prerana'
  - ➤ The Tahasil level Elocution competition 'Swachhata Mitra' on sanitary issues and water conservation.
  - ➤ Poster competitions, Rangoli competition, quiz competition, debate, essay writing competition etc.
  - ➤ Cultural programs such as dramas on social issues and comedy, mono acting, poem reading, mime, singing, dance and mimicry etc.
  - ➤ Chemistry department provides analytical skill through Rangoli exhibition to develop creativity and critical thinking among the students.
  - ➤ Lectures on social and environmental issues by social activists like Doctors, Police officers, Lawyers, Social workers, NGO etc.
  - ➤ Orientation programs on NSS and DLLE for newly enrolled students.
  - ➤ Lecture on different MPSC and UPSC, Banking, Staff Selection commission RRB, etc. and other competitive Examinations.
- ❖ The institute also encourages and guides students to participate in different University, Taluka, District and State level competitions organized by other institutes and university.
- ❖ Institute encourages and guides students to participate in Science Projects.
- ❖ The institute encourages the students for writing articles in the magazine.
- ❖ The institute encourages participating and performing street plays on different social and environmental issues.
- The institute also encourages to participate in SRD / NRD/ Utkarsh Pre-selection camp, Leadership camp, Disaster management training, women equality workshop,
- ❖ Institute encourages students to participate in Indian Youth science Congress.
- ❖ Institute encourage students to participate in Student parliament.
- ❖ Faculty encourages students to participate and present papers in national and state level conferences.
- ❖ Faculty encourages students to read research journals which are subscribed in institute.
- ❖ Faculty encourages and guides PG students for Seminar presentations to improve their personality and communication skills.
- Encouraging e-learning.

## 2.3.5 What are the technologies and facilities available and used by the faculty for effective teaching?

E.g. Virtual laboratories, e-learning-resources from National Program on Technology Enhanced Learning (NPTEL) and National Mission on Education through Information and Communication Technology (NME-ICT), open educational resources, mobile education, etc.

The institution has made available the following facilities to the faculty members which are used by them:

- Faculty members use library, Sci-lab, Matlab ,Python software, Chemdraw software, software on stereochemistry and other techniques to make the subject easy to understand.
- The institute provides e-books, e-journals and e-databases.
- Faculty provides online tutorials, notes and study material to the students.
- > Teachers use power point presentation for the course delivery.
- ➤ The institute gives important academic tips on the Communication apps as well on college website to the students.

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

- ➤ The institute organizes expert lectures, seminars, workshops to expose students and faculty to the advance level of knowledge.
- The institute deputes the faculty for continuous learning programs, academic programs, conferences, and workshops etc. Institute takes faculty feedback of such programs and considers the same while planning the next event.
- ➤ The institute purchases advance instruments such as water distillation plant, flame photometer, UV- Visible Spectrophotometers, Turbidimeter, Cathode ray digital oscillator, Embedded system kit etc.
- The institute encourages faculty members to organize seminars and workshops and also facilitating them to attend orientation program, short duration courses and refresher courses.
- > The institute encourages faculty members to deliver expert lectures in other institutions.
- ➤ The institute encourages faculty members to write research papers, articles, and minor / major research projects.

## 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 advises) provided to student.)?

#### **Academic support:**

The college has an actively functioning Counselling Centre. Academic support begins with the orientation classes. The Centre gives the advice of professional counselors, psychologists and trained internal counselors. In addition to providing academic, professional and psycho-socio guidance to those in need, the centre also arranges value education classes for different batches of students.

At the time of admission, the members of admission committee provide expert academic advice to the students. Also, the Principal of the college conducts advisory lectures at induction stage. In due course, the students get the academic, personal and social guidance from the concerned Teacher Guardians. The numbers of students benefited are:

Year	No. of students benefited
2012-13	396
2013-14	437
2014-15	441
2015-16	490
2016-17	498

#### **Professional support:**

Even during the time of admissions, students are given guidance regarding Conventional and Self-financed courses that they can opt for. Some of the students are guided to plan in advance about their career opportunities and they also given coaching by the faculty. Tutorial sessions are held regularly. The entire students are benefited by the tutorial sessions.

Personal, professional and psycho-social support is provided by the alumni association to the needy students. Counselling is given to students also sort out their personal and family problems by senior teachers.

The following professional Counselors conduct professional Counseling for the students.

- 1) Mrs. Rekha Sathe, Pune
- 2) Mr. Abhinash Kumar, Technical Support Executive, Aspiring Mind, Gurgaon, Hariyana
- 3) Prof. Sherin Thomas, MBA Head, YTIM, Karjat
- 4) Mr. Dinesh Bhandare, Joint Secretary, School and College, Money Investment Dept.
- 5) Prof Prachi Deshmukh, MBA Head, PNP College, Alibag.

The numbers of students benefitted in last four years are:

Year	No. of students benefited
2012-13	73
2013-14	50
2014-15	300
2015-16	56
2016-17	241

#### **Mentoring support:**

The Principal, Head of Department and all faculty members who have a broader role as a mentor performs. Each faculty looks after the progress of the students by keeping the record of the attendance and result of students of allotted subject. The mentors have proved themselves as a path finder to develop students in all direction.

The grievance of girl students are discussed with the help of women teachers. Women's Development Cell initiates programs to empower girl students.

#### **Career guidance support** :

It is practice to our institute to get a call from Mr. Suhas Patil, Ex. Assistant commissioner and faculty of National Academy of Custom, Excise and Narcotics, Mumbai for delivering a lecture and filling up the Examination forms of different MPSC and UPSC Examinations for our students.

Career Guidance and placement cell provides guidance to acquire different skills which includes:

Numerical ability

Reasoning aptitude

General Knowledge

Computer skill

Facing interview

The Career Guidance and Placement Cell have adopted the strategy of professional counseling of the students. The cell arranges lectures of experts from various fields. These students are provided with books, CDs, magazines, journals and test papers. The students benefited are as under.

Year	SC	ST	NT	OBC	SBC	General
2012-13	03	-	02	107	08	126
2013-14	29	02	15	199	16	180
2014-15	10	-	07	80	04	121
2015-16	06	-	06	65	05	98
2016-17	26	05	16	147	10	138

# 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?

Most of the faculty members have started adopting innovative approaches in the academic process to make the learning a more enriching experience to the students.

The institute understands that innovative teaching methods make teaching learning interesting. In this institution, the efforts are made at faculty level and institute level to use such techniques.

#### **❖** Innovative teaching approaches at teacher's level

- ➤ Faculty uses laptop, E-library and online journals to make teaching more informative and interesting.
- > Faculty use models, graphs, power point presentation to present the content in the syllabus.
- Faculty prepares question bank for the students.
- Faculty uses collaborative learning and active learning through interaction among students and teachers.
- For conceptual understanding of the subject, special project works are given to students for some subjects.
- Faculty makes laboratory set ups for students to understand clearly the principles and concepts in the subjects.
- ➤ For vegetation study, field tours are arranged for Botany students.
- Industrial visits are arranged at college level to study facts in the subjects.
- > Students are encouraged to write poems, articles etc. for magazine.

#### **!** Innovative teaching approaches at institute level (supportive role):

- Institute has provided Laptops to the faculty as a teaching aid.
- The institute provides facilities of LCD T.V, LCD projectors etc.
- > The institute provides internet facilities.
- > E- library services are provided.
- ➤ The institute deputes faculty members for orientation programs, refresher program, seminars, workshops, and conferences with financial support.
- Library reference books and e-library access is made available to the teachers on any day at any time.
- > Teachers are given freedom to purchase required CD's, softwares, models and charts to fulfill needs of innovative practices.

#### **!** Impact of such innovative practices on student learning:

- > It enables students to develop and realize their personal potentials.
- ➤ Innovative learning process helps the learner not only to enjoy learning but also acquire skills that empower them to actively engage in development of their personal skills and competence which ultimately improve their performance and achievement.
- ➤ It helps students to cope up with advance technology.
- ➤ It helps students to increase their academic performance. Considerable increase in marks is observed as compare to previous examination.

These approaches results in increasing the attention and curiosity of the students and shoulder the Teaching Learning and Evaluation with great satisfaction.

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

- > Teachers use the library resources like educational CDs, reference books to develop the teaching material.
- > Four Computers with e-learning facility are made available to the staff and students in library.
- > Students get the text as well as reference books to carry at home. Also, they have access to reference section and e-library. They can study; prepare seminars, papers and projects using the library material.
- ➤ To understand current affairs newspaper cuttings, journals, magazines are made available by the library.
- ➤ Library has subscribed INFLIBNET-N-list database for the staff and students.
- > Students can avail the additional book facility and references as per their needs to study the regular subject in curriculum, project work, paper presentation, seminars etc.
- ➤ On demand the library staff provides paper cuttings to the teachers to understand the topics with updation in the curriculum.
- ➤ Faculty refers research journals, transactions, Proceedings for improvement of study material, projects and seminars.
- ➤ The library downloads e-learning material which include notes, applications, e-journal, Presentations and courseware & to make it available to students & staff. These are used by Student & faculty for teaching-learning process.
- ➤ Previous years question paper sets of university and institute examinations are made available in library to the students and teachers.

- Every department has its departmental library and reading room for the use of faculty and students.
- > Departmental library is effectively used for enhancement of teaching and learning of the faculty and students.
- > Special provision is made for keeping books related to MPSC, UPSC and other competitive examinations to assist students for competitive examinations.
- **>** PG students are directed to use library resources for seminar presentations.
- ➤ New arrivals / titles are displayed on the notice board at the entrance of the library.
- > During examinations the period of library hours are extended than the regular.

## 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.

- ➤ Teaching plan does not confirm the intellectual ability of student, so we could not perform totally, according to the plan.
- The individual faculty plan, depends upon individual perfection & capacity, it may not match with the academic calendar & hours allotted by the university.
- ➤ The university gives the uniform time slots for all subjects but certain subjects need lesser or more time and the time slot depends upon actual contact with students and grasping power of students.
- > State Government admission process of engineering and medical programs etc. also affect academics of Science stream.
- ➤ Declaration of result time also affects academic planning.
- ➤ Ninety days are given for academics which include declared holidays and days required for co-curriculum & extra curriculum activities.
- ➤ During rainy season most of the areas inundates and students are not in position to commute. Fewer working days were lost on account of untimely suspension of regular classes.
- ➤ Over the period it is observed that most of the NGOs and experts show their interest to undertake varieties of workshops / camps in our institution which puts challenges before the teachers to complete curriculum at given schedule.
- > Government of Maharashtra doesn't give NOC to recruit all the teaching posts.

#### **\*** Efforts to overcome the challenges

- ➤ The variation in actual lectures and planed lectures is declared as Non-conformities. To bridge this gap, additional lectures and practicals are arranged and informed the same in advance.
- In consultation with the management and with the consent of teachers, institute compensate the days lost due to heavy rain by engaging extra classes on holidays / during vacation. Whenever required the faculty members also takes special classes during Sundays to complete the semester curriculum in time.
- ➤ The institute gives the freedom to the teachers to use additional hours on regular days and also on Sunday by displaying proper time-table in advance.
- ➤ Use of advance technology to complete the syllabus within the frame.
- > There are also some courses offered on self-financed basis and the staff for these courses are offered and appointed and paid by management.
- ➤ Due to the Government policy some of departments of the institution have recruited Clock Hour Basis teachers to meet the shortage and complete the syllabus in time.

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

The effective teaching quality, teaching methodology and classroom environment on students' performance is completely monitored by college.

- ➤ The college IQAC monitors, analyses and evaluates the feedback collected from the students. On the basis of such feedbacks the IQAC monitors and evaluates the quality of Teaching- Learning. This evaluation helps the individual faculties to understand their strengths and weaknesses, opportunities and challenges leading to overall development of Teaching and Learning.
- The students' feedback is also obtained by the Principal through direct interaction.
- ➤ The teachers are required to submit Course File and diary which itself monitors and evaluates the quality of teaching-learning.
- ➤ Test examination is the best method to evaluate and monitor the quality of teaching-learning therefore, the institution arranges unit tests and additional tests to evaluate the students.
- ➤ The institute analyses university result regularly and corrective measure are taken every year.
- ➤ The Principal of the institute attends classes and practicals of faculty members and if required, gives suggestions for improvements.
- > The institute evaluates projects prepared by the students.
- > Frequent meetings of the Principal and teaching staff members help in monitoring and the evaluation quality of teaching learning process.

All the above appropriate measures are adopted at different levels to evaluate the quality of teaching at the classroom ambience.

#### 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 teachers are employed as the norms and conditions laid down by the Government of Maharashtra Higher Education and the norms framed by UGC and the affiliated University.

Temporary teachers are employed the same eligibility conditions on the basis of Clock Hour Basis (CHB).

Appointments and promotions of the teachers including the Principal are made in accordance with the provisions of UGC norms and the Government of Maharashtra Higher Education time to time.

#### **\*** Human Resource Recruitment Process

The Government of Maharashtra has laid down the procedure for the recruitment of human resources required for the colleges. The strategies and the procedures are:

- > In the month of October, an institution has to submit the details of student's strength to the office of Joint Director, Higher Education.
- ➤ On the basis of students strength, the number of teaching and non-teaching post are sanctioned, which is called as staffing pattern approval.
- > On receiving of staffing pattern an NOC from Joint Director's office is required.
- ➤ On the basis of NOC, Roster for reservation of posts is approved.

- The special cell of University and appointment section approves the advertisement.
- ➤ The total requirement of human resources is published in the national level newspaper and applications are received.
- > The interviews are scheduled with the permission of the University and Joint Director.
- ➤ On interviewing the candidates, they are selected, informed and appointed.

#### **\*** Retention Strategies:

- ➤ It is the strategy of our institution to retain the teachers by offering all out facilities such as financial assistance to attend workshops, seminars, providing healthy environment, organizing social events and so on.
- > Staff members are felicitated for their achievements by Konkan Education Society after every two years.
- > Felicitation on receiving awards and achievements from outside agencies.
- The institute deputes, sponsors faculty for higher studies, conferences, workshops, etc.
- ➤ The institute provides facilities like laptops, internet etc.
- > To retain the CHB teacher, the college provides them regular increments, PF facility, opportunities for performing the research etc.

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
Permanent To	eachers	}					
D.Sc./D.Litt.	-	-	-	-	-	-	-
Ph.D.	01	-	01	01	05	-	08
M.Phil.	-	-	ı	-	02	02	04
P.G.	-	-	ı	-	02	01	03
<b>Temporary T</b>	eachers	S					
Ph.D.	-	-	ı	-	-	-	-
M.Phil.	-	-	ı	-	-	-	-
P.G.	-	-	-	-	-	09	09
Part-time Teachers							
	-	-	-	-	02	02	04

- 2.4.2 How does the institution cope with the growing demand/ scarcity of qualified senior faculty to teach new programs / modern areas (emerging areas) of study being introduced (Biotechnology, IT, Bioinformatics etc.)? Provide details on the efforts made by institution in this direction and the outcome during the last three years.
  - ➤ The college has taken efforts to recruit faculty and train them to meet the needs of the students as per the demands of respective courses.
  - ➤ During the last four academic years the appointments are made in the self financed courses like Information Technology, Computer Science and PG Course (M.Sc. in Organic Chemistry). The College adopts the same policy devised by the UGC while appointing additional faculty to teach new programs.
  - ➤ There are six new appointments made so far, three each in Computer Science and Information Technology departments. Two new additional faculties are appointed

- specially for PG course from 2014-2015 for the smooth conduct of the course and to meet the needs of increased student strength from 10 to 20.
- ➤ The college pays salary to these staff from the fees received in Self-financing courses and through management share where necessary.

## 2.4.3 Providing details on staff development programs during the last four years elaborate on the strategies adopted by the institution in enhancing the teacher quality.

#### a) Nomination to staff development programs

Staff development must be intentional, active and individual growth should reflect the current personal and professional status to perform assigned duties, short term and long term goods. These help in improvement of the institution.

The college encourages the faculty members to attend training programs, orientation and refresher courses, seminars, workshops, conferences etc. and the number of staff nominated to these programs during the last four years is given below.

Academicstaff development programs	Number of faculty nominated
Refresher courses	16
Orientation programs	04
HRD programs	-
Staff training conducted by the university	03
Staff training conducted by other institutions	25
Summer/Winter schools, conferences, workshops	55

## b) Faculty training programs organized by the institution to empower and enable the use of various tools and technology for improve teaching-learning.

- ➤ Teaching learning methods/approaches
- ➤ Handling new curriculum
- ➤ Content/knowledge managements
- > Selection, development and use of enrichment materials
- > Assessment
- > Cross cutting issues
- ➤ Audio visual aids/multimedia
- > OFR's
- > Teaching learning material development, selection and use.

#### **❖** TEACHING LEARNING METHODS/APPROACHES

On appointment of new teachers in the month of July 2012, a two day training session was organized on 1<sup>st</sup> and 2<sup>nd</sup> August 2012, wherein the Principal of the institution acted as resource person.

A half day workshop on API was organized for the teachers of Raigad district on 28<sup>th</sup> October 2012 at M.T.E.S. Doshi Vakil Arts & G.C.U.B. Science and Commerce College, Goregaon wherein Prin. Sunil Mantri and Prin. Debashis

Sarakar were the resource persons. Principal of our institute have attended this workshop. The presentation of the said workshop was then given by Principal to the staff members of our institute. The presentation helped to a sense of teaching learning methods among faculty members. The outcome of this presentation is that the faculty members have been changed their views from traditional teaching to modern teaching.

Academic Experts from other institutes/ universities are invited to deliver a guidance talk on core subjects' for PG students.

In all the above mentioned lectures reaped fruitful results in subsequent years where the faculty members have started the use of

- ➤ Modern teaching aids like LCD projectors.
- Advance preparation of lesson plan.
- > Strictly adherence to semester calendar followed for the teaching learning method.

#### **\*** Handling New Curriculum

Whenever there are changes in the curriculum or a new curriculum is introduced by the affiliating university then the Board of Studies of the University of Mumbai always takes care to handle new curriculum by organizing cluster-wise workshops. Whenever curriculum was revised, staff members of our institute have attended / worked as a Resource Person in such workshops. Details are as under:

Academic Year	Number of Staff members worked as a Resource Person in a workshop on New curriculum	No. of Staff Members Attended in a workshop on New curriculum	Total
2012-13	-	03	03
2013-14	-	03	03
2014-15	01	10	11
2015-16	01	04	05
2016-17	01	02	03

In this line to involve students in learning new curriculum, the institution organized training to students and faculties through:

- Lectures for faculty and students on CBSGS are organized in the beginning of the academic year.
- ➤ Through brainstorming sessions where free exchange of ideas is possible which include both experienced senior teachers and faculty members.
- Expert lectures are organized to broaden the views of students and faculty members in respect of handlings new curriculum.
- As per the curriculum of the university, the institution strictly follows the guidelines.

#### Content/Knowledge Management:

Content / knowledge management involves creating, editing and publishing material which will benefit the faculty members in getting clear idea and objectives and outcomes of the prescribed syllabus.

In the exponential growth of information, there is a need to manage our related and useful information and knowledge so the institution has organized a training program on 'Content Management Through Creating Google Sites' by Mr. Pritam Bade.

#### **❖** Selection, Development and Use of Enrichment Materials

Each department develops enrichment material related to their subjects. The career guidance and placement cell selects, develops and use material to groom students for competitive examinations.

- A special training program is organized by library staff in respect of e-learning resources to enrich study material available with the staff and also to develop new study material.
- > Our faculty members always take initiative to update and enrich their study material in the form of notes without hesitating to refer other learning centers study materials.
- > Our faculty members are very well conversant with the necessary requirements to modify study material and time to time corrective steps are taken by them.

#### **\*** Assessment

Most of the faculty members use formative and summative assessment. Formative assessment gives an early feedback on the depth of knowledge, understanding of students and it also help students identify for themselves if they can answer in brief. Summative assessment evaluates a student's learning at the end of each semester; help the teachers and the students about the change to be incorporated in learning style.

In the year 2011, the examination pattern was changed from yearly system to semester pattern for first year students. Then after the examination patterns were changed many times for first, second and third year students also. In-charge of Examination Committee of our institute Dr.S.D.Patil has attended all workshops on Revised Examination Pattern organized by Board of Studies, University of Mumbai. The details of the workshops attended by him are as under:

Date	Venue			
<b>30<sup>th</sup> June 2012</b>	Dapoli Urban Bank Senior Science College, Dapoli			
18 <sup>th</sup> August 2013	C. K. T. College, New Panvel			
28 <sup>th</sup> March 2014	Bhausaheb Nene College, Pen			
28 <sup>th</sup> February 2015	K.V. Pendharkar College, Dombivali			
28 <sup>th</sup> April 2015	K.E.S.A.P.Science College, Nagothane (Our Institute)			
02 <sup>nd</sup> March 2016	M.T.E.S. DoshiVakil Arts & G.C.U.B. Science and			
	Commerce College, Goregaon			

05 <sup>th</sup> August 2016	Sheth	J.	N.	Paliwala	Commerce,	Science	&	Arts
	College, Pali–Sudhagad							

The timely and corrective guidelines and instructions are given to the faculty members through the following measures:

- > Feedback through test at the end of every year.
- ➤ In respect of paper assessment, the Examination Department provides guidelines and arrange for training.
- Centralized Assessment Program is organized to bring high degree of accuracy in assessment.

#### **\*** Cross Cutting Issues

College education is not complete unless awareness on social alarming diseases like HIV/AIDS, protection of the environment, gender sensitivity is imparted to the students along with the regular curricula. These are called cross cutting issues because they cannot be seen in isolation, as they influence all sections of the society including education sector.

With the view to make global responsible citizens students have been participating blood donation on National Youth Day and Plantation of sapling on Environmental Day. If these issues are not tackled, the success in other sectors will be confined. Hence the college creates proper awareness on Worlds Aids Day and protecting the environment etc.

- ➤ The students belong to majority class are motivated to develop cordial relations with minority students.
- ➤ Enhancing of retention rate (preventing dropout rate) through periodic review process.
- > Immediate application of concepts favorable to the healthy environment in the classroom.
- ➤ Seminars and workshops are conducted where the experts from industry/academia are invited to share and deliver their knowledge and experience to sensitize and bring about awareness about the gender issues, empowerment of women and upliftment of socially and economically weaker society.
- ➤ Women Development Cell of the institution organizes co-activities involving boys to develop a sense of equality.
- ➤ Career Guidance Cell organizes expert lectures for the preparation of entrance examinations.

#### \* Audio Visual Aids/Multimedia

The library has organized a training session on 'Use of e-Resources in Teaching Learning Activity' by Assistant Professor Jadhav Hemant F., Librarian.

A training program was organized by inviting Mr. Abhijit More, Expert in Cyber Crime and Security, to handle and operate audio-visual devices. He also provided valuable inputs in respect of technological developments in the field of computer, teaching softwares, latest LCDs, maintenance of internet LAN and Server during his training session. This has resulted in:

Lectures are delivered using audio visual aids in classroom.

➤ All departments avail the audio visual aids and teaching learning aids.

#### **♦** OER's

- A study material containing topic-wise abstracted points, list of formulas and PPT presentations, slide printouts are circulated among students to remix, improve and redistribute.
- ➤ The printouts of paper cuttings relating to "Man Ki Baat" program of Hon. Prime Minister Shri Narendra Modi on Digital India, Land Acquisition and Drugs Addiction are distributed to the students.
- ➤ The library makes available free online resources through library website by providing links. The library website contains possible educational resources that anyone can refer to.

#### **❖** Teaching Learning Material Development, Selection and Use

- ➤ The teaching material in the form of charts, manuals and CDs are developed by the departments.
- ➤ The stereo chemical and other readymade models of molecular structures are selected for Chemistry students and are used for effective teaching-learning.
- ➤ An album of various plants and vegetation has been developed with ready reference study material for students.
- A unique *Rangoli* exhibition is organized on Green Chemistry and Environment to know the subject depth.
- ➤ The students are encouraged to cut the articles and pictures from newspapers on the issues such as democracy, environment, gender issues, social problems, competitive examinations, politics communication process and interview techniques to make the topics more relevant and interesting.
- Faculty members are given free access to internet which helps them to traverse through ocean of learning materials.
- > The college has a well-stocked library containing both reference and text books on various subjects.
- Further, attending and organizing seminars, symposiums and workshops also help the faculty in developing the course materials.

#### c) Percentage of faculty:

Program	<b>Total Percentage</b>		
Invited as a resource person in workshop/seminar/conference	26.92%		
Participated in external workshop/seminar/conference	100.00%		
Presented paper in workshop/seminar/conference	73.08%		

- 2.4.4 What policies/systems are in place to recharge teachers?(e.g.: providing research grants, study leave, support for research and academic publications teaching experience in other national institutions and specialized programs industrial engagement etc.)
  - The institute encourages teachers to register for M. Phil. and Ph.D.
  - The institute issues No Objection Certificates to the staff for the research purpose.
  - The institute has a provision of On Duty Leave to the faculty for workshops, seminars, conferences, orientation programs, refresher courses etc.

- ➤ The institute provides travelling allowance and registration fees to attend seminars, workshops, conferences, etc.
- > The institute makes available laboratories to the faculty researchers and students.
- ➤ The institute promotes and sponsors the students/faculty members to take active participation in 'Avishkar Research Convention'.
- ➤ Teachers are made aware of and encouraged to submit Minor Research Project to funding agencies like university and UGC. For this purpose institution provides seed money.
- > Study leave is granted to the teachers to attend courses, seminars and research activities.
- 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.
  - Principal Dr. Sandesh S. Gurav
    - ➤ Member of Minor research Project committee from 2016
    - ➤ Member of LIC committee by University of Mumbai for 2016-17
    - ➤ Invited talk in INSPIRE workshop jointly organized by Department of Science and Technology ,Govt. of India and Sheth J N Paliwala College, on 4<sup>th</sup> January 2017.
    - ➤ Letter of Appreciation from Vice –Chancellor ,University of Mumbai.-for successful conduction of District Level Workshop for the 49<sup>th</sup> Inter collegiate Youth Festival 2016
    - ➤ Letter of Appreciation from Maharashtra Andhashraddha Nirmulan Samiti, Nagothane Branch, Dist. Raigad
    - ➤ Letter of Appreciation from Lions Club of Nagothane : Co-operation in Social Activities.
    - ➤ Chairperson of the Technical Session for the National Multidisciplinary Conference on "Contemporary Issues in the Development of Rural India." held at Dr. C.D Deshmukh College, Roha on 23April 2016.
  - Dr. V.S.N.RaghavRao, Associate Professor and Head, Department of Zoology has been awarded with following awards:
    - ➤ Bharat Shikshan Ratan Award 2013
    - ➤ Rajiv Gandhi Excellence Award 2014
    - ➤ Rashtrya Ratan Award 2014
    - ➤ Best Citizen of India Award 2014
    - ➤ Mother Teressa Award 2016
  - ❖ He has been member of the panel of Examiner and Paper setter for
    - ➤ MPSC Examinations, Mumbai
    - ➤ Konkan Krishi Vidyapeeth, Dapoli
    - > T.Y.B.Sc. Applied Component, University of Mumbai
  - ❖ Dr. Mrs. KurraSarada, Associate Professor and Head, Department of Botany has been awarded 'Best Teacher Award 2013-14' by Nagothane Patrakar Sangh and Gram Panchayat Nagothane.
  - She has been Member of Panel of Examiner for
    - ➤ MPSC Examinations, Mumbai
    - ➤ Konkan KrishiVidyapeeth, Dapoli

- ❖ Dr. V.S.Chavan, Assistant Professor of Botany has been a member of Board of Editors of Nano-Frontier Journal, Mumbai.
  - He has been a life member of Indian Aerobiological Society, New Delhi.
- Dr.D.V.Bhagat, Assistant Professor and Head, Department of Chemistry has been Panel of Examiner and Paper setter for F.Y.B.Sc. Chemistry, University of Mumbai

He has been Member of Syllabus Committee, University of Mumbai for

- ➤ F.Y.B.Sc. Chemistry Paper I & II,2016-17
- ➤ T.Y.B.Sc. Organic Chemistry Paper III, 2015-16
- ➤ S.Y.B.Sc. Chemistry Paper III, 2014-15
- ➤ F.Y.B.Sc. Chemistry Paper I & II, 2013-14.

He has worked as a Resource Person in the workshop on Revised Syllabi on F.Y.B.Sc., S.Y.B.Sc. and T.Y.B.Sc. at different venue.

- ❖ Dr. SD.Tupare, Assistant Professor of Chemistry worked as a member of RRC, at Dr. Babasaheb Ambedkar Technical University, Lonere.
- Principal Dr. S. S. Gurav and Staff members Dr. V.S.N. Raghav Rao, Dr. Mrs. V. Sarada, Dr. D. V. Bhagat, Dr. S. D. Patil, Dr. S. D. Tupare, and Dr. V. R. Jadhavar were invited as Resource Person / Invited Speaker in International/ National/ State/ District/ University Level Workshops/ Seminars/ Conferences at different venue.
- ❖ Few of our faculty members are invited to chair the Technical session in National / International Conferences / Seminars.

## 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 institute has developed effective evaluation systems to gauge the teachers' performance which are as follows:

- The institute evaluates teachers by taking inputs from students in the form of four points feedback forms once in a year and after the analysis, it is conveyed to the teachers with suggestion for improvement.
- > The Principal informally meets the students and obtains feedback about the teachers, their teaching methods, knowledge, etc.
- ➤ In the parent-teacher meeting, parents give valuable suggestions and according to that the Principal decides the strategies for improvements.
- ➤ The teachers fill up API forms each year and give presentation on it before the Principal. The teacher gets constructive suggestions about their teaching style, participative teaching-learning and use of innovative methods for teaching.
- > The institute takes feedback from alumni.
- > The Principal also gets informal feedback from alumni.
- > Yearly confidential reports are kept as per University of Mumbai and Government of Maharashtra rules.

#### 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 process?

- ➤ The institute notifies related evaluation process and related documentation on the notice board as well as on website. It includes frequency, nature of internal and external evaluation process of each year.
- ➤ The institute also notifies the criterions for allocation of internal and practical marks.
- Examination Committee also circulates the revised evaluation process if any among the staff and students time to time for their ready reference.
- The Principal of the institute along with Examination In-charge organize seminar for students where they give presentations on evaluation processes.

## 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 semester pattern which is adopted by University of Mumbai in the year 2011-2012 incorporates continuous evaluation of students.

#### **Academic Year 2011-2012:**

- ➤ University has introduced Credit Based Semester and Grading System (CBSGS) (60:40) Examination pattern for first year UG Courses with effect from academic year 2011-2012. The learner's performance was assessed by Internal Assessment with 40% marks in the first part & by conducting the Semester End Examinations with 60% marks in the second part.
- ➤ The Pattern was applicable for Theory as well as Practical Examinations.
- ➤ Seven Point Grading System is introduced by university for all first year UG Courses from academic year 2011-2012.

#### **Academic Year 2012-2013:**

- ➤ The CBSGS (60:40) pattern of 2011-2012 of first year UG Courses was continued for second year UG Courses from academic year 2012-2013.
- ➤ University has introduced Credit Based Semester and Grading System (CBSGS) (60:40) Examination pattern with effect from academic year 2012-2013 for first year PG Courses.
- From academic year 2012-2013, university has cancelled Internal Examinations for Practicals and kept only External Practical Examinations for UG and PG Courses.
- > Seven Point Grading System is introduced by university for all second year UG Courses and first year PG Courses from academic year 2012-2013.

#### **Academic Year 2013-2014:**

- ➤ The CBSGS (60:40) pattern of 2012-2013 of second year UG Courses was continued for third year UG Courses from academic year 2013-2014.
- ➤ The CBSGS (60:40) pattern of 2012-2013 of first year PG Courses was continued for second year PG Courses from academic year 2013-2014.
- Seven Point Grading System is introduced by university for all third year UG Courses and second year PG Courses from academic year 2013-2014.

#### **Academic Year 2014-2015:**

➤ University has changed the pattern and introduced new Credit Based Semester and Grading System (CBSGS) (C75:25) Examination pattern with effect from academic year 2014-2015 for all UG Courses. The learner's performance was assessed by Internal Assessment with 25% marks in the first part & by conducting the Semester End Examinations with 75% marks in the second part for theory examinations.

➤ But CBSGS (60:40) pattern for PG Courses was kept as it is for the Academic Year 2014-2015.

### **Academic Year 2015-2016:**

➤ The CBSGS (C75:25) Examination pattern for UG Course and CBSGS (60:40) pattern for PG Course was kept as it is for the Academic Year 2015-2016

#### **Academic Year 2016-2017:**

- ➤ University has again changed the pattern and introduced new Choice Based Credit and Grading System (CBCGS) Examination pattern with effect from academic year 2016-2017 for all first year UG Courses.
  - ➤ University has cancelled Internal Examinations and kept only External Examinations of basic science subjects like chemistry, botany, zoology, physics and mathematics for first year UG Courses. The learner's performance was assessed by conducting the Semester End Examinations with 100% marks for these subjects. But for optional subject like Foundation course learner's performance was assessed by Internal Assessment with 25% marks in the first part & by conducting the Semester End Examinations with 75% marks in the second part.
  - For first year UG Computer science and Information technology Courses, the learner's performance is assessed by Internal Assessment with 25% marks in the first part & by conducting the Semester End Examinations with 75% marks in the second part.
  - ➤ Ten Point Grading System is introduced by university for all first year UG Courses from academic year 2016-2017.
  - ➤ But for all second and third year UG Courses and also for PG courses the examination pattern is kept same as per the academic year 2015-2016 with seven grade point system.

Candidate will be considered as having passed the Semester when the candidate passes in all the subject heads and obtains overall a minimum of 40% of the aggregate marks prescribed for the Semester.

The internal marks are awarded to the students on the basis of assignments, class tests, projects, attendance, presentations and viva.

Thus, the institution conducts unit test in the month of August and February. Moreover, it is a compulsory practice of our institution to submit assignments with specific intervals. The project reports are to be submitted by the students with the help of teachers as per their respective departments periodically.

Seminar presentations are conducted as a part of internal examination for students. Seminar topics for all the subjects are given well in advance soon after the commencement of semester so as to get enough time for the preparation. Such presentations help the students to develop confidence, stage daring and communication skill.

To evaluate the understanding level and subject depth of the student, the faculty member conducts viva-voce in each semester during practical examination for each paper.

The Chairman of the Examination Committee organizes training workshop for the students to make them aware of evaluation process.

The reforms in evaluation adopted and initiated are:

- The PG students are required to solve at least two previous year question papers, which is assessed by the teachers who return it back to the students with observations.
- ➤ In reforming the evaluation system and to bring transparency in a provision of rechecking, revaluation the grievance Redressal is developed.
- ❖ For effective and unbiased evaluation, the institute invites external faculties for moderation of first year and second year examinations. Also, arranges Central Assessment Program (CAP) for the first, second and third year examination. For T.Y.B.Sc. and M.Sc. University Examinations, CAP is arranged in University of Mumbai where our lecturers are invited for the assessment and moderation of answer books.

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

Our institution ensures effective implementation of evaluation reforms of the university and the institution at two tier level:

- 1. Examination Department Level
- **2.** CAP Centre Level

The institutional examinations schedule is prepared by Examination Committee members under the guidance of Chairman of Examination Committee, whereas the University declares final year examination schedule. Both these examinations are conducted very strictly by the Examination Committee as per the directions of University of Mumbai. A separate IT coordinator is appointed to look after online downloading of the university question papers. IT coordinator and Principal of the institute maintain high level of safety and security in printing till distribution of question papers in the examination block. The schedule for internal evaluation is also prepared by Examination Committee, which is followed rigorously by the faculty members.

The CAP Centre consists of the CAP Director, CAP Co-coordinator, members of CAP Committee and supporting staff. The papers are evaluated, moderated and entries are recorded under the control of coordinator as per the directives of university. The CAP centre is responsible for maintaining accounts and recording assessment process. The CAP Coordinator hands over the marks statements to the Result Finalization Committee. The records of answer sheets one copy of mark statement are kept and maintained under the safe custody of the Examination Committee.

## 2.5.4 Provide details on the formative and summative evaluation approaches adapted to measure student achievement. Cite a few examples which have positively the system.

### **\*** Formative Evaluation Process:

The goal of formative assessment is to monitor student learning, to provide ongoing feedback that can be used by instructors to improve their teaching and by students to improve their learning. Formative assessment of the students is done on the following parameters:

- > Assignments
- Class Tests

- > Seminar Presentations
- ➤ Industrial visits
- > Class interactions
- ➤ Group discussions /viva-voce
- ➤ Workshops/seminars
- > Research activities
- > Projects
- ➤ Written and practical tests
- Organizing functions
- > Social activities
- ➤ Inter college competitions
- > Overall attendance and conduct during the session

#### **Summative evaluation process:**

The goal of summative assessment is to evaluate students learning at the end of an instructional unit by comparing it against some standard or benchmark. Summative assessments are often high stakes, which means that they have a high point value.

Summative assessment takes place at the end of the academic session which is conducted by the college during the terminal test at the end of the semester. This process helps the students to gain confidence and to achieve good results. The university/institute conducts a summative evaluation at the end of each semester through the following:

- ➤ Written examinations
- > Practical examinations
- Viva voce
- > Project work

# 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.)

- Faculty takes efforts to have transparency in the internal assessment. The question bank, objective type questionnaire for class test is given to the students.
- After examination, the model answers are given to the students. Students get an opportunity to discuss the performance in the tests with the concerned teachers.
- ➤ The institute has specially developed progressive assessment sheet which considers attendance, personality, behavior, extension of experiment, innovations and marks for writing conclusion of the practical performed. The proper weightages are given to these heads.
- ➤ The institute displays marking scheme at the start of academic year, on the notice board, website and carries out the evaluation and display the result based on the above evaluations. Earlier, the internal marking scheme was 20 : 10 : 5 : 5, then it changed to 20 : 5.
- 2.5.6 What are the graduates attributes specified by the college/affiliation University? How does the college ensure the attainment of these by the students?

The institution ensures that the student who graduates from this institution have certain specific attributes, besides those expected by the university. Strengthening of moral values such as national integration, patriotism, humanism, secularism, democracy, social justice and peace are stated in our institution GOAL while 'Education for all" is the MISSION of the Institution. The institute is committed to provide quality higher education particularly in science to bring about the social change in rural area. These are published in the college prospectus and website. The attributes like being punctual, serving the community, participating in social awareness programs, scientific temperament are ensured through, NSS, WDC, DLLE, Nature Club, Science Association, industrial and study tours etc. The institution thrives to sensitize the students towards exclusive social concerns, gender and environmental issues and to make them sensitive, sensible useful and conscious global citizens.

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

### **College Redressal:**

The mechanism for redressal of grievances with reference to evaluation at the college and university level remains same which is as under:

- > On declaration of results the students are asked to apply for photocopy of answer sheet if in case they are not satisfied with the marks obtained to them.
- ➤ On receiving of photocopy, if a student finds any discrepancy in assessment and evaluation, he can apply for rechecking and revaluation of his paper within 10 days period.
- ➤ The Examination Committee collects all applications in respect of rechecking and revaluation to check the marks as well as to reassess the paper as per the Statutes, Ordinances and Acts of the University of Mumbai.
- The result after rechecking and revaluation remains final. But if in case a students has any complaints about paper pattern, out of syllabus questions etc., they can apply to get redressed their grievances to the Grievance Committee constituted by the Institution/University.

### 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,

- In the beginning of every semester, the faculty members always prepare study plan which contains the topic, learning objectives, recapitulation of topics and home work.
- As the teaching plan contains aims, objectives of the particular model, the students understand usefulness, practicality of the topic in the daily life. At the end of the topic, it is a general teaching practice of the teachers that they recapitulate the points and give the home work to the students. In the teaching learning process, students have freedom to ask any query to the teachers.
- > The learning outcomes are all the times notified by notices, websites and academic diaries.

- ➤ Learning outcomes are printed on the academic documents given to faculty and students.
- ➤ Learning outcomes are notified to parents during the parent meet.
- 2.6.2 Enumerate on how the institution monitors and communicates the progress and performance of students through the duration of the course/program? Provide an analysis of the students results/achievement (Program/course wise for last four years) and explain the differences if any and patterns of achievement across the programs/courses offered.
  - ➤ To monitor the student progress, the institute has continuous internal evaluation system which consists of unit tests, seminar presentations, semester end examination, practical and oral exam. Using this mechanism the institute finds out the progress of the students and uses this mechanism as a feedback to improve the academic process.
  - ➤ The institute organizes parents meet to have a communication with students and parents.
  - ➤ The institute conducts semester end examinations of first year and second year on behalf of university and the result of the same are communicated to the students and parents.
  - > The academic monitoring is also carried out for the third year result from university result summary.
  - ➤ The institute carries out the analysis of each program every year.
  - ➤ The results of the programs for the last four years and the comparison with university results are shown below:

	difficulty festits are shown below.							
S.N.	Year of Examination	Program	No. of students appeared	No. of students passed	Department result in percentage	Result of the university in percentage		
	2012-2013		95	62	65.26%	50.25%		
1	2013-2014		116	89	76.71%	47.61%		
1	2014-2015	B.Sc.	108	96	88.89%	56.79%		
	2015-2016		113	102	90.27%	-		
	2012-2013		14	05	35.71%	42.95%		
2	2013-2014	B.Sc.	12	09	75.00%	47.61%		
	2014-2015	(Comp.	07	01	14.29%	54.75%		
	2015-2016	Sci.)	07	04	57.14%	-		
	2012-2013	B.Sc.	13	10	76.92%	40.83%		
3	2013-2014	(Info. Tech.)	15	07	46.67%	33.33%		
3	2014-2015		10	01	10.00%	57.83%		
	2015-2016	recii.)	19	01	05.26%	-		
	2012-2013		10	10	100.00%	80.03%		
4	2013-2014	M.Sc.	10	10	100.00%	78.68%		
4	2014-2015	WI.SC.	10	09	90.00%	71.64%		
	2015-2016		20	16	80.00%	-		

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

- ➤ The faculty members summarize program wise learning outcomes.
- Faculty prepares the course files and other study material to supplement the learning outcomes. The laboratories are developed accordingly.
- After evaluation and assessment, achievements of outcome are understood by the teachers and necessary corrective measures are initiated to improve performance of the students those who have scored below the expectations.
- ➤ In teaching-learning strategies, the institution organizes training in communication and other quantitative aptitude skill development.
- > The institution takes efforts to conduct presentation skills and technical seminar course to its true spirit.
- > Remedial coaching and time to time problem solving facilitate the achievement of intended learning outcome.
- ➤ The results of internal and external examination at end of each semester are the indicators of learning outcomes.
- ➤ The Principal conducts the regular meetings with the faculty and review the course material to develop teaching-learning as per the learning outcomes.

## 2.6.4 What are the measures/initiatives taken up by the institution to enhance the social and economic relevance (quality jobs, entrepreneurship, innovation and research aptitude) of the course offered?

- ❖ In the context of courses offered, the supplementary certificate courses are designed and offered. Career Guidance and Placement Cell always initiates steps to offer quality jobs and entrepreneurship in relevance to the courses. e.g. B.Sc. students get jobs mostly in MIDC area at Roha.
- ❖ Along with study programs, the students are promoted to involve in research activities through 'Avishkar- Research Convention'. Moreover, when the students seek admission for research degrees after completing program, the faculty assistance and laboratory assistance are always extended to them.
  - Along with the academic courses, the institution promotes the various departments and associations to inculcate sense of social and economic relevance through the various activities such as:
  - ➤ The institute organizes blood donation camps, street plays, rallies on social issues for the awareness of both the students and the society.
  - Employability and skill development programs are conducted by the institute through WDC, NSS and Career Development and Placement Cell.
  - Few of our students have joined Police Force / Army due to the efforts taken up by Sport department of the institute.
  - > The institute motivates students to participate in district/state/national level competitions.
  - The institute motivates students to participate and present papers in district/state/national level conferences/ seminars.
  - Women Development Cell of the institute organizes short training programs of Tailoring, Beauty parlor, cushion making, flower and bouquet making, jewelry making, food processing etc. This has resulted in developing entrepreneurship among girls students.

- ➤ The institute arranges lectures of Police Offices, Lawyers, and Doctors on Social issues for students.
- ➤ Mr. Suhas Patil, Ex. Assistant commissioner and faculty of National Academy of Custom, Excise and Narcotics, Mumbai delivers lecture every year and fill up the Examination forms of different MPSC and UPSC Examinations of our students.
- > Celebration of Birth and Death Anniversaries of our national idols.
- > Spoken English classes are conducted in the institute.

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

The institute has constituted IQAC which initiates the following steps in respect of data analysis, planning and overcoming barriers of learning.

### **Collection and Analysis:**

- ➤ The institute takes feedback from students and it helps to understand and overcoming learning barriers.
- ➤ Institute analyses the results.
- ➤ Institute collects the data about learning outcomes from students, alumni, employers, industries and parents.
- ➤ Also, data is collected from suggestion box.

### **Planning to Overcome the Learning Barriers:**

The IQAC committee analyses the collected data and discusses with faculty and Principal. The faculty uses the same for planning and overcoming the barriers of learning. The result of students in the examination is the best indicator to overcome learning barriers. On the recommendation of IQAC, the corrective measures are initiated such as:

- > Providing the question banks to the students.
- > Providing question paper solutions
- Extra/remedial classes for slow learners to solve their problems.
- Academic tutorials to needy and poor students of each class to improve the results.
- > The faculty sets benchmarks from feedback report and develops strategies.

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

The IQAC analyses data of low performing students at the beginning and organizes department-wise meetings to discuss and improve learning materials. On implementation of IQAC suggestions, the results are compared with earlier examinations. The following table exhibits the few examples of analysis.

### The table indicating achievements and progress of students

	Comparison of performance of HSC Marks with T.Y.B.Sc					
Sr.	Sr. Name of students					
No.		in H.S.C.	in T.Y.B.Sc.			
1.	Miss. Gadmale Nidhi Hiraji	45.67%	6.15			

2.	Miss. Bhokate Supriya Laxman	39.83%	6.14
3.	Miss. Mohite Kashmira Mahendra	41.17%	6.08
4.	Miss. Gawade Priyanka Mohan	42.33%	6.04
5.	Miss. Patil Akshata Sitaram	42.83%	6.02
6.	Mr. Khot Sanket Narayan	40.17%	5.90
7.	Mr. Kambale Vivek Gorakh	43.83%	5.88
8.	Mr. More Ankesh Vasant	38.50%	5.61
9.	Mr. Pawar Raju Dinesh	43.67%	5.49
10.	Mr. Ingale Sachin Natha	41.50%	5.48
11.	Miss. Dahimbekar Komal Shantaram	43.33%	5.46
12.	Miss. Khamkar Neeha Mujahid	43.67%	5.43

The institute uses following means to ensure the achievement of learning outcomes:

- ➤ To make the groups of advance, average and slow learners and deciding policies to improve their learning outcomes.
- ➤ Remedial coaching and Academic Tutorials for slow learners
- > Preliminary test, class tests and university examinations.
- ➤ Assignment and extension of experiments.
- > Monitoring attendance of students.
- > Periodic student feedback.
- > Organizing make up/resource lectures to meet the student's requirements.
- ➤ By monitoring participation and achievement of students in a co-curricular activities.
- > By evaluation projects and innovations of the students.
- > To ensure the achievement of the learning outcomes, institute focuses on planning and effective implementation of teaching learning. It also inculcates the research culture and value based education.
- ➤ Individual academic advice from the faculty helps students in overcoming barriers and achieving learning outcomes.

# 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 evaluation and assessment of student is carried out continuously at IQAC level and department level. The students are continuously evaluated through internal examinations, assignments, seminars, project work, viva-voce, classroom performance, communication skills and practicals. Similarly, behavioral aspects are evaluated by considering their active part in Extension activities, NSS, Sports, Women Development Cell, Cultural activities, Seminars, Conferences, Workshops, Indian Youth Science congress, Avishkar Research Convention etc. One of our PG students Mr. Jagdish Pathak got first prize in paper presentation in Two Days National Level Multidisciplinary Conference held at T.C.T. Dr. Shri. Nanasaheb

Dharmadhikari Arts, Commerce & Science College, Gove – Kolad on 22<sup>nd</sup> and 23<sup>rd</sup> December 2016. It also inculcates the research culture and value based education and motivates us to plan teaching accordingly.

These indicators and their effectiveness become a tool in planning of further teaching methods and procedures. The new teaching techniques are developed with the help of the outcomes of evaluation through the various indicators. Also, this facilitates to interlink classroom teaching to advance teaching methods.

### **Criterion - III**

# REAEARCH, CONSULTANCY AND EXTENSION





K.E.S.A

## 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?

Our institution has not recognized research centre of University of Mumbai. But it has recognized chemistry laboratories by university and because of that institution has practical examination centers for UG and PG Level for University Practical examinations. It is much efficient for the research activities of the staff and students with their interest area. For further analysis they took help from other colleges and universities.

On the basis of Research activities of faculty member, PG Department of Chemistry has sanctioned a Research grant of Rs.20,00, 000/- (Twenty Lacs.) from DST-FIST New Delhi for improvement of S & T (Science and Technology) in the Universities and Higher Educational Institution. In the year 2014-2015 only two colleges has received such grant and our college is one of them. With this research grant, PG department has become active and quality of research has been enhanced by using the facilities like Equipments, Instruments, Reference books, Computers and Networking etc.

MPCB (Maharashtra Pollution Control Board) is selected our institute for monitor air pollution two point near Dhatav, Tal-Roha Dist-Raigad . For this, MPCB has sanctioned grant of Rs.8,00,000 /- (Eight Lacs. ) to purchase equipments and for the remuneration for the staff and students working under the project. Underthis projects, free training is provided to the staff and students by MPCB.

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

There is a Research Committee to monitor and address the issues regarding research.

### **Composition of Research Committee is as follows:**

Dr. Gurav S.S. : Chairperson
Dr.V.S.N.Raghav Rao: Member
Dr. Bhagat D.V. : Member
Dr. Patil S.D. : Member

> Dr. Tupare S.D. : Member

Dr. Jadhavar V.R. : MemberDr. Chavan V.S. : Member

### **\*** The objectives of the committee include

- To motivate the faculty to register for M.Phil and Ph.D. programme.
- To undertake minor and major research projects under UGC and University.
- To monitor the ongoing research projects under UGC and University.
- > To conduct District Level Workshops on Research Methodology
- > To promoting collaborative research and a research culture among the students.

### **A** Major recommendations of the committee are:

- > Submission of more number of research proposals for major and developing minor research.
- ➤ Submission of project proposal to different research agencies such as UGC and University of Mumbai and University Departments.

- > Strengthening the in-house student research.
- ➤ Establishing special need based Instrumental and Non- Instrumental laboratories in the college.
- ❖ The Research Committee of the college provides overall guidance on:
  - ➤ Preparation of research project e.g. Major, Minor, Projects for Avishkar Research Competition, National Youth Congress etc.
  - ➤ Availability of funding agencies.
  - > Broad areas on which research activity could be initiated.
  - > Enhancement of research among the teachers.
  - > To motivate the research activity among the student.
- ❖ Committee recommends regarding students Research, Field Visit, Industrial Visit etc.

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

### **Autonomy to the principal investigator:**

The principal investigator has autonomy to select the area of research & implement action of research scheme.

### **Timely availability or release of resources:**

- > The college is covered under 2f & 12b of UGC Act hence entitled for research grants from UGC and other funding agencies.
- For smooth completion of research work, required man power and other resources are made available as per the need.

### **❖** Adequate infrastructure and human resources:

- ➤ The institute provides necessary infrastructure such as an Instrumental Lab and Non-Instrumental Labs.
- ➤ All laboratories are well-equipped with equipment, instrument and chemicals.
- ➤ The solvent & chemicals used are of Analytical and Laboratory Grades. The Instrument and equipments are calibrated.
- > ICT facilities are made available for research activities through a computer lab.
- > LCD TV are available in the laboratories to display table, diagrams and procedures.
- ➤ College library is equipped with research journals, e-journals and many references and all the departments also have their departmental reference library and reading sections.

### **Time-off, reduced teaching load, special leave etc. to teachers:**

The institute offer provision of duty leaves for –

- > PET Examination, RRC Presentation and Registration.
- > To attend national, international conference/ seminar and exhibition related to research area.
- Institute offer provision of leaves for Ph.D. viva to the staff.

### Support in terms of technology and information needs:

- ➤ Computer laboratory, library, camera, internet facility have been provided to the faculty.
- > ICT facilities made available to staff and students for the research activities.
  - Reference books, photocopy and print facilities are available for the researchers.
- Facilitate timely auditing and submission of Utilization certificate to the funding authorities: Konkan Education Society has internal auditor and all internal Audit facilities are working for timely submission of Utilization certificate and statement of expenditure to the funding agencies.

### **Any other:**

- Faculty motivates and guides the PG student for preparation of their projects
- ➤ Faculty motivates and guides the UG and PG student for preparation of projects for Avishkar Research Convention organized by University of Mumbai.

- ➤ On behalf of University of Mumbai college organized Avishkar Research Convention in the year 2014-15 to aware the students about the research activities.
- > Staff submitted MRP proposals to the various funding agencies to improve research and make department enrich with equipments and reference books.

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

- ❖ Institute has Science Association Committee run by students and Teacher guide. A group of students published Science bulletin name as "Prerana" on a current issues once in a year.
- Science Association organizes power point presentation competition, poster competition, Science day, Quiz competition, Model Exhibition etc. to create the research interest among the students.
- The institute conducts intra-collegiate research program for the students to provide Platform for development of research talent.
- ❖ Projects with good research theme are selected and fine-tuned to represent at **National Youth Congress** and "**AVISHKAR**"- the Inter-Collegiate Research Convention organized by the University of Mumbai.
- ❖ In National Youth Congress, The Students are motivated by lectures of eminent Scientist like Dr.V.Selvam (Executive director of Swami Nathan Foundation),Dr.C Muthuamizhchelvan, Dr.Arvind Untawale,Dr.Madhura Swaminathan at Mumbai university
- Chemistry Department organizes Industrial visits to the Chemical and Pharmaceutical Industries
- For UG and PG students to give them industrial exposure.
- The Students are encourage to attend the lectures of Dr.Sanjay Deshmukh, Anil Kakodkar (former president of BARC, at a Mumbai University)
  - ❖ Botany Department organizes study tours and motivates the students to collect plants Species.
  - These activities ignite a spark of research in the students and faculty members.
  - ❖ Library subscribes research journals for all faculties (Print and non-print) to create research culture among the students. Also, the library has purchased reference books on various subjects.
  - ❖ The NSS and DLLE units organize surveys on economic conditions, social status and Education in this locality.
    - 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.)
- **Second Second S**
- > Dr.V.S.Chavan Assit. Professor in Botany is recognized as Ph.D guide by University of Mumbai, one student is register for Ph.D under his able guidance.
- ➤ Dr.V.R.Jadhavar Assit. Professor in Chemistry Guided to the 25 YCMU students of M.Sc.for their Minor thesis at Dr.ShriNanasaheb Dharmadhikari Arts, Commerce and Science College, Gove Kolad, Tal.Roha. Dist. Raigad. From 2015 onwards
- **❖** leading Research Projects
- Research project by faculty
  College has been received a research grant from UGC and University of Mumbai to promote
  the research activities at our centre.

Information about MRP(Ongoing and Completed) is given in a following tables

> Minor Research Projects Ongoing

Name of the Person	Name of the research title	<b>Funding agency</b>	<b>Amount Sanctioned</b>
Dr. S.D. Tupare	"Green synthesis and	University of	25,000/-
& Dr. S.S. Gurav	Pharmacological screeing of 6-	Mumbai	
	(4-((E)-3 phenylacryloyl)		
	phenyl amino)pyridazin-		
	3(2H)-one & Their		
	derivatives"		
Dr. D.V. Bhagat &	Effective Synthesis of	University of	30,000/-
Dr. S.D. Tupare	Imidazole Derivativess: An	Mumbai	
	Important Synthon for the		
	Preparation of Biologically		
	Active Heterocyclic		
Dr.S.D.Patil &	An efficient green approach	University of	35,000/-
Dr. S.S. Gurav	for the synthesis	Mumbai	
	characterization and anti-		
	microbial screening of new		
	bioactive molecules.		

Minor Research Projects Completed

	Minor Research Projects Completed						
Name of the	Name of the research	Funding	Year	Amount			
Person	title	agency		Sanctioned in Rs.			
Dr. S.S. Gurav & Dr. S.D. Tupare	Synthesis and biological activity of benzodizepines	University of Mumbai	2013-2014	25000/-			
Dr. D.V. Bhagat	To monitor the drinking water quality for the tribal villagers, Roha Tehsil	University Grant Commission	2011-2012 and 2012-2013 (2 Years)	65,000/-			
Dr.S.D.Tupare	Synthesis and antibacterial activities of benzilidine compounds	University of Mumbai	2011-2012 (1 Year)	20,000			
Mrs.S.T.Morbale	Green approach to the sustainable advancement for the synthesis of heterocyclic compound	University Grant Commission	2012-2013 and 2013-2014 (2 Years)	70,000/-			

### > Research project by students

**❖** Details of Research Project Participated in Last Five Years For Avishkar Research Convention Held By University Of Mumbai By Science Association Committee

Academic Year	No. of Research Projects For Avishkar		No. of Projects selected for University level	No. of Projects selected for State level
2011-12	08	18	03	-
2012-13	12	24	04	
2013-14	15	36	03	1
2014-15	19	38	04	
2015-16	01	02	-	

2016-17	10	20	01	
Total	65	138	15	1

#### **\*** collaborative research activity

Staff and students from different courses are actively participated for the research projects and research festival. Details of collaborative research is mentioned above

## 3.1.6 Give details of workshop/training programmers/ sensitization programmes conducted/ organized by the institution with focus on capacity building in terms of research and imbibing Research culture among the staff and students.

- \* The institute organizes seminars / lectures of resource persons to encourage the faculty.
- The institute's research committee has taken the initiative to focus on increasing research culture among the teachers and students.
- ❖ The institute has organized half day orientation workshop to explain the role of research in newly framed "API" system by UGC.
- ❖ Institute organizes workshop on Laboratory Safety
- ❖ Following seminars/ lectures have been organized by the various departments during the last few sessions

Sr.	Name of Resource Person	Title	Organizing
No.			Department
1.	Dr, Sadanand Dharap	Recent Trends in Science	Department of
	(Principal, B.N.College,Pen-Raigad and		Chemistry
	Chairman BOS in Chemistry, University		
	of Mumbai		
2.	Dr.Vikas.V.Vaidya	Analytical Techniques	Department of
	Member BOS in Chemistry, University		Chemistry
	of Mumbai, HOD Chemistry, Ramnarain		
	Ruia College,Matunga		
3.	Dr. Sunil Patil	Research Methodology	Department of
	Changu Kana Thakur A.C.S. College,		Chemistry
	New Panvel		
4	Consumer Guidance society of India	Consumer Guidance	Placement Cell
5	Pr. S.B. Datar	Modern trends in physics	Department of Physics
6	Dr. Nyayate	Physics and Safety	Department of Physics
7	Dr. Dharmadhikari	How to face NAAC	Institute level

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

The details of research areas and specialization by the faculty as under:-

	The details of research areas and specialization by the faculty as under.						
Sr.No.	Name of the Researcher	Subject	Research areas				
1.	Dr. S.S. Gurav	Physics	Material Science				
2.	Dr. V.S.N.Raghava Rao	Zoology	Fisheries				
3.	Dr.(Mrs.) Vallabhaneni	Botany	Phycology				
	Sarada						
4.	Dr. D.V. Bhagat	Chemistry	Co-ordination Chemistry				
5.	Dr. S.D. Patil	Chemistry	Adsorbtion Kinetics				
6.	Dr.S.D.Tupare	Chemistry	Heterocyclic Chemistry				
7.	Dr.V.R.Jadhavar	Chemistry	Environmental Pollution				
8.	Mr.M.D.Shirsath	Chemistry	Natural Products				

9.	Dr. V.S. Chavan	Botany	Aeromycology
10.	Mrs.S.V.Chaudhari	Chemistry	Adsorption & Enviornmental Ananlysis
11.	Mrs.S.T.Morbale	Chemistry	Synthetic Organic Chemistry
12.	Mrs.P.N.Jyothi	Zoology	Ecological Concept of Lake
13	Mr.H. F. Jadhav	Library science	Digital Library, Subject gateways

## 3.1.8 Enumerate the effort of the institution in attracting researches of eminence to visit campus and interact with teacher and students?

The institute invites eminent personalities for the interaction with teacher and student. The details are as follows:-

Table showing the eminent personalities who visited our institution

Sr.	Name of Eminent Personalities	Topic	Organizing
No.	D 4 9 4 D 49		Department
1.	Dr.Anil K Patil	Carrier opportunities	Department of
		in Science	Botany
2.	Dr.M.M.Burondkar	Developing new	Department of
		variety of alphanso	Botany
	D D D 1	mango	D
3.	Dr.R Rele	How to enhance	Department of
		Research	Chemistry
4.	Mr.Sanjeev Karpe	Carrier opportunities	Department of
		in plantation of	Botany
_		Bamboo	_
5.	Dr.Nitin Lingayat	Energy Conservation	Department of
_			Physics
6.	Dr, Sadanand Dharap Principal,	Recent Trends in	Department of
	B.N.College,Pen-Raigad and	Science	Chemistry
	Chairman BOS in Chemistry,		
_	University of Mumbai		-
7.	Dr. Vikas. V. Vaidya	Analytical	Department of
	Member BOS in Chemistry, University	Techniques	Chemistry
	of Mumbai, HOD Chemistry,		
	Ramnarain Ruia College, Matunga	-	7
8.	Dr. Sunil Patil	Research	Department of
	Changu Kana Thakur A.C.S. College,	Methodology	Chemistry
	New Panvel		D
9.	Dr. Sandesh Jaybhaye	Thesis Writing	Department of
	Birla College of Arts, Science and		Chemistry
10	Commerce, Kalyan	D 1	D
10.	Dr.Mrs.Sugandha Shetye	Research	Department of
	Dept. of Chemistry, K.J. Somaiya	Methodology	Chemistry
	college of Science& commerce,		
1.1	Vidyavihar, Mumbai.	A 1 1 1 CT	D
11	Dr.Ulhas Pandit	Analytical Chemistry	Department of
	B.N.Bandodkar College of Science,		Chemistry
	Thane		

12	Prof. S.B. Datar	Modern physics	trends	in	Department Physics	of
13	Dr. Manohar Nyayate	Physics a	nd Safety	<b>y</b>	Department Physics	of

- 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?
- ❖ College is recognized by UGC under 2(f) and 12(B) under UGC
- ❖ Most of the faculties are M.Phil. and Ph.D. but they completed their research table Work without utilizing Sabbatical Leave.
- Our staff member visited to abroad for their research paper presentation on duty leave.

Name of Teacher	Name of Paper	Venue
Dr.V.R.Jadhavar	Impact of Heavy MetalConcentration in Water Quality of Amba River Near Nagothane, Dist.Raigad (Maharashtra)	Colombo ,Sri Lanka
Dr. V.S. Chavan	Emerging Trends and Challenges in Science And Technology	<i>y</i>

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)

The following initiatives are taken up by the institute:

- ❖ The institute organizes project exhibition, research poster competition and invites the School, Jr. college students and parents to convey the research findings.
- ❖ The institute organizes research poster presentation in the premises which is open for all.
- ❖ The institute organizes rangoli competition on "Green chemistry".
- ❖ Following Consultancy activities are working in institute:-

Sr.	Research Finding	Activity	Place
No.			
1.	Air Pollution Monitoring	To check Air quality	MIDC Roha
2.	Water Quality Analysis	Physical and Chemical parameters	Nagothane
3.	Soil Testing	Soil Health Card	Nagothane and
			Bhomoli
4.	Fish Farming	Supplementary occupation for	Nagothane
		farmers	
5.	Bio fertilizers	Organic farming	Nagothane
6.	Save Electricity	Optimum use of Home appliances,	Aamdoshi
		Use of Solar Energy and LED lights	

#### 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 for last four years.

Year	Financial	Library	Equipment purchasing	Contingencies	Travelling Expenses	Recurring Expenses
			purchasing		Expenses	
2012-	Allocation	7500	5000	500	7000	5000
2013	Utilization	5000	5499	500	5500	5414
2013-	Allocation	7500	5000	500	7000	5000
2014	Utilization	5000	4640	500	6200	5647
2014-	Allocation	7500	5000	500	7000	5000
2015	Utilization	5000	4631	500	6600	5310
2015-	Allocation	7500	5000	500	7000	5000
2016	Utilization	5725	5480	500	7200	4748

## 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?

The institute has a provision to provide seed money for research. For the participation of research activities like Workshops/Seminars/Symposia by the faculty, institute bears all the expenditure including T.A. and registration fee of the same.

Amount disbursed for the research purpose by the institute during the last four years is shown below:

Sr.	Name of Department	2012-13	2013-14	2014-15	2015-16
No.					
1	Chemistry	7505	7779	6882	9568
2	Physics	1519	1720	1113	1350
3	Botany	1889	1104	1932	1164
4.	Zoology	-	1684	1014	1146

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

- Budget allocation of Rs.15000/- to the student research project is made every year for the purpose of preparation of projects, travelling allowance, foods, etc.
- Basic infrastructure including chemicals, glassware and instruments is made available by college to student.
- Library and Internet facilities are made available to the students for their project work.
- Details of expenditure for research projects of students is given below

Year	Expenditure
2012-13	17420/-
2013-14	13152/-
2014-15	27631/-
2015-16	9650/-
2016-17	14050/-

## 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 the end of year, every faculty member gives presentation of their research work to all teachers and students to instigate inter-disciplinary research.

❖ Inter-disciplinary research is carried in this institution and one Minor Research Projects have been completed and one is sanctioned under Interdisciplinary Category in last five years.

Sr. No.	Name of Staff	Title of Projects	Funding Agencies	Remark
1.	Dr. S.S.Gurav – Dr.S.D.Tupare	Synthesis and Antibacterial activity of 1,5- Benzodiazepines	University of Mumbai	Completed
2.	Dr. S.S.Gurav – Dr.S.D.Tupare	Green synthesis and Pharmacological screeing of 6-(4-((E)-3 phenylacryloyl) phenyl amino)pyridazin-3(2H)-one & Their derivatives"	University of Mumbai	Sanctioned and working

The students are motivated by the faculty to undertake the interdisciplinary project under DLLE, NSS and Avishkar Research convention.

During interdisciplinary projects, some extra lectures and practicals are conducted for the students participated in Research projects.

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

The institute prepares the documents denoting names of equipments, its specifications, it's possible uses, location, and related interface as well as library resources.

- ❖ The college provide Library facilities with full of resources as all relevant subject text books, reference books, journals, e- journals, internet facilities and all new edition books purchase every year.
- All laboratories i.e. Chemistry, Physics, Botany, Zoology, Computer are available with all the resources required for faculty and student.
- ❖ Most of the research related facilities like chemicals, electronic equipments

Microscope, models, Software and Computer facilities and Internet facilities are provided to the student during their academic project tenure under the supervision of concerned faculty.

The detail information of all equipments available in institute is as follows:

Department	Equipment/Research Facilities	Efforts for optimal use		
Botany	Autoclave, Camera Lucida, Colorimeter, AC., Hair Dryer, Student Microscope, Micrometer Occular Graph, Stage Micrometer, Soil Testing Kit, Centrifuge Machine, Water Testing Kit, Hot plate, Slide Cabinet, Pocket Balance			
Chemistry	Electronic Digital Potentiometer , Conductometer, pH-meter, Photoelectric Electronic Digital Colorimeter , Infra Red Lamp, Electronic Electronic Balance, Visible Spectrophotometer, Digital Oven, Rotary Shaker, Vacuum pump, Heating Mantle, Microwave Oven, Magnetic stirrer, Flame Photometer, Serological Water Bath , Centrifuge Machine, Silver electrode, Glass electrode, Platinum electrode, Refrigerator, UV chamber .	After institute hours, teachers and students engage themselves in their research work.		
Computer Science	Computers, Printer, Scanner, Inverter, Server, Internet connectivity, e-journals, e-databases, etc.	After institute hours, teachers and students use these facilities for research work		
Library	Reference Books, Journals, e-journals, Printout facilities, reprography, Internet facility ,etc.	Display on website, class notice, display on notice		

		board, new arrival section, etc.
Physics	AC Voltmeter, Ammeter 0.5A, Analyser, Bar Pendulum, Battery of 2 Volt, Battery of 9 Volt, Bread Board, Cathode Ray Oscillator (CRO), Circuit Board, Contilever, Decade of capacitance box, Decade of Resistance box, Digital Multimeter, Disc, DMM Philips, Earphone, Extension Board, Function generator Galvanometer, H.T. Generator, Katter's Pendulum, Lamp & Scale, LCRQ meter, Microprocessor train kit (Power supply), Milliammeter, Multimeter, Optical Bench, Post Office box, Potentiometer, Power Supply S.T. 4060, Set of tuning fork, Spectrometer optical bench, steel disc, Stop Watch Digital, Surface Tension, Variable Power Supply, Micrometer SC-0,1000u, Resistance boxes, Rheostate, Sanwa P.3 Multimeter, Table Lamp, Telescope with stand, Thermocouple, Travelling microscope, Vernier Calliper, Voltmeter, Weight, Spectophotomer	After institute hours, teachers and students use these facilities for research work
Zoology	Cyclomix, Slide Cabinet, Variable Auto, Micro pipette 20u to 104 u, Overhaed Projector (OHP), Student Microscope	After institute hours, teachers and students use these facilities for research work

• Such conductive environment encourages/ motivate the staff and student to take a forward step to pursue research in their relevant interests. The institute has a well- stocked library which includes latest syllabi as well as reference books of all relevant subjects and disciplines and the institute is always eager to purchase new edition of books and journals every year.

## 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.

Yes

- As a college is covered under 2f & 12b of UGC Act, research grants has been received under UGC XI th, and XII th plan for the purchase of equipment and library resources.
- ➤ College received UGC grant for minor research project as well
- ➤ College received grant for minor research project from University of Mumbai.
- From academic year 2014-2015 college received research grants for development of S & T (Science and Technology) under DST-FIST scheme 2014 from Central Government, New Delhi for the purchase of equipment and library.
- ➤ The institute received Research grant of Rs.17,00, 000/- (seventeen Lacs.) from DST-FIST scheme 2014 to strengthen the research facilities with respect to Equipments, Instruments, Computers and Networking.
- ➤ In academic year 2015-16 Institute is selected by MPCB (Maharashtra pollution control Board) to measure air pollution due to chemical and pharmaceutical Industries in Raigad District. MPCB has sanctioned grant of Rs 8,00,000/- to purchase equipments and remuneration per year.

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

College has been received a research grant from UGC and University of Mumbai to promote the research activities at our centre.

### **Minor Research Projects Ongoing**

Name of the Person	Name of the research title	Funding agency	Amount Sanctioned
Dr. S.D. Tupare	"Green synthesis and	University of	25,000/-
& Dr. S.S. Gurav	Pharmacological screeing of	Mumbai	
	6-(4-((E)-3 phenylacryloyl)		
	phenyl amino)pyridazin-		
	3(2H)-one & Their		
	derivatives"		
Dr. D.V. Bhagat &	Effective Synthesis of	University of	30,000/-
Dr. S.D. Tupare	Imidazole Derivativess: An	Mumbai	
	Important Synthon for the		
	Preparation of Biologically		
	Active Heterocyclic		
Dr.S.D.Patil &	An efficient green approach	University of	35,000/-
Dr. S.S. Gurav	for the synthesis	Mumbai	
	characterization and anti-		
	microbial screening of new		
	bioactive molecules.		

**Minor Research Projects Completed** 

Willor Research Projects Completed					
Name of the	Name of the research	Funding	Year	Amount Sanctioned	
Person	title	agency		in Rs.	
Dr. S.S. Gurav	Synthesis and biological	University	2013-2014	25000/-	
&	activity of	of Mumbai			
Dr. S.D. Tupare	benzodizepines				
Dr. D.V. Bhagat	To monitor the drinking	University	2011-2012 and	65,000/-	
	water quality for the	Grant	2012-2013		
	tribal villagers, Roha	Commission	(2 Years)		
	Tehsil				
Dr.S.D.Tupare	Synthesis and	University	2011-2012	20,000	
_	antibacterial activities	of Mumbai	(1 Year)		
of benzilidine					
	compounds				
Mrs.S.T.Morbale	Green approach to the	University	2012-2013 and	70,000/-	
	sustainable	Grant	2013-2014		
	advancement for the	Commission	(2 Years)		
	synthesis of				
	heterocyclic compound				

### 3.3 Research Facilities

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

### Research facilities are available to the faculty:

Institute has separate and specious laboratories for conducting research in the Department of Chemistry, Physics , Botany Zoology, Computer science and Information Technology. All Departmental laboratories are well equipped with chemicals ,equipments and departmental libraries and reading section.

The internet connectivity in campus to enable the faculty and students to review their academic as well as their research programmes. Following equipments and apparatus are available in the institute.

Sr. No.	Name of the Department	Name of the Equipment/ facilities
1.	Botany	Autoclave, Camera Lucida, Colorimeter, Hair Dryer, Student Microscope, Micrometer Occular Graph, Stage Micrometer, Soil Testing Kit, Centrifuge Machine, Hot plate, Slide Cabinet, Pocket Balance
2.	Chemistry	Electronic Digital Potentiometer , Conductometer, pH- meter, Photoelectric Electronic Digital Colorimeter , Infra Red Lamp, Digital Balance, Visible Spectrophotometer, Digital Oven, Rotary Shaker, Vacuum pump, Heating Mantle, Microwave Oven, Magnetic stirrer, Flame Photometer, Serological Water Bath , Centrifuge Machine, Silver electrode, Glass electrode, Platinum electrode, Refrigerator ,UV chamber, Turbidimeter, Ion exchange purifier, UV chamber.
3.	Computer Science	Computers, Printer, Scanner, Inverter, Server, Internet connectivity, e-journals, e-databases, etc.
4.	Library	Reference Books, Journals, e-journals, Printout facilities, reprography, Internet facility ,etc.
5.	Physics	AC Voltmeter, Ammeter 0.5A, Analyser, Bar Pendulum, Battery of 2 Volt, Battery of 9 Volt, Bread Board, Cathode Ray Oscillator (CRO), Circuit Board, Contilever, Decade of capacitance box, Decade of Resistance box, Digital Multimeter, Disc, DMM Philips, Earphone, Extension Board, Function generator Galvanometer, H.T. Generator, Katter's Pendulum, Lamp & Scale, LCRQ meter, Microprocessor train kit (Power supply), Millimeter, Multimeter, Optical Bench, Post Office box, Potentiometer, Power Supply S.T. 4060, Set of tuning fork, Spectrometer optical bench, steel disc, Stop Watch Digital, Surface Tension, Variable Power Supply, Micrometer SC-0,1000u, Resistance boxes, Rheostate, Sanwa P.3 Multimeter, Table Lamp, Telescope with stand, Thermocouple, Travelling microscope, Vernier Calliper, Voltmeter, Weight, Spectophotomer
6.	Zoology	Cyclomix, Slide Cabinet, Variable Auto, Micro pipette 20u to 104 u, Overhaed Projector (OHP), Student Microscope

## 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?

- ❖ College is recognized by UGC under 2(f) and 12(B) and the institute has planned to meet the requirements of researchers by use of UGC grants in the following manner:
  - > Purchasing required equipments.
  - > Purchasing necessary software's.
  - Purchasing reference books
  - Arranging workshop on preparation of research proposals and data analysis techniques.

- Utilizing fund from MPCB State Government of Maharashtra for research equipments and addition in infrastructure.
- Use of grants received from UGC, University, DST-FIST to update the laboratory equipments.
- ❖ Till date, the institution has made successful efforts to create research environment by:
  - > Developing well equipped and modern laboratories.
  - Developing well planned library with e-learning facilities.
  - ❖ MOU with other research institute for using their research facilities/ library facilities.

## 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, financial assistant is received from industries but some research grants has been received from University Grant Commission, DST-FIST, MPCB, University of Mumbai and Management of the College.

Sr.No.	Funding agencies	Research grant sanctioned	<b>Amount Received</b>
1	UGC(for MRP)	1,35,000/-	1,35,000/-
2	DST-FIST	20,00,000/-	17,00,000/-
3	MPCB	8,00,000/-	Yet to be received
4	University of Mumbai	1,35,000/-	1,35,000/-
	(for MRP)		

### Year wise purchase of equipments is given as follows:

Academic Year	Name of Instrument	Make	Quantity	Funding Agencies
2012-2013	pH meter	Equiptronics	01	UGC
	Conductometer	Equiptronics	01	
	Potentiometer	Equiptronics	01	
	Regulated Power supply	Equiptronics	01	
	Variable power supply	Equiptronics	01	
	Resistance box with brass	-	01	
	Sodium vapour lamp	-	01	
	Digital stop watch	Equiptronics	03	
	Student Microscope		03	
	Colourimeter	Equiptronics	01	
2013-2014	pH meter	Equiptronics	03	UGC
	Conductometer	Equiptronics	02	
	Potentiometer	Equiptronics	02	
	Colourimeter	Equiptronics	02	
	Centrifuge machine	Remi	02	
	Silver electrode	Equiptronics	04	
	Combined electrode	Equiptronics	05	
	Platinum electrode	Equiptronics	02	
	Digital multimeter	Scientech 4060	03	

	Signal generator	Scientech 4060	01	
	Student microscope	-	03	
	Dissecting microscope	-	01	
	Digital balance	Contech	01	
	Turbidimeter	Scientech 4060	01	
2014-2015	Variable power supply	Equiptronics	01	Rural Development
	Spectrometer	Equiptronics	01	Fund
	Signal generator	Scientech 4060	01	Management
2015-2016	Cathod Ray Oscillioscope	E.W.K	01	Management
	Spectrometer	Equiptronics	01	
	Potentiometer	Equiptronics	10	DST-FIST
	Conductometer	Equiptronics	09	
	pH meter	Equiptronics	09	
	Infra red Lamp	Philips	05	
	Heating Mantle -		05	
	Magnetic Stirrer	Galaxy	02	
	Microwave Oven	Samsung	02	
	Digital Balance	Contech	04	
	Spectrophotometer	Systronics	02	
	Digital Oven	Labline	02	
	Vaccum pump	Labline	03	
	Flame Photometer	Equiptronics	01	
	Rotary Shaker	Hally Instruments	01	DST-FIST
	Serological Water bath	Labstar	03	
	Centrifuge machine	Remi	02	
	Silver electrode	Equiptronics	06	
	Glass electrode	Equiptronics	06	
	Platinum electrode	Equiptronics	06	

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

- ❖ The library department has a provision of inter library loan services with J.S.M. College Alibag, C.K.T.College New Panvel, P.E.S. Bhausaheb Nene College Pen, D.G.Tatkare College Tala-Raigad.
- ❖ The institution facilitates with necessary letters and recommendations to the Faculty members for their reference work in other research laboratories and libraries to pursue their research work.
  - ❖ MOU has been signed for the use of Chemical Research Laboratory, Language Laboratory and Computer Centre with
- ❖ Gokhale Education Society, Arts, commerce and science college, Shrivardhan
- ❖ Nanasaheb Dharmadhikari Arts, Commerce, Science college, Kolad
- \* Rajiv Gandhi college, Vashi, Navi Mumbai.
- ❖ C. K. Thakur College, New Panvel
- ❖ J.S.M. College Alibag.
- ❖ D. G. Tatkare College, Mangaon,
- Bhausaheb Nene college,Pen
- G.M. Vedak College, Tala

College has also signed M.O.U.with Industries to enrich industrial exposure w.r.t industrial visits, campus interview and to arrange lectures for the students from the industrial experts.

- ➤ Reliance Industries NMD Ltd. Nagothane,
- > Sudarshan Chemicals Pvt. Ltd. Roha,
- > Supreme Petrochemicals Pvt Ltd.Amdoshi,
- ➤ Roha Dye Chem Pvt. Ltd Roha,
- ➤ Vidhi Dye Pvt.Ltd.Roha.
- > Sadhana Nitro chem. Ltd., Roha.
- > Rathi Dye Chem (P) Ltd, Roha,
- ➤ Nilicon Pvt Ltd.Roha,
- Aqua care Solution and Engineering Ltd. Roha
- ❖ College has also signed M.O.U.with CSR Unit of Reliance Industries, Nagothane and Primary Health centre Nagothane for medical services, Awareness programmes on health, Participation of students in National Programme like Pulse Polio Programme etc.
- ❖ For awareness and social programs, institute formed MOU with Local club such as Rotary club, Lion Club and ANIS, Nagothane

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

- ❖ INFLIBINET N- list data based subscribed from INFLIBINET Gujarat for e-books and e-journals. Around 25000 e-books and 3500 e-journals can be referred online through this programme.
- ❖ In the institute, library provides internet facility with bandwidth of 2.0 mbps
- ❖ Library has signed MOU with other colleges library to cater the information needs of the researchers.
- ❖ An open access journal such as DOAJ, Guttenberg Projects for free e-books has provided to faculty and students for reference work.
- OPAC is available in central library which facililates to search any books and references from any site in the institute.
- ❖ Barcode facility is available for issue -return purpose.
- ❖ List of research journals available in library.

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

Institute has separate and specious laboratories for conducting research in the Department of Chemistry, Physics , Botany Zoology, Computer science and Information Technology. All Departmental laboratories are well equipped with chemicals ,equipments and departmental libraries and reading section.

## \* Researches facilities developed / created by the research institutes in the collegeare as follows

Department	Equipment/Research Facilities	Efforts for optimal use
Botany	Autoclave, Camera Lucida, Colorimeter, AC., Hair Dryer, Student Microscope, Micrometer Occular Graph, Stage Micrometer, Soil Testing Kit, Centrifuge Machine, Water Testing Kit, Hot plate, Slide Cabinet, Pocket Balance	teachers and students use these facilities for research work.

Chemistry	Electronic Digital Potentiometer , Conductometer, pH-meter, Photoelectric Electronic Digital Colorimeter , Infra Red Lamp, Electronic Electronic Balance, Visible Spectrophotometer, Digital Oven, Rotary Shaker, Vacuum pump, Heating Mantle, Microwave Oven, Magnetic stirrer, Flame Photometer, Serological Water Bath , Centrifuge Machine, Silver electrode, Glass electrode, Platinum electrode, Refrigerator	After institute hours, teachers and students engage themselves in their research work.
Computer Science	Computers, Printer, Scanner, Inverter, Server, Internet connectivity, e-journals, e-databases, etc.	After institute hours, teachers and students use these facilities for research work
Library	Reference Books, Journals, e-journals, Printout facilities, reprography, Internet facility, etc.	Display on website, class notice, display on notice board, new arrival section, etc.
Physics	AC Voltmeter, Ammeter 0.5A, Analyser, Bar Pendulum, Battery of 2 Volt, Battery of 9 Volt, Bread Board, Cathode Ray Oscillator (CRO), Circuit Board, Contilever, Decade of capacitance box, Decade of Resistance box, Digital Multimeter, Disc,DMM Philips,Earphone, Extension Board, Function generator Galvanometer,H.T. Generator, Katter's Pendulum, Lamp & Scale, LCRQ meter, Microprocessor train kit (Power supply), Milliammeter, Multimeter, Optical Bench, Post Office box, Potentiometer, Power Supply S.T. 4060, Set of tuning fork, Spectrometer optical bench, steel disc, Stop Watch Digital, Surface Tension, Variable Power Supply,Micrometer SC-0,1000u, Resistance boxes, Rheostate, Sanwa P.3 Multimeter, Table Lamp, Telescope with stand, Thermocouple, Travelling microscope, Vernier Calliper, Voltmeter, Weight, Spectophotomer	After institute hours, teachers and students use these facilities for research work
Zoology	Cyclomix, Slide Cabinet, Variable Auto, Micro pipette 20u to 104 u, Overhaed Projector (OHP), Student Microscope	After institute hours, teachers and students use these facilities for research work

### 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: Nil
- \* Research studies or surveys benefiting the community or improving the services: 01
- ➤ Dr. V. S. N Raghavrao worked in MPEDA( Marine Products Exports Development Authority) has been involving in Raigad District- Fresh Water, Brackish Water and 1CZM.

### Research inputs contributing to new initiatives and social development

As mentioned above the institute provides major inputs to the researchers in the form of well-equipped laboratory, library facilities, e-journals facilities and financial assistance. Out of

these inputs, the students as well as the people of locality are taking initiative to utilize mainly the laboratory and library facilities. The outcomes of research are proved very helpful to the new researchers and society which is already elaborated above.

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? Yes,

• The proceeding of Interdisciplinary state level conference on Science for sustainable development are published in the international journal "Bionanofrontier" on 19 Dec 2016.

The Editorial board for the above publication is as follow:

Chairman	Principal, Dr. S.S. Gurav
Convener	Dr.D.V.Bhagat
Co-Convener	Dr.S.D.Patil
	Dr. V.S. Chavan
	Mr. V. S. Shinde
Members	Dr. V.S.N.Raghava Rao
	Dr.(Mrs.) Vallabhaneni Sarada
	Dr.S.D.Tupare

• Dr.V.S.Chavan: He is working as co-editor for Bio-nano Frontier, Research Journal published twice in year.

### 3.4.3 Give details of publications by the faculty and student:

**Dublication per faculty:-**

Sr.	Name of Faculty		Level		Total
No.		State	National	International	
1.	Dr. S.S. Gurav	01	02	04	07
2.	Dr. V.S.N.Raghava	01	18	8	27
	Rao				
3.	Dr.(Mrs.)	01	27	02	30
	Vallabhaneni Sarada				
4.	Dr.D.V.Bhagat	01	00	07	08
5.	Dr.S.D.Patil	01	06	09	16
6.	Dr.S.D.Tupare	01	01	09	11
7.	Mr. J.V.Patil	01	-	-	01
8	Mrs.P.N.Jyothi	01	03	-	04
9.	Dr.V.R.Jadhavar	01	03	03	07
10.	Dr. V.S. Chavan	05	02	01	08
11.	Mrs.S.V.Chaudhari	01	01	-	02
12.	Mrs.S.T.Morbale	01	00	03	04
13.	Mr.M.D.Shirsath	01	00	01	02
14.	Mr. V. S. Shinde	01	01		02
				-	
15	Mr.H. F.Jadhav	02	02	02	06
Total		20	66	49	135

**❖** Number of papers published by faculty and students in peer reviewed journals:(National / International)

_	,			
Sr.	Name of Faculty	Name of Student	No of	Level
No.			Publications	
1	Dr.S.D.Patil	Chaitrali S. Patil	1	International
2	Dr.S.D.Patil	Chaitrali S. Patil	1	National
3	Dr.S.D.Tupare	Gaurav S. Pawar	1	National
4	Dr.S.D.Patil	Jagdish Pathak	4	National
5	Mrs.Smita Morbale	Iram Mandlekar	1	National

- **❖** 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.)
- \* monographs'
- Chapter in Books
- Dr.V.S.N Raghav Rao -8
- Dr. D.V.Bhagat 2
- **❖** Books Edited
- **Dooks** with ISBN/ISSN numbers with details of published:

Dr. D.V.Bhagat has written two chapters inText book of Environmental and Industrial Chemistry for S.Y.B.Sc.with ISBN - 978-93-5149-325-9

- **&** Citation index
- SNIP
- SJR
- **❖** Impact factor- 2-3
- **♦** h-index

Table showing number of papers published by faculty as above

### 3.4.4 Provide details (if any) of

- **Research** awards received by the faculty :
- > Smita Morbale- Received first prize in poster presentation at state level inter discliplinary conference organized by A. P. Science college, Nagothane.
- > Jagdish Pathak- Received first prize in oral presentation at National level inter discliplinary conference organized by Dr. Nanasaheb Dharmadhikari college, Kolad.
- > Our student participated at university research festival and won prizes. The detail information is given below-

Level	Date and venue	Date and venue for university level	Title of the project	Name of the students
District level selected & presented at University	11/12/ 2013J.S.M College Alibag	08/01/2013 University of Mumbai	Using Banana Peels As the green energy source: Wealth fromWaste	Hafiz RumeezaRais     Thakur Viraj Vinayak
District level selected & presented at University level	J.S.M College Alibag	08/01/2013 University of Mumbai	Natural Indicators	1.Jana Vikarant Manoranjan 2 Kale SayaliAvinash

District level	11/12/ 2013	08/01/2013	Cow urine,key	1. Kartik Jain Pravin
selected &	J.S.M	University of	product for curing	2. PandharJidnyasa Sanjay
presented at	College	Mumbai	dermal diseases &	
University level	Alibag		blood disorder's	
8'thMaharashtr			1. Hafiz RumeezaRais.	
a State inter	18/1/2014	of Jalgagaon	As the green energy	S.Y.BSc.Roll No.235
University	North		source:	
Research	Maharashtra		Wealth from Waste	
Convention	University,			
(State Level)	Jalgagaon.			
District level	26/11/ 2014	03/12/2014	Development and	Miss Mandlekariram Amin.
selected &	K.E.S	03/12/2011	Study of Eco-Friendly	(F.Y.B.Sc.)
presented at	Anandibai		Herbal Mosquito	(1.1.B.Sc.)
university level	Pradhan		Repellent	
university level	Science		Repellent	
	College			
	Nagothane			
District level	26/11/ 2014	03/12/2014	Making of Herbal	Miss Nije C Johns C V IT
District level		03/12/2014	$\mathcal{E}$	Miss Nija.C.Johny S.Y.IT
selected &	K.E.S		Mosquito Repellent	ShriprasadBavarkar S.Y.IT
presented at	Anandibai		From	TrushnaPawar S.Y.IT
university level	Pradhan		ocimum Sanctum	
	Science		Leaves.	
	College			
	Nagothane			
District level	26/11/2014			AdhikariSafa Irfan T.Y.IT
selected &		27/12/2014	Techniques for spell	Aditi Nitin Terade T.Y.IT
presented at		A.C.Patil	and grammar check	
university level		college		
v		Kharghar		
District level	26/11/2014		Hacking and	RizwanSiloskar(F.Y.IT)
selected &		27/12/2014	computer security.	SurabhiDhamanse(F.Y.IT)
presented at		A.C.Patil	F	
university level		college		
		Kharghar		
University	15/12/2016	-	Aegle marmelos as	Miss Vaishnavi P. Kuthe.
omversity	R.T.C.C.S.		bio-catalyst for	171105 valolilla vi i . ixulle.
	College,		Knoevenagel	
	Kharghar		condensation	
<b>T</b> T • • ·	Miargilar	0.4/10/001		16: YY : 1
University	-	24/12/2016	Aegle marmelos as	Miss Vaishnavi P. Kuthe.
		Vaze	bio-catalyst for	
		College,	Knoevenagel	
		Mulund	condensation	

## Recognition received by the faculty from reputed professional bodies and agencies, nationally and internationally:

- > Dr. Sandesh Gurav is appointed as member of RRC committee ,University of Mumbai for subject of Physics
- > Dr.Shrikishan Tupare is appointed as member of RRC committee, Dr.Babasaheb Ambedkar Technical University Lonere, Raigad for subject of chemistry
- > Dr. V.S.Chavan is recognized as Ph.D guide in the subject of botany From University of Mumbai.
- ➤ Dr. D.V.Bhagat is appointed as member of syllabus committee for F.Y.B.sc., S.Y.BSc. and T.Y.BSc in subject Chemistry by the Board of studies, University of Mumbai.

- ➤ Dr. D.V.Bhagat is appointed as member of Paper setter committee for F.Y.B.sc. in subject Chemistry by the Board of studies, University of Mumbai.
- > Dr. D.V.Bhagat, Dr. S.D. Patil, Dr.Shrikishan Tupare has got recognization as University recognized PG teacher by University of Mumbai

### Incentives given to faculty for receiving state, national and international recognitions for research contributions.:

The institute offer provision of duty leaves –

- > To attend national, international conference/ seminar and exhibition related to research area.
- ➤ Institute felicitates the faculty for receiving state, national and international recognitions for research contributions.

#### 3.5 Consultancy

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

College has signed M.O.U. with Industries given below to enrich industrial exposure w.r.t industrial visits, campus interview and to arrange lectures for the students from the industrial experts.

- \* Reliance Industries NMD Ltd. Nagothane,
- Sudarshan Chemicals Pvt. Ltd. Roha,
- Supreme Petrochemicals Pvt Ltd.Amdoshi,
- \* Roha Dye Chem Pvt. Ltd Roha,
- ❖ Vidhi Dye Pvt.Ltd.Roha.
- Sadhana Nitro chem. Ltd., Roha.
- \* Rathi Dye Chem (P) Ltd, Roha,
- Nilicon Pvt Ltd.Roha,
- ❖ Aqua care Solution and Engineering Ltd. Roha

Other than the above, the institution is being in contact with alumni of the institute who are presently working in the Industries. Those students are also very helpful in arranging the placement camp and lectures on industrial issues. As per requirement, bio-data of the eligible students is also mailed to different chemical industries directly by the Institute.

Following table indicating number of student recruited by placement cell:

Sr.No.	Year	Name of Industry	No of Students present for written test	No. of students present for interviews	Total Number of Students Selected.	Name of students selected & joined
1	2012-13	Sadhana Nitro chem. Limited, Roha.	40	20	10	1.Mr.Ajay P. Konde 2.Mr.Prashant S.Mhatre 3.Mr.Parag M.Pawar 4.Mr.Pramod M.Naik 5.Mr.Satish D.Bhosale 6.Mr.Roshan R.Sanap 7.Mr.Chetan C.Shinde 8.Mr.Yogesh Y.Jadhav 9.Mr.Navin K. Bamugade 10.Mr.Sachin Z. Gaikar
2	2013-	Rathi Dye	25	21	08	1.Mr.Prashant V. Bhoir

	14	Chem (P)				2.Mr.Vishal V. Jangam
		Limited,				3.Mr. Pranay P. Konde
		Roha.				4.Mr.Dinesh D.Javarat
						5.Mr.Sanjay Deshmukh
						6.Mr.Bharat Y.Ladge
						7.Mr.Nitesh T.Lakisare
						8.Mr.Sumit H.Tawate
3	2014-	Aqua care	10	08	02	1.Mr.Rupesh G.Mengal
	15	Solution &				2.Mr.Dharmendra
		Engneering				Sharma
		Ltd. Roha.				
4	2015-	Aqua care	10	05	01	1.Susmit Shirke.
	16	Solution				
		&Engnee-				
		ring Ltd.				
		Roha.				

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

The institution has published its policy statement "AVAIL THE FACULTY OF EDUCATION IN THE DOWN TRODDEN COMMUNITY FOR DEVELOPMENT OF SOCIETY". In this line, the faculty members and students are directed to contribute to the society along with education. To meet the requirements.

❖ The institute has a policy of free access for promoting consultancy. All consultancy

however is provided free of cost and is non-remunerative.

As the institute is well known in the region, several institutes/individuals approaches the institute/faculty members for consultancy in educational fields, career options, Animal Husbandry & Dairying and its allied activities, Post Harvest management, Energy Conservation, Water analysis etc.

The faculty members visit the neighboring villages to consult the issues like dropout rate of students, drug addiction, various career opportunities to the wards, eradication of superstitions, Antiplastic drive, AIDS awareness, Save girl child etc.

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

- ❖ The consultancy services offered are voluntarily and non-remunerative.
- ❖ The staff is encouraged to utilize their expertise by making available them the financial assistance from the society.
- ❖ Appreciation letters are given by the Principal for extra ordinary contribution to the staff members.
- ❖ The institute helps by granting suitable leave to the concerned staff members.
- ❖ By giving free access to all faculty members in the institute to major instruments and resources for consultancy services.

Consultanonsy services in college:-

Sr. No.	Research Finding	Activity		Place
1.	Air Pollution Monitoring	To check Air quality		MIDC Roha
2.	Water Quality Analysis	Physical and	Chemical	Nagothane

		parameters		
3.	Soil Testing	Soil Health Card	Nagothane and Bhomoli	
4.	Fish Farming	Supplementary occupation for	Nagothane	
		farmers		
5.	Bio fertilizers	Organic farming	Nagothane	
6.	Save Electricity	Optimum use of Home	Aamdoshi	
		appliances,Use of Solar Energy and LED lights		

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

The institute promotes free consultancy services. Teachers of the institute offer following free consultancy services.

Career guidance and counseling consultancy to the students of college and junior college.

Sr. No.	Activities	Date	Resource Person	Beneficials
1	A lecture on- Staff Selection Commission exams and Filling of examination forms	21 <sup>st</sup> October 2012	Mr. Suhas Patil Custom & Excise Officer, Thane	F.Y./S.Y. & T.Y.B.Sc. Students
2	An Employability Assessment test	24 <sup>th</sup> & 25 <sup>th</sup> August 2012	Mr. Abhinash Kumar, the technical support executive from aspiring mind,Delhi.	T.Y.B.Sc. Students
3	A workshop on M.P.S.C., Staff Selection Commission exams and Banking examinations	02 <sup>nd</sup> Feb. 2013.	Mr. Suhas Patil- faculty of National Academy of custom excise and Narcotics, Mumbai.	T.Y.B.Sc. Students
4	A lecture on I become an IAS officer.	26 <sup>th</sup> March. 2013	Mr. Prof Dr.Nareshchandra Kathole. Director IAS academy Amravati.	S.Y.& T.Y.B.Sc. Students
5	Workshop on How to study the Staff Selection Commission/ M.P.S.C exams & Filling of Application Form	29 <sup>th</sup> July 2013	Mr. Suhas Patil- faculty of National Academy of Custom, Excise and Narcotics, Mumbai.	F.Y. S.Y.& T.Y.B.Sc. Students
6	A Seminar on "Filling of Railway & BARC exam Application Form"	31 <sup>st</sup> August 2013	Mr. Suhas Patil- faculty of National Academy of Custom, Excise and Narcotics, Mumbai.	F.Y./S.Y. & T.Y.B.Sc. Students
7	A workshop on Filling of Multitask Staff exam Application Form of Staff Selection	30 <sup>th</sup> Nov. 2013	Mr. Suhas Patil- faculty of National Academy of Custom, Excise and Narcotics, Mumbai.	F.Y./S.Y. & T.Y.B.Sc. Students

	Commision			
8	A lecture on How to prepare for various competitive examinations	23 <sup>rd</sup> Dec.2013	Smt.Rekha Sathe, L.M.C Member of K.E.S.APScience college Nagothane & Visiting Faculty of Chanakya Mandal, Pune.	T.Y.B.Sc. Chemistry Comp. Sc & I.T. students
9	A Lecture on How to prepare and filling of Combined Graduate Level and Combined Higher Secondary Level Examinations	25 <sup>th</sup> Jan.2014	Mr. Suhas Patil- faculty of National Academy of Custom, Excise and Narcotics, Mumbai	F.Y./S.Y. & T.Y.B.Sc. Students
10	A lecture on "How to Prepare & Filling of Application Form of Staff Selection Commission Exam 10+2 Level?		Mr. Suhas Patil- faculty of National Academy of Custom, Excise and Narcotics, Mumbai.	F.Y./S.Y. & T.Y.B.Sc. Students
11	A workshop on "General Information and Preparation of Preliminary exams of M.P.S.C."	23 <sup>rd</sup> August 2014	Mr.Pravin R.Mundhe,Section Officer,Mantralaya,Mumbai	T.Y.B.Sc. Chem. C.S. & I.T.Students
12	Educational Fair 2014-15	on 27 <sup>th</sup> November 2014	KES A.P.Science College, Nagothane.	300 Students From nearby area.
13	A workshop on Filling of Application Form of Staff Selection Commission Exam 10+2 Level and Combined Graduate Level Exam	16 <sup>th</sup> July2015	Mr. Suhas Patil- faculty of National Academy of Custom, Excise and Narcotics, Mumbai.	F.Y./S.Y. & T.Y.B.Sc. Students
14	A lecture on "Career awareness Programme"	09 <sup>th</sup> September 2015	Prof. Sherin Thomas, In-charge Director, Yadavrao Tasgaonkar Institute of Management Studies and Research, Karjat.	F.Y./S.Y. & T.Y.B.Sc. Students
15	A workshop on How to Prepare for MBA entrance examination and opportunities in Management studies.	11 <sup>th</sup> December 2015	Mr. Kakade Sir, Head, Department of Management Studies, P.N.P.College, Alibag.	T.Y.B.Sc. Students
16	A lecture on How to fill the application forms for BARC examination and its preparation?	12 <sup>th</sup> March 2016	Mr. Suhas Patil- Ex.Assistant commissioner and faculty of National Academy of Custom, Excise and Narcotics, Mumbai.	M.Sc. students
17	DST inspire lecture	4 <sup>th</sup> Feb 2017	Prin Dr.S.S.Gurav	Junior college students of

				Raigad district
18	DST inspire lecture	5 <sup>th</sup> Feb 2017	Dr.V.S.N.RaghavRao	Junior college
	_		-	students of
				Raigad district
19	A Lecture on career	15 <sup>th</sup>	Mr.Umesh B. Patil-	T.Y.B.Sc
	guidance.	March2017	Ex-Tehsildar Murud, District supply	Students
			officer ,Raigad.	
20	University of	2 nd March	Mr.Sanjeev S. Karpe	UG,PG
	Mumbai Oration	2017	Founder director	students
	Series lecture.		KONBAK,Maharashtra.	

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?

The entire consultancy provided by the institute is free of cost and it is non-remunerative.

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

- 3.6.1 How does the institution promote institution-neighborhood-community network and student engagement, contributing to good citizenship, service orientation and holistic development of students?
- ❖ Programme of "Raksha Bandhan" is organized by the institute girls students for police officers.
- Extension activities of the institute are listed in the prospectus itself. Institute organized welcome party to the first year students and farewell party to last year students.
- ❖ NSS Programme Officers, Incharge of DLLE, WDC and Cultural Activities gives information of the extension activities.
- ❖ Students are motivated to participate in extension activities through poster displays, lectures, skit etc. explaining its significance for self development and contribution towards social cause.
- ❖ NSS and DLLE Volunteers are awarded with 10 grace marks.
- ❖ Teachers are also motivated to participate in Extension Activities, NSS and Women Development cell. Programme Officers of such units are appointed by considering their potential and interest.
- ❖ To inculcate the moral and cultural values in students, the Institute arranges the Orientation Programme by expert for N.S.S. student.
- ❖ National integration is inculcated amongst students by observing "Mission Manvata Rally", "Constitution Day", "Surkasha Saptah" "Jagar Janivancha", "Voting Awareness Campaign" programmes.
- ❖ Institute and Local citizens collectively arrange the Marathon Rally every year to increase the relations with society.
- Clean India Campaign.
- ❖ Police Mitra at Ganpati Festival and Local Elections

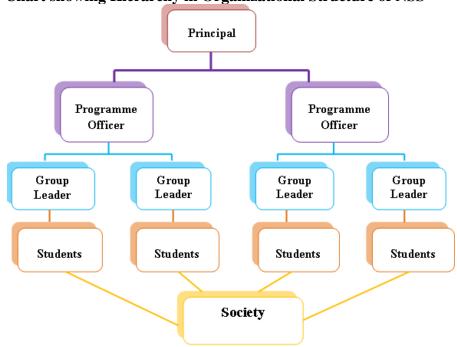
NSS and various Associations play an important role in developing community network and engaging the students in their holistic development to make them good citizens to discharge social obligations by organizing following programmes:

Sr. No.	Particular	Quantity	Sr. No.	Particular	Quantity
1	Bandhara- Bund	06	6	Road Repair	20 (5 KM)
2	Plantation	600	7	Road construction	1(0.5)
3	Toilet Blocks	02	8	Rod Safety Drive	12
4	Soak pits	25	9	Cleanliness Drive	15
5	Compost pits	01	10	Street Plays	25
6	Blood grouping (Hemoglobin and Elisa test)	150/yr	11	Blood donation Drive	50 bottle/ yr
7	Yoga workshop by Wellness Management	03	12	Self Defense programme for girls	02
8	Self employment programs for girls	03	13	Anti-addiction programs	10
9	Monitory support to mentally retarded and physically handicapped children	01	14	Pulse polio immunization programme	02/yr

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

In this institution, various Associations are formed including NSS, DLLE,WDC etc. The main object behind this is to involve 100% students participation in various social activities to make them responsible citizen. Accordingly, the mechanisms are developed to maintain consistency in social activities. The mechanisms are:

### Chart showing Hierarchy in Organizational Structure of NSS

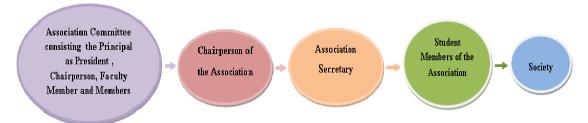


The above components of mechanism undertake the social and other activities at:

❖ Local level activities as per the directives by Principal and Program Officers.

- ❖ District level activities as per the directives by District co-ordinator & Area co-ordinator.
- University level activities as per the directives of University Co-Ordinate.
- ❖ State level activities as per the directives of State Liaison Officer.
- ❖ National representation as per the directive of State Liaison Officer.
- ❖ With the help of above mechanism, the students are tracked and attempts are made to involve them in social activities.

### ❖ A Formal Chart showing Organizational Structure of Associations in the institute



Thus, the above mechanism indicates that the Associations (as mentioned earlier) discuss and decide the policies and program at committee level. A committee prepares Master Plan to initiate student activities with the main objectives to promote social movements and to give benefits to the society. The Chairperson and the student secretary are at the key position to implement the programs with the help of students planned by committee. Ultimately, the students and society are awakened with research exhibition, Tree Plantation, Blood Donation, Street plays, programmer allies, Rubella vaccination program, poster exhibition, Clean India Campaign, Heritage Conservation, Shram Sanskar Shibir and Disaster Management.

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

Stakeholders perception has proved a valuable benchmark to improve overall performance and quality of the institution. Their views and perceptions are solicited through various interaction sessions conducted over the year with the following ways:

#### Student meetings:

The students meetings are called frequently at departmental level (class room meetings) as well as institutional level (open house meeting) and students are asked to give suggestions.

### **Parent meetings:**

A separate committee is formed to organize parent meetings once in a semester. The parents are requested to give their valuable suggestions in respect of students" performance, teachers" performance, college timing, problems of ward, problems of transportation, etc. The committee members prepare and maintain records of attendance, suggestions, complaints, favorable remarks, etc. These points are submitted to the Principal and Management in a report form. Meanwhile measures are initiated to implement suggestions and resolve complaints for which action plan is prepared.

#### **Student Feedback:**

- The institute has a provision to take students" perception on the overall performance and the quality of the institutions by two types of feedback forms.
- In the first type of feedback form, the students assess the performance of teacher at 10points scale i.e. on the basis of teaching aptitude, subject knowledge, teaching style, communication skills, sincerity, use of ICT tools and overall performance, etc.
- In the second type of feedback form, the students measure infrastructural facilities, administrative set up and classroom conditions, laboratory etc. This includes infrastructural facilities, timetable, library services, co-operation from teaching and non-teaching staff,

cleanliness of institute campus, co-curricular and extra-curricular activities, discipline and the cultural environment of the college, sports, NSS /DLLE, student research etc.

#### **Staff Feedback:**

The staff members of the institute fill up feedback forms which include the services provided by the institute, the extension of financial support, motivation for curricular, extra-curricular activities, academic activities and administration aspects.

#### **❖** Alumni Feedback:

The alumni instigated to give their valuable suggestions and support to improve performance in informal manner.

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 institution plan and organize its extension and outreach programs as follows:-

#### NSS Unit:

The NSS units of the college, treading on the theme of "Not Me But You".It plans and organizes the following extension and outreach programmes:

The unit has been adopted a needy village for at least 3 yrs.( e.g. In last 3 year our adopted village is At Post: Aamdoshi, Tal- Roha.) where NSS residential camp is organized during winter break (7 Day Camp) every year.

- Various Orientation Programmes are arranged on different social causes such as Save Electricity Programme, Water Conservation, Literacy, Road Safety Programme, etc.
- 250 students are enrolled for N.S.S (National Services Scheme) for performing various social activities. i.e. in terms of Blood Donation Camps, Extension Lectures, Skill Development Programmes, Construction of Bandhara, Plantation, Toilet Blocks, Soak pits, Compost pits, Road Repair, Road Construction etc and Yoga workshop, Self employment programs for girls, Road Safety Drive, Cleanliness Drive, Blood Donation Drive, Blood Grouping
- (Hemoglobin and Elisa test) Anti-addiction Drive, Pulse Polio Immunization Programme and Self Defense etc.
- The institutes has three NSS units working under the guidance of Programme Officers Dr.
   S. D. Tupare, Mr. V. S. Shinde & Mrs. P.N. Jyothi are constantly engaged in making a difference in the quality of lives of the villagers
- Students are enrolled from B.Sc. Chemistry , B.Sc. I.T. and B.Sc. Computer Science programs.
  - A "Note-books Collection Drive" is organized every year where in volunteers collect and distributes un-used notebooks to the underprivileged section.
  - ➤ The NSS unit of the college works in collaboration with Public Health Centre, Nagothane for Eradication of Polio under Pulse Polio immunization programme.
  - ➤ Volunteers continuously strive to spread environment awareness about the need for saving water, electricity and to make the Earth a better place to live in.
  - ➤ To create awareness among people about AIDS, Campaigns are annually organized on the occasion of World AIDS Day on 1st December every year in association with CSR unit of Reliance Industries Ltd , Nagothane.
- ❖ The volunteers engage in various creative activities such as poster making to convey the impact, the causes of AIDS and the precautions that should be taken by the public. The Red-Ribbon which is a symbol of AIDS awareness are distributed every year too

#### **Outreach Activities**

- Career guidance and counseling consultancy to the students of surrounding schools.
- ➤ Bio fertilizer consultancy to the farmers.

- **>** Botanical plant identification program by Department of Botany.
- Health and hygiene consultancy to the villagers especially to promote awareness about Dengue and Malaria.
- Save electricity consultancy is made available by NSS Department.

#### **Career Guidance and Placement Cell**

#### **Budget expenditure:**

Programmes	2012-13	2013-14	2014-15	2015-16
NSS	120000	120000	120000	120000
DLLE	5000	5000	5000	5000
WDC	5000	5000	5000	5000
Cultural	15000	15000	15000	15000
CG & PC	10000	10000	10000	10000

#### **Activities and Impact:**

Sr. No.	Dept./ Associations	Activities	Impact on studies
1	NSS	Clean India Campaign, Road Safety Programs, Self Defense program for girls, Personality development lectures for the students, Yoga practice, Tree plantation, Police Mitra at Ganpati Festival	Inculcation of social and moral values, dignity of labour, sense of coordination and cooperation, leadership qualities, personality development, sense of Equality and respect to poor and villagers
2	WDC	Gender sensitization programs, Self employment, Development skill	leadership qualities, personality development, sense of Equality and respect to poor and villagers
3	Cultural	Participation in the Intercollegiate and University Level Youth Festival, Workshop on Youth Festival, Participation in the Intercollegiate Elocution and Debate Competition	Team spirit, Exposure to various Competitions, Motivation to develop hidden skill, Understanding various art forms

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?

- ❖ Information is given through the institute magazine, prospectus, institute website, etc.
- ❖ The orientation lecture is given to the new comers by the Principal and Programme Officers / Co-ordinators of the associations where the extension activities are explained to the students in detail.
- ❖ The teachers of the college convey the information and motivate the students to participate in extension activities such as NSS, DLLE and WDC.
- ❖ Wide publicity mentioning multi-dimensional benefits after joining the particular activity is given through posters, skits organized by senior students to attract good and deserving students.

- ❖ The faculty members have been assigned the role of Chairperson for different associations by the Principal.
- The teacher conducts extra lectures to those students who have missed lectures / practical's due to participation in extension activities.
- The institution grants duty leave to the teachers for the involvement in the extension activities.
- ❖ The institute gives the prizes to the achievers for their Achievements in extension activities.

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?

#### **\*** The surveys are conducted frequently by the faculty members in respect of:

- ➤ Water quality.
- ➤ Soil Quality
- ➤ Bio fertilizer

#### **\*** The NSS volunteers undertake the surveys on:

- ➤ Socio-economical Survey
- > Under privileged section of society
- ➤ Literacy rate
- > Demographic Composition.
- > Save electricity awareness.

## Research and Extension work for the benefit of under privileged and vulnerable section of society:

- Three days 'self employment workshop on tailoring' for girl students
- > One day workshop on 'Sexual Harassment' by Adv. Smt. Kishori shinde and Adv. Sonal Iain
- ➤ One day Workshop on 'Safety of today's youth' was organized and DYSP. Dr. Anita Jamadar Lady Police Officer was available as resource person .similar type of workshop was organized by API Mr.Balasaheb Darekar and PI.Mr. Sampatrao Bhosale.
- > Smt. Rekha Sathye of Chanakya Mandal was invited to guide the girls students of college on "Carrier Guidance".
- ➤ One day workshop on Self Employment skill development programme "Making of artificial flowers" by Mrs. Neena Begumpure Assistant Art teacher, from Reliance Petrochemical School, Nagothane and Miss Mayuri Shinde, Assistant Professor of our college
- ➤ One day workshop on Self Employment skill development program me "Art of Weaving Bags" by Mrs Manali Sahastrabuddhye
- > The distribution of cloth bags prepared by NSS volunteers to the women of Ramnagar, Jogeshwari Nagar ,Nagothane in the Haldikunkum Programme for the Anti-plastic awareness in the society.
- ➤ A Speech on Beat Martial Art is arranged by B. A. Darekar, PI Nagothane Police Station to the girl students for their Self defence.
- ➤ On the occasion of "International Women's Day" Adv. Sonal Jain and Adv. Kishori Shinde are invited to discuss the social issues, constitution and self-defence. The girls students and lady teachers were felicitated by the invitees.
- ➤ Under privileged and vulnerable students are given support in studies by scholarships and allowing them to pay their fees in installments.

- ➤ The informal surveys prepared during the admission process for each academic year are utilized to earmark students who need, financial support and to ensure social justice for students from the underprivileged and vulnerable section 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 have provided exposure to the community in the direction of protection of girl child, health and hygiene environmental conservation among other vital issues of community interest

#### Objectives:

- > To inculcate the importance of social and ethical values
- ➤ To develop the leadership qualities.
- To realize social responsibility for being a good citizen of a country.
- > To make students capable of identifying serious social problems, its impact and proposing solutions for the same.
- > To increase the interest towards research.
- > To prepare students for disasters.

#### **Expected outcomes:**

- ➤ Leadership qualities.
- ➤ Management skills.
- > Social awareness.
- > Personality development.
- > Developing team spirit among the students.
- > To adapt with various situations in professional and personal life.
- ➤ Different sections of society are benefited through various social programs Under taken by the institute.

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?

A continuous support with Sarpanch, respectable personalities and parents of students from different villages through their involvement in institute function, programs and cultural activities by invitation which helps us to communicate and interact with villagers and ultimately results in community development.

- ❖ The institution is roping in community to actively participate in all the extension activities. This has contributed to both community −institution networking and development of institution.
- ❖ The local villagers are initially consulted and the youth of the villagers are made to involve in all NSS activities, such as road construction and temporary water Bandhara.
- ❖ Extensive local participations are witnessed during tree plantation, blood donation, etc. The alumni association is also involved in all these extension activities.
- ❖ The institution has taken the initiative to spread awareness in the society about social and health problems like female foeticide, superstitions and blind beliefs, national integration, dowry system, environment protection, consumer protection awareness, anticorruption, HIV awareness, anti-tobacco and cleanliness awareness, etc.

Sr.No.	Name of Institution/ Community	Activity	
	with which the institute has		
	collaboration		
1	Lions club, Nagothane	Personality Development	
		Health checkup	
		Eye checkup camp	
2	Laxmi trust, Panvel	For cataract operations	
		To provide glasses to needy	
2		persons	
3	Sane Guruji Rashriya Smarak	Varsharang	
	trust, Wadghar- Mangaon	Kavya Sandhya	
		Tree Plantation	
		Elocution	
		Self defense	
_		Sky reading	
4	Civil Hospital Blood Bank,	Blood Donation camp	
	Alibag- Raigad	Hemoglobin checkup	
		Blood group chekup	
5	Primary health center, Nagothane	Health and hygiene	
		Pulse polio immunization	
6	Maharashtra Andhashradha	Scientific Attitude	
	Nirmulan Samiti(MANIS), Raigad	Snake science	
		Women program scientific	
		experiments	
7	Police station, Nagothane	Road safety programs	
		Special police volunteers	
		police rising day	
		Shantata – Dakshta Committee	
_		Weapon exhibition	
8	Grampanchayat, Nagothane	Cleanliness drive	
		Sanitation	
_		Swachch Bharat abhiyan	
9	SOBATI Socio- Cultural	Yoshodhabai Phadake scholarship	
	Institution, Pen-Raigad	Medical treatment	
		Save electricity campaign	
10	Reliance Industries Medical Unit,	HIV-AIDS program	
	Nagothane	HIV test	
		Health awareness program	

## 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.

The institution has constructive relationships with other institutions of the locality, such as:

SR.	Constructive Relationship of Institution with other Institution from Locality	
No.		
1	Sane Guruji Rashriya Smarak trust, Wadghar- Mangaon	
2	Civil Hospital Blood Bank, Alibag- Raigad	
3	Primary health center, Nagothane	
4	Maharashtra Andhashradha Nirmulan Samiti(MANIS), Raigad	
5	Police station, Nagothane	
6	Grampanchayat, Nagothane	
7	SOBATI Socio- Cultural Institution, Pen-Raigad	
8	Reliance Industries Medical Unit, Nagothane	
9	Lions club, Nagothane	
10	Laxmi trust, Panvel	
11	Taluka Magistrate office, Roha	
12	Panchayat samiti, Roha	
13	District Disaster Cell, Raigad	

## 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.

Sr.No.	Year	Award	Institute	
1	2012-13	First rank in Street Play at District level.  WDC department, Universit Mumbai.		
		Second rank in Slogan & poster at District level.	WDC department, University of Mumbai.	
		Participation in Street Play at University level.	WDC department, University of Mumbai.	
		First Prize in Poster competition on Road Safety at District level	Traffic police, Raigad.	
		Appreciation for Street Play on Save Girl Child	Police station, Nagothane	
2	2013-14	Third Rank in Road safety Program at District level	Y Traffic police, Raigad.	
		<b>Suvarna Sanman</b> award 2013-14 at District level	Social organization, Pen Dist. Raigad	
3	2014-15	Felicitation of programme officer Dr. S. D. Tupare, V. S. Shinde& Volunteers for their contribution in police station	Police station, Nagothane	

		activities		
Sr.No.	Year	Award	Institute	
4	2015-16	Third Rank in Avhan 2015-16	State level Avhan disaster	
		at State Level management camp organized		
			SRTM University, Nanded	
5	2016-17	Suraj Mhashalkar Third Rank in State Level Utkarsh Socio		
		Street Play	3	
			Savitribai Phule University,	
			Pune	

#### 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.

The institute has performed MOU with the following industries and colleges

- Industries-:
- ➤ Reliance Industries NMD Ltd. Nagothane,
- > Sudarshan Chemicals Pvt. Ltd. Roha,
- > Supreme Petrochemicals Pvt Ltd.Amdoshi,
- > Roha Dye Chem Pvt. Ltd Roha,
- ➤ Vidhi Dye Pvt.Ltd.Roha.
- > .Sadhana Nitro chem. Ltd., Roha.
- > Rathi Dye Chem (P) Ltd, Roha,
- ➤ Nilicon Pvt Ltd.Roha,
- > Aqua care Solution and Engineering Ltd. Roha
- Colleges-:
- ➤ Gokhale Education Society, Arts, commerce and science college, Shrivardhan
- Nanasaheb Dharmadhikari Arts, Commerce, Science college, Kolad
- Rajiv Gandhi college, Vashi, Navi Mumbai.
- > C. K. Thakur College, New Panvel
- ➤ J.S.M. College Alibag.
- D. G. Tatkare College, Mangaon,
- ➤ Bhausaheb Nene college,Pen
- ➤ G.M.Vedak College, Tala
  - 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.
  - ❖ The library department has a provision of inter library loan services with D.G.Tatkare College Tala-Raigad, J.S.M. College Alibag, C.K.T.College New Panvel, P. E. S. Bhausaheb Nene College Pen.
  - ❖ The institution facilitates with necessary letters and recommendations to the Faculty members for their reference work in other research laboratories and libraries to pursue their research work.
  - ❖ MOU has been signed for the use of Chemical Research Laboratory, Language Laboratory and Computer Centre with
  - ❖ Gokhale Education Society, Arts, commerce and science college, Shrivardhan
  - ❖ Nanasaheb Dharmadhikari Arts, Commerce, Science college, Kolad

- \* Rajiv Gandhi college, Vashi, Navi Mumbai.
- ❖ C. K. Thakur College, New Panvel
- ❖ J.S.M. College Alibag.
- ❖ D. G. Tatkare College, Mangaon,
- Bhausaheb Nene college,Pen
- ❖ G.M.Vedak College,Tala
- ❖ College has also signed M.O.U.with Industries to enrich industrial exposure w.r.t industrial visits, campus interview and to arrange lectures for the students from the industrial experts.
- ➤ Reliance Industries NMD Ltd. Nagothane,
- > Sudarshan Chemicals Pvt. Ltd. Roha,
- > Supreme Petrochemicals Pvt Ltd.Amdoshi,
- ➤ Roha Dye Chem Pvt. Ltd Roha,
- ➤ Vidhi Dye Pvt.Ltd.Roha.
- > .Sadhana Nitro chem. Ltd., Roha.
- Rathi Dye Chem (P) Ltd, Roha,
- ➤ Nilicon Pvt Ltd.Roha,
- > Aqua care Solution and Engineering Ltd. Roha

College has also signed M.O.U.with Primary Health centre Nagothane for medical services, Awareness programmes on health by college and Doctors. Participation of students in National Programme like Pulse Polio Programme.

# 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.

	Name of Department services etc.	A = ( = - 1 ( = = =	
Sr.	Name of Department	Activities	
No.			
1.	Prof. S. B. Datar, HOD Physics, JSM	Donated Marathi encyclopedia- Vishwakosh	
	college, Alibag		
2.	Mr. R.D. Pradhan, Patron	Donated Books	
3.	Mr. Deepak Sanghavi, KayVee	Donated water pump, Maintenance of lab	
	corporation equipment		
4.	Sudarshan Chemical Industries Ltd. Gas Chromatography equipment for demons		
5.	Sudarshan Chemical Industries Ltd.	Job Placement and Seminar on job training	
6.	Sadhana Industries Ltd.Roha-Dhatav	Job Placement	
7.	Rathi Dye Chem Industries Ltd.	Job Placement and Seminar on job training	
8.	Supreme Petrochemicals Pvt. Ltd.	Job Placement	

# 3.7.4 High lighting 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.

The institution has organized a state level interdisciplinary conferences on Science For Sustainable Development

- ❖ Dr. Rajan Rele, Associate Professor in Chemistry D.G. Ruparel CollegeMatunga-Mumbai
- ❖ Dr. M. M. Burondkar, Department of Agricultural Botany, Dr. B. S. Krishi Vidyapeeth Dapoli Such a eminent scientists/participants who really contributed to the conference organized by institute.

- ❖ A State Level Avishkar Research Convention in association with University Of Mumbai a state level Career Fair for the Junior and senior Colleges where Dr. Mrudul Nile Dr. Sunil Patil Director Student Walfare ,University of Mumbai were available to encourages researchers
- ❖ A State Level Workshop on revise syllabi of S.Y.BSc .Chemistry with BOS, University of Mumbai where Dr. S.B.Dharap Chairman BOS Chemistry, Dr Vikas Vaidya, Dr. Ulhas Pandit were available as resourse person
- ❖ A state level Workshop on revise syllabi of F.Y.BSc .Physics with BOS, University Of Mumbai where Dr. Nyayate Prof S.B. Datar were available as resourse person
  - 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 -
- ❖ Curriculum development/enrichment: Some topics in PG are covered in coordination with guest faculties from the colleges of University of Mumbai
  - > Dr.Meshram, University of Mumbai
  - Dr.Ramanna, University of Mumbai
  - > Dr.Deepak Mangaonkar, Mithibai College, Vile Parlay Mumbai

Dr. Harischandra Parbat, Department of Chemistry, Wilson College of Arts and Science, Mumbai.

- Dr.G.B.Sathe, Head Dept. of Chemistry, Dapoli Urban Bank Senior Science College, Dapoli.
- > Dr.Mayur Desai,Gogate College,Ratnagiri
- ➤ Miss.Nilam Mhatre,Department of Chemistry,University of Mumbai.

**❖** Internship/ On-the-job training:

Sr. No.	Institute/Industries/PHC	Number of MOUs
1.	Industries	9
2.	PHC	2
3.	Institute	8

- **Summer placement**
- **Faculty exchange and professional development**: 04
- **Research:** Four education institution.
- **Consultancy**: Five agencies.
- **Extension:** MOU with Multipurpose Hall Aaradhana Bhavan Nagothane for arrangement of curricular and extra- curricular activities.
- **Publication**: 02
- **Student Placement :** 21 students

Sadhana Industries Ltd. Dhatay- Roha

Rathi Dye Chem Industries Ltd. Dhatav- Roha

Aqua care Solution and Engineering Ltd. Roha

Sudarshan Chemical Industries Ltd. Dhatay- Roha

Supreme Petrochemicals Pvt. Ltd., Aamdoshi- Roha

- **Twinning programmes**: 03
- **!** Introduction of new courses: 03
- **Student exchange**: 08
- **❖** Any other

For the benefit of placement and industrial exposure, recently the college has interaction with various industries to form MOUs.

For the medical aids/ facilities college has interaction with Primary Health Centre, Nagothane to form MOUs.

For awareness and social programs, institute formed MOU with Local club such as Rotary club, Lion Club and ANIS, Nagothane

## 3.7.6 Details on the systematic efforts of the institution in planning, establishing and implementing the initiatives of the linkages/collaborations.

The institution finds gaps in the following areas in respect of linkages and collaborations:

- Curriculum development/enrichment
- ❖ Faculty exchange and professional development
- Introduction of new course
- \* Research committee of college takes initiative in linkages with research institutes
- ❖ LMC takes efforts for linkages leading to holistic development of student
- ❖ Extension activity units take efforts to initiate linkages with NGO and other agencies for community and social work.

Though the institution has limited scope in respect of enrichment and development, a proposed plan is prepared in respect of linkage and collaboration and submitted to our Society which is under consideration.

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

The institute has followed a formal and informal path for interaction and collaboration with other institutions. In near future, the institute has plan to establish and implement the collaboration and linkages with selective industries from MIDC Dhatav Roha such as Sadhana Industries Ltd. ,Rathi Dye Chem Industries Ltd. ,Sudarshan Chemical Industries Ltd. , Unichem Industries Vidhi Dyestuff , Nilicon Industries Ltd. and Supreme Petrochemicals Pvt. Ltd., Aamdoshi- Nagothane region. Extension programme has plan to form such types of collaboration with NGOs .Institute also plan conduct on/off campus placement camp with the above mentioned industries and others.

Institute has got opportunity to measure air pollution in Roha –District through MPCB Maharashtra so PG student are given opportunity to take training under the guidance of experts from MPCB Maharashtra.

## **Criterion - IV**

# INFRASTRUCTURE AND LEARNING RESOURCES





#### **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?

The policy of the Kokan Education Society Anandibai Pradhan Science College is to provide excellent learning environment for the students. Therefore, the policy statement is declared "Avail the facility of education to the down trodden community for development of Society". Accordingly, Very good infrastructure is developed with excellent teaching - learning facilities in rural and hilly area. Computer laboratory with broad-

internet facility. Band. hybrid library e-resources, reading room facility, seminar hall, well equipped laboratories and gymnasium, Infrastructure is upgraded to facilitate the newly introduced programmes as well as when revision in the curriculum of existing courses is done. Infrastructure of the institute is sufficient at present for running the institute. In this respect, the institution has a policy as individual departments prepare their requirements well in advance and submit to the Accountant of our institute to prepare a budget. The above requirements and their budget are placed before the Local Management Committee (LMC) who discusses the same in detail and accord the sanction. The copy of the approved budget is given to office Accountant. An office takes care of placing purchase order, supply and settlement of bills. When it is sanctioned, effective implementation is carried out through the Planning Board, and the Building Committee, if necessary.

#### 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 and research etc.

Sr. No.		Facility	Quantit y	Area In Sq Mt
	Building "A" Wing			
1	Ground floor	Classrooms with Dias 01	01	160
	Ground floor	Laboratories		
		Main Chemistry Laboratory	01	101.5
		Organic Chem. Laboratory	01	60.0
		Physical Chem. Laboratory	01	40.0

Sr.		Facility	Quantity	Area In Sq Mt
No.				
	Ground floor	Technology Enabled Learning		
	Ground noor	Spaces	01	50.6
		Computer Laboratory-1	01	13.5
		Server Room	01	10.0
		Specialized facility		
		Parking Area	01	30.0
		Botanical garden	01	200.
		Canteen	01	100
		Play Ground	01	2495.5
		Sports Room (Gymkhana)	01	30.0
		Ladies Common Room	01	32.
		Extra-Curricular Activities	01	70.0
		Generator room	01	11.0
2	First floor	Classroom 08	01	52.9
		<b>Technology Enabled Learning</b>		
		Spaces	01	49.3
		Computer Laboratory-2		
	First Floor	Specialized facility		
		Principal cabin	01	49.3
		NAAC Room	01	20.00
		Administrative Office	01	63.0
		Exam Room	01	56.0
		Staff Room	01	56.0
		Library with Reading Room	01	160.0
	Second Floor	Boys Common Room		
		Second Floor	01	19.5
	Building "B"			
	Wing			
	Ground Floor	Laboratories		
		Physics Laboratory	01	88.7
		Zoology Laboratory	01	81.4
		Botany Laboratory	01	58.7
	First Floor	Classrooms with Dias	02	
		Classroom -2	01	58.7
		Classroom- 3	01	55.8
		Special Facility		
		Seminar Hall	01	108.9
	Second Floor	Classrooms with Dias	04	
	2001	Classroom -4	01	58.7
		Classroom- 5	01	53.6
		Classroom- 6	01	53.6
		Classroom- 7	01	53.6
	1	O ANDREA O VALLE /		

## The institution has following facilities and equipments for Teaching – Learning &Research

Sr.	Equipment	Quantity
No.		
1	LCD T.V	07
2	Projector (Dell )	05
3	Computers	46
4	Laptop	10
5	Printer	07
6	Inverter	02
7.	UPS	06
8	Xerox Machine	02
9	Scanner	02
10	Digital Video Camera	01
11	CCTV Camera	10
12	Podium	02
13		02
13	Sound System Mixer	01
	Cord Mike	04
	Cordless Mike	02
	Speaker Box	04
14	Generator	01
15	Water Cooler with Purifier	02
16	Gas Cylinder	04
17	Gas Stove	01
18	Fire Extinguishers	04
19	Sanitary machine	01
20	<b>Botany Department</b>	
	Autoclave	01
	Camera Lucida	01
	Colorimeter	01
	Air conditioner	03
	Hair Dryer	01
	Student microscope	40
	Micrometer ocular graph	02
	Stage micrometer	03
	Soil testing kit	02
	Centrifuge machine Water testing kit	01 01
	Hot plate	01
	Slide cabinet	01
	Pocket Balance	02

Sr. No.	Equipment	Quantity
21	Chemistry Department	
	Analytical balance	01
	Ball & stick	02
	Conductivity bridge with	02
	cell, Conductivity meter	19
	Colorimeter	23
	Centrifuge machine	05
	Centrifuge machine handed	01
	Centrifuge head	01
	Combined glass	11
	electrode	01
	Distillation unit	10
	Digital balance	02
	Flame photometer	05
	Heating mantle	01
	Ion exchange	01
	Mc furnace	01
	Magnetic stirrer with hot	02
	plate	05
	Microwave oven	08
	Oven lab hot	02
	Platinum electrode	18
	Polarimeter	21
	Potentiometer with	01
	magnetic stirrer	01
	Ph meter digital	02
	Pocket balance	
	Rotary shaker	05
	Refrigerator	06
	Spectrophotometer	06
	Serological water bath	02
	Suction pump	01
	Silver electrode	01
	TDS meter	01
	Turbidimeter	01
	U.V.Chamber	01
		01
22	Physics Department	
	Ammeter 0.5A	01
	A. C. Voltmeter	02
	Cathode ray	02
	oscillator(CRO)	01
	Battery of 9volt	11
	Bar pendulum	07
	Battery of 2volt	02
	Bread board	02
	Contilever	02
	Microprossor train kit	02

	Disc	08
	Digital multimeter	02
	Extension board	01
	Earphone Earphone	10
	Galvanometer	01
	Multimeter	
		04
	Kafter pendulum	01
	Lamp & scale	02
	Milliameter	07
	Variable power supply	07
	Post office box	10
	Potentiometer	02
	Power supplyS.T.4060	04
	Stop watch digital	02
	Spectometer optical	03
	bench	03
	Function generator	02
	Steel disc	11
	Set of tuning fork	17
	Resistance boxex	02
	Rheostat	10
	Travelling microscope	02
	Telescope with stand	04
	Thermocouple	02
	Vernier calipers	04
	Voltmeter	02
	Micrometer DC-0-1000u	
	Micrometer BC 0 1000ti	01
Sr. No.	Equipment	Quantity
	Zoology	
23	Cyclomix	01
	Slide cabinet	01
	Variable auto micropipette 20u to	01
	Over Head Projector	01
	Student Microscope	10
	Glucometer	01
	Spyromonometer	01
	2 7	02
	Stage micrometer	
	Copper electrode	02
	Reference electrode	02
24	Library	
	Computer	04
	Scanner	01
	Seamer	
	Printer	01
		01 01
	Printer	
25	Printer	

Computers (Desktop)	35
UPS	01
Server	01
Router	01

#### **Class Rooms:**

The institute has well-furnished eight spacious class rooms with proper light arrangement and good ventilation. Six classes are equipped with LCD projectors with screens, comfortable benches with proper space distance between the benches and well illuminated.

#### **Seminar Hall:**

The institute has 01 seminar hall with capacity of 150 seats and equipped with LCD projector and screen, efficient sound system, Internet connectivity. The hall is regularly used to conduct seminar and conferences as well as programmes conducted by various committees.

#### Laboratories:

The Laboratory facilities created in the Departments are used to conduct regular practical classes as per the curricula and syllabi for the students. Institute facilitates teachers to conduct regular practical's during the session and University examinations. There are Laboratories in departments like Physics, Chemistry, Botany, Zoology, computer Science and Information Technology.

#### **Botanical Garden:**

The institute has well designed Botanical Garden of 200 sq.mt. area which is managed by Botany faculties with the help of class four employees and NSS volunteers. The students of botany make use of this garden to study plants and their importance in environmental conservations. The garden is also having a good collection of medicinal plants. Each plant is having tag indicating its common name, botanical name and family.

#### Specialized Facilities and Equipment for Teaching, Learning and Research:

The institution provides specialized facilities and equipments for effective teaching, learning and research such as:

- ❖ A well-equipped computer laboratory with LAN, separate server and internet facility for e-learning.
- Classrooms with the facility of LCD Projector with screen, Sound System ,dust free green board and proper size benches.
- ❖ An automated library and resource center is established at the first floor of A Wing. The specialized services provided by the library such as OPAC facility, Reprography service, e-resources and equipments for accessing online e-databases and informative reference sources.

- Seminar Hall with 150 seating capacity with big display screen, LCD Projector, sound system,
- ❖ Well-equipped laboratories with proper working tables and electrical points, Gas and water pipelines etc.
- b) Extra-curricular Activities: Sports, outdoor and indoor games, gymnasium, auditorium, NSS, NCC, cultural activities, Public speaking, communication skill development, yoga, health and hygiene etc.

In respect of effective conduct of extra-curricular activities, the institution has provided following infrastructural facilities.

#### **Sports:**

#### **Indoor Games**:

Sr No	Name of The Game / Facility
1	Table Tennis
2	Carrom
3	Chess

**Outdoor Game facility** 

Sr No	Name of The Game / Facility			
1	Volley ball / Throw Ball			
2	Badminton			
3	Kabaddi			
4	Cricket			
6.	Shotput			
7.	Disc Throw			
8.	Running			

#### **Gymnasium**

Sr. No	Facilities Available	No. of Units
1.	Station Machine	01
2.	Dumbbells	10

#### **Seminar Hall**

Sr. No	Infrastructure	Total Sq.ft	Capacity
1.	Seminar Hall	1089	150

#### **❖** National Service Scheme (NSS)

The National Service Scheme has 3 units of 250 students in the institute. All required means such as equipments, utensils, mats are provided as per requirement.

#### **❖** Cultural Activity

The students are encouraged by the faculty members to participate in the Youth festival of university and college. They are trained by eminent artists and provided with drapery for participations in the events like One act play, mono acting, singing, folk dances, street play, poster making, essay, competition etc.

#### **❖ Public Speaking: Communication Skill Development**:

The computer laboratory is made available and schedule is declared for communication skill development, where 30 computers are provided with LAN, separate server etc and students are guided for participation in debate, quiz, competition, power point presentation etc.

#### **❖** Yoga:

In multipurpose hall, the institution organizes Yoga practice for boys and girls. Yoga Day is celebrated on the occasion of International Yoga Day-21<sup>st</sup> June.

#### **Health and Hygiene:**

The institute has a very special concern for the health and hygiene of students, staff and other members. Separate toilet arrangement is available for boys and girls students. Proper arrangement of safe and cool drinking water is made available in the institute campus at two different locations (R.O. purified drinking water). First-aid boxes are available at Gymkhana and laboratory for the first aid treatment on emergency. The Primary Heath Centre is at a walk able distance from the institute. Students are accompanied by teacher in case of medical emergency to the primary health centre .The medical officers Dr. Netake & Dr. Shinde take care of such cases. The institution has hi-power vacuum cleaner for dusting purpose. The girls are provided with vending machine to get sanitary napkins and inclinator is available in girls common room for the disposal.

## 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).

Detailed Layout Plan of The College Infrastructure is as follows.

A Wing			
Ground Floor	Classroom 1, Main Chemistry Laboratory, Organic		
	Chemistry Laboratory, Physical Chemistry.		
	Laboratory,computer laboratory,server room, Sports		
	Room (Gymkhana),Ladies Common Room,		
	Career Guidance Cell, Generator room,		
	Extracurricular activity Room		
First Floor	Computer Laboratory-2		
Second Floor	Boys common room		
B Wing			
Ground flower	Physics Laboratory, Zoology Laboratory, Botany		
	Laboratory		
First Floor	Classroom 1,2 and Seminar Hall		
Second floor	Classroom 1,2,3,4.		

#### The details of the facilities which have been added are as under:

In the year 2014-15 the extension building of area 203 Sq mt consisting a laboratory at ground floor and principal cabin and laboratory at first floor has been constructed through the funding from the Konkan Education Society of Rs.3500000 Lacs and In the year 2015-16 the construction of New B wing building of area 650 Sq mt was completed through funding from the Konkan Education Society of Rs.12294803.It consist of three laboratories at the ground floor two classroom and one seminar hall at first floor and four classrooms at the second floor.

Year	Infrastructure	Amount
2012-2013	Maintenance of laboratories and furniture	160923
2013-2014	Maintenance of laboratories and furniture ,	158962
Year	Infrastructure	Amount
2014-2015	Development of chemistry Laboratories, Computer Laboratory in A Wing	213054
2015-2016	Development of Physics ,Botany, Zoology, Seminar Hall, and Five classroom in B wing	921424

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

The requirements of the physically disabled students are specially attended by their fellow students, NSS and DLLE volunteers and faculty members. Our drinking water points, toilets, laboratories etc. are on the ground floor of A Wing and B Wing for easy movement of physically disabled students. Institute has constructed Ramp at the entrance of the institute.

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

The institution has no provision till date for residential facilities of teachers and students.

#### ❖ Hostel Facility : Nil

- **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?
  - \* Regarding the provisions of health care, first-aid facility is available.
  - ❖ In case of emergency, the students and staff are taken to the nearby Primary Health Centre, Nagothane which is a distance of 300 meters.

# 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 common facilities available in the Institute are:

Sr. No	Description	Location	Area Sq.mt.
1.	IQAC (Internal Quality Assurance Cell)	Ground floor A wing	7.40
2.	Grievance redressal unit. Extra Curricular Activities Room	Ground Floor	9.10
3.	Counseling, Career Guidance Placement Cell Women development Cell NSS Room DLLE Room Cultural Association	Ground Floor	8.85
4.	Canteen	Ground Floor	17.10
5.	Safe drinking water facility	Ground floor A and B wing	
6.	Students common room (Boys)	Second floor A wing	9.98
7.	Students common room (Girls)	Ground Floor A wing	37.62
8.	Seminar Hall	First floor B wing	

#### **4.2Library 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 the Chairperson of the committee. The composition of the Library Committee of the institute is as follows:

#### **Library Committee Members:**

Prin. Dr. S.S.Gurav	Chairman
Mr. H. F. Jadhav	Secretary
Dr. V.S.Chavan	Member
Dr.D.V.Bhagat	Member
Miss.Sheetal Take	Member
Mrs.MeghaPadwalkar	Member

## The significant initiatives implemented by the committee to render the library, student/user friendly include:

- **...** Computerization of the library.
- Journal subscription.
- ❖ Internet services for both students and faculty.
- ❖ Library automation with library software (SOUL software).
- \* Ready Reference Services are provided.
- Availability of Reprographic facilities.
- Up gradation of reading room.
- ❖ Membership of INFLIBNET N-List.
- Computers have been provided to library.
- Increase in purchase of reference books.
- ❖ The committee gives guidelines for the procurement of costly books, e-journals, hardware and software necessary for the library.
- ❖ It ensures the availability of books on latest syllabi.
- ❖ The committee considers feedback from library users.
- ❖ Information on new arrivals is provided.
- ❖ The committee formulates development plans and recommends facilities for implementation.

#### 4.2.2 Provide details of the following:

Total area of the library (in Sq. Mts.), Total Seating capacity, Working days of the Library, Working hours (on working days, on holidays, before examination days, during examination days, during vacation):

1. Total area of the library	160 Sq Mts.
2. Total seating capacity	40
3. Working days of the library	Monday to Saturday
4. Working hours	8 Hours in all working days
5. On working days	8 Hours
6. On holiday	Closed
7. Before examination days	9 Hours (It extend on demand)
8. During examination days	9 Hours
9. During vacation	8 Hours

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.

#### **Procurement of the Books & Journals:**

As per the requirements of Departments and faculty, lists of text books reference books and journals are prepared and such lists are approved by advisory committee. The library procures these books and journals after cross-checking the availability of these in the library. In case copies are available but are not sufficient or not of the latest edition, procurement is done in consultation with the concerned faculty.

The amount spent on procuring new books, journals and e-resources during the last four years.

Library holdings		Year -1 2012-13	Ŋ	Year – 2 2013-14		Year – 3 2014-15	Year 2015-	
	Number	Total Cost in Rupees	Nu mb er	Total Cost in Rupee s	Number	Total Cost in Rupees	Number	Total Cost
Text books	156	571166		59288	48	51444	47	11431 5
Reference Books	1244		174		51		81	
Journals/ Periodicals	19	8000	15		21	10200	27	12595
e-resources e-journals	INFLIB NET N List Databas e	5000			INFLIB NET N List Databas e	5000	INFLIB NET N List Database	5000
Any other:								

## **4.2.4** Provide details on the ICT and other tools deployed to provide maximum access to the library collection?

Sr. No.	Item	Remarks	
1	OPAC	YES	
2	Electronic Resource Management package for e -journals	t INFLIBNET N-List Database	
3	Library Website	https://sites.google.com/view/apscnlib/home	
4	In-house/remote access to e- publications	Yes	
5	Library automation	YES	
6	Total number of computers for public access	3	

	Total numbers of printers for public	01
	access	
8	Internet band width speed	1.5 mbps
9	Institutional Repository	Library crated institution repository using D- Space digital library software
10	Content management system for e- learning	
11	Participation in Resource sharing	We have created membership with INFLIBNET-
	networks/consortia (like Inflibnet)	N-List database .

## 4.2.5 Provide details on the following items:

Sr.	Items	Statistics
No.		
1	Average number of walk-ins	45-50 (per day)
2	Average number of books issued/returned	25-30 (per day)
3	Ratio of library books to students enrolled	1:5
4	Average number of books added during	401
	last three years	
5	Average number of login to opac (OPAC)	30
6	Average number of login to e-resources	22
7	Average number of e-resources	165
	downloaded/printed	
8	Number of information literacy trainings	1/ year
	organized	

#### 4.2.6 Give details of the specialized services provided by the library.

Services Provided by library	Details	
Manuscript	Notes, Projects, Articles, etc	
Reference	Dictionaries, Encyclopedias, Directories, Map,	
	Newspaper Articles etc.	
ILL(Inter Library Loan	Yes Library provides internet library services	
Service)		
Information deploy mentioned	The library holdings are classified according to subject	
notification(Information	wise. The shelve list is displayed on the particular	
Deployment and Notification)	books rack. It helps for searching the books.	
	OPAC facility is also available for searching the	
	books.	
Download	Library provides computer with internet facility and	
	printer to take printout	

Printing	This service is provided by the library to the staff and	
	student.	
Reading list/Bibliographic	The library has publishers catalogues, shelve list etc.	
Compilation		
In-house/remote access to e-	e-journals, e-books and CD/DVDs are available for the	
resources	use.	
User Orientation and	Librarian provides Orientation to the first year students	
awareness	for the optimum use of library resource.	
Assistance in searching	Library staff provides assistance to the user for	
Databases	searching information, download and printout.	
INFLIBNET/IUC facilities	INFLIBNET-N-List database is subscribed for use of	
	e-resources for teaching-learning and research activity.	

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

The institute library supports faculty and students in the following ways:

- ❖ Library staff provides textbooks, reference books, journals,e-database, question papers and other resources based on the need of the staff and students.
- ❖ Library staff/Librarian provides assistance in locating required resources in the library or even online matters.
- ❖ Library staff provides reminders to the students and teachers about library deposits (i.e. books, journals, magazines or CD/DVD) so that records are maintained and resources are made widely available.
- ❖ Library staff enables the students, teachers and staff members to reserve books etc.
- ❖ Library staff provides reference as well as referral service to the staff and student in terms of ready range and long range reference services.
- ❖ Library staff also provides career related guidance to the interested students and suggest the books and made available the required books to the students.
- ❖ The library staff provides the list of publishers catalogues of various publishers to the teachers so that new and relevant books can be purchased in the library.
- ❖ The librarian considers and purchases the recommendations of faculty members as well as students.
- ❖ The library staff conveys to the faculty and student regarding new procurement by notice, by orally, by uploading list on website etc.

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

❖ The library is on the First floor of A Wing.For physical challenge person departmental library and Reading room facility has been provided at the ground floor.

- ❖ The library staff provides special help to them for their information requirements.
- First priority is given to them in library services.
- 4.2.9 Does the library get the feedback from its users? If yes, how is it analysed and used for improving the library services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analysed and used for further improvement of the library services?)

#### Yes.

- ❖ The library has installed suggestion box at the entrance of the library. Every month the suggestions are deliberated by advisory committee and acted upon. Quarterly interactive session is held by advisory committee with students to get feedback for improvement of library services.
- Feedback system has been introduced by the Institute to take the feedback from all the stakeholders about helpfulness of library staff and library services, where a student can put their grievances. It is very helpful to improve library services as per the demand of the staff and students.
- ❖ The separate feedback is taken from the student in the end of the academic year. The collected data is analyzed and action is taken to complete the demand.
- ❖ In the beginning of the session the students are taken to the library by the teachers to make them familiar to the different sections of library.

#### 4.3 IT 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) the computer and internet facility made available to the faculty and students on the campus and off-campus?

Sr. No.	Location	No. of Computers /Laptop	Configuration
1	Principal Cabin	01	Lenovo, 500 GB HDD, 4 Gb Ram
2.	Administrat ive Office	03	15" TFT IBM Pentium dual CPU@ 1.80 G.Hz. Processor, 3 GB RAM, 100 GB HDD, DVD RW 15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD 15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD
3	Library	4	15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD
4.	Examinatio n Department	01 Laptop 01 Computer	Dell, 4 Gb Ram, 500 Gb HDD, Windows 8, NVIDIA Graphic card, Wi-Fi, 3D display 15.6' 15" TFT IBM intel dual core CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW
5.	IT Department	01	Laptop-15' TFT IBM Pentium CPU@ 3.0 G.Hz Processor, 512MB RAM, 50 GB HDD, DVD RW

Sr. No.	Location	No. of Computers/ Laptop	Configuration
6.	Chemistry Dept.	01+01	Laptop -15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW PC-
7.	Botany Dept.	01	Laptop-15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW
8.	Physics Dept.	01	Laptop-15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW
9	NSS	01	Laptop -15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW
10	Gymnasium / Gymkhana	01	Laptop-15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW
11	Seminar Hall	01	Laptop-15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW
12	Computer Science Laboratory	15	15" TFT IBM Pentium CPU@ 3.0 G.Hz. Processor, 2 GB Ram, 50 GB HDD, DVD RW
13	Information Technology	20	15" TFT IBM intel dual core CPU@ 3.0 G.Hz. Processor, 512 MB Ram, 50 GB HDD, DVD RW

❖ Computer / Internet facilities available to faculty & students on the campus.

Computer-student ratio	1:10
LAN facility	All computers are connected with LAN
Stand alone facility	Yes
Licensed software	Yes (Windows 8)
Number of nodes/computers with	46
Internet facility	

- ❖ The Principal cabin, Administrative Office, computer labs, library in every department, teachers' common room has Internet facility.
- ❖ The institute has BSNL Broadband with 2.0 Mbps speed.
- ❖ Faculty members can access internet in their departmental rooms, library, and computer laboratory and in the teachers' common room.

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

- ❖ The institution intends to upgrade IT infrastructure and associated facilities by purchasing new hardware as well as software for different departments / offices / cells and to provide them with subject/research related solutions.
- The institute intends to upgrade the computers with latest configuration. There are plans to extend computer facilities.
- ❖ The institute has planned to upgrade the speed of the internet facility.

- ❖ The institute has planned to purchase Firewall Software for the security purpose.
- ❖ The institute has planned to add specialsoftware's related to research.

# 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 for last four years.

During the last four years procurement, up gradation and deployment were being done with the available funds in the institute. The amount spent on procurement up gradation, deployment and maintenance of the computers and their accessories during the last four years is as follows:

Provisions	2012-13	2013-14	2014-15	2015-16	2016-17
Procurement of the computer	5400	61500	256072	386895	259835
Up gradation of the computer	1500	2000	59500	41000	
Deployment of the computer	-	-	-	-	-
Maintenance of the computer	140568	101596	173995	146130	96750
Total Amount	147468	165096	489567	574025	356585

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

- For the teaching and presenting the lesson through power point presentation.
- ❖ The teachers liberally take help of the ICT resources to enrich their prescribed curriculum with the help of internet.
- Computers are available in the institute for student such as in the library, computer lab and each department.
- ❖ Through the available computers and internet the student accesses e-journals, e-books and other e-resources.
- OPAC facility is available in the library to find out the books.
- ❖ LCD Projectors are frequently used for teaching and learning process.
- ❖ The institution is planning to increase the usage of advance technology and to upgrade the more advanced ICT enabled teaching.
- ❖ Faculty members are provided with computers with internet facility for preparation of teaching/learning materials in their respective departments.
- ❖ The institute also has Seminar hall equipped with projector and computer with internet facility for screening the online videos.
- 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 center of teaching-learning process and render the role of a facilitator for the teacher.

#### Access to online Teaching-Learning Resources:

- ❖ Institute library subscribes e-database and provides access to available resources with the internet and computer facilities.
- ❖ Institute has institutional repository for accessing knowledge created and stored by the institute regarding teaching and learning process.
- ❖ The Computer lab provides technology-enabled learning spaces to the students and teachers help the students in this regard.
- ❖ Students prepare lessons and presentations through ICT tools.
- ❖ Students abundantly use ICT during their Students' seminar. Teachers help them in this regard.

#### **Independent Learning**

- ❖ Through the multimedia e-learning platform is provided by the institute, students can have independent e-learning experience. Our teachers help them to use the facility.
- ❖ The students browse on Google, YouTube etc. for novel ideas and study materials.
- ❖ Library website <a href="https://sites.google.com/view/apscnlib/home">https://sites.google.com/view/apscnlib/home</a> contains the link of other free e-resources , e-books, notes etc.

#### **❖** ICT enable classroom/learning spaces

- **Library**: The library provides e-learning resources to the faculties and student.
- > Seminar Hall: It is well equipped with ICT tools is used for presentations, seminars, cultural programmers by the student. etc.
- ➤ **Computer lab:**The computer lab uses for internet facility, for preparation of projects, presentations and browse online information resources etc.
- 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?

No.

The institute doesn't have connectivity with the National Knowledge Network directly or through the Mumbai University.

## **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 institute ensures optimal allocation and utilization of the available financial resources for maintenance and upkeep of the building, furniture, equipment, computers, and miscellaneous.

Utilization for	2012-13 Rs.	2013-14 Rs.	2014-15 Rs.	2015-16 Rs.	2016-17
Building	20355	141172	3006225	355247	12294803
Furniture	100069	61819	118777		113505
Equipment and Electrical	12000	17790	24761	23858	25000
Computers	25000	55000	128500	52670	18000
Vehicle					
Any other					

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

The institute has following mechanism for the upkeep of the infrastructure and facilities of the institute. The tenders are invited from the respective agencies for the maintenance or construction work in the campus. persons for maintenance of available infrastructure and facilities:

Sr. No.	Persons appointed	Maintenance for	
1	Mr. Vasant Appa Terde.	Building maintenance contract	
2	Mr.Omkar Vijay Patil	Computer maintenance	
3	Mr.Subhash Mhatre	Electrical maintenance	
4	Mr.Rampravesh Vishwakarma	Furniture Maintenance	
5	Mr.Deepak Saghavi	Equipments maintenance	
6	Mr.Sidhesh Manave	Welding work	
7	Mr.Rajendra Shankar Gaikar	Plumbing work	
8	Mr.Machindra Salunke	Painting work	

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

- ❖ Monthly calibration and maintenance is carried out of invertors.
- ❖ The institutes carried out calibration of the fire extinguisher on yearly basis.
- ❖ The regular calibration of glass wares is carried out.
- ❖ The calibration and precision measures of equipments and instruments are done in every six months and up gradation/ replacement is carried out by Mr. Deepak Sanghavi from KEY VEE Corporation.

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

- ❖ For the voltage fluctuation stabilizer has been installed in office, library, and laboratories.
- ❖ Shri. D.T.Dabhade and Chandrakant Devale Supporting Staff is looking for upkeep and maintenance of sensitive electrical equipments in addition to his duty.
- ❖ Two inverter has been installed in the institute office for uninterrupted power supply.
- **!** Equipments are placed at proper and safe places.
- The Institute has installed 04 nos. of firefighting units for the safety on the every laboratory of institute building.
- ❖ There is an overhead water tank with submersible water pump for constant water supply of water attached with multi-tapped.
- ❖ Maintenance and repairing of electrical installations are done by the trained electricians.
- ❖ For Safety, Security and maintenance of Science equipments and chemicals, a Committee is constituted as under:

Sr. No.	Faculty	Designation
1	Dr.S.S.Gurav	Incharge
2	Dr.(Mrs).Kurra Sarada	Member
3	Dr.S.D.Patil	Member
4	Mr.Vijay Chavarkar	Member
5	Mr.D.K.Tivalekar	Member
6	Mrs.Neelam Shelar	Member

The Committee submits its report once in six months on reviewing equipments and chemicals.

# Criterion - V STUDENT SUPPORT AND PROGRESSION







#### **CRITERIA-V:**

#### STUDENT SUPPORT AND PROGRESSION

The institute believes that primary stakeholders are students. The College has also internalized the practice of social reservation, financial incentives and Welfare measures. Konkan Education Society believes in holistic education, thus all activities are directed towards student's supports and progression.

The institution publishes its prospectus and updates its website periodically so that the student, parents and alumina gets updated information. Orientation, awareness programmes, parent meets are all directed towards students support. Open, transparent, systematic admission process as per directives, rules and the time frame is ensured. Girl students in the college are about 64.06%. The dedicated teachers provide valuable support to the students for overall development. University ranks, consistency good pass percentage speaks volumes about the efforts taken through intensive teaching and remedial classes. It has resulted in vertical mobility of students from one level of education to the next higher level. Every year, college students participate in youth festivals ,sports, avishkar, research festival, uddan festival organized by University.

Thus the college ensures all the support, physical, academic, financial, social, career, sports, culture, learning ambience and inclusive practices.

#### **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 institution publishes the prospectus annually. It covers the following aspects.

- Mission and Objectives of the College.
- Information regarding faculty members.
- ❖ Institution terms and rules concerning admission.
- Instruction regarding course and credit and grading points.
- ❖ Details of Credit Base Semester Grade System (CBSGS) scheme of the course.
- **Details** of fees and scholarships.
- College regulations.
- \* Co-curricular and extra-curricular activities.
- Chart showing fee structure.
- ❖ About Management and Society.

Contact information.

#### The Institute ensures its commitment and accountability by following ways:

- ❖ IQAC/steering committee discusses the implementation of information provided in the prospectus and a report is prepared.
- To groom the involvement of the student in social and cultural activities and holistic development of the students, various associations are formed.
- ❖ All the associations 'prepare annual report which ensures implementation.
- ❖ Institute displays academic calendar on the institute website and notice board which is prepared according to schedule given by University of Mumbai.
- ❖ Institute adhere the rules of University of Mumbai for admission process.
- ❖ Institute prepares timetable according elective subjects chosen by the student.
- ❖ Attendance committee is formulated to ensure the attendance of student.
- **Exam committee conducts the examinations as per the rules of University.**
- ❖ The Konkan Education Society publish annual magazine called the 'VIKAS' Series in which achievement of various association and students are mentioned.
- ❖ A committee for welfare of SC/ST students is set up, who insures procurement and disbursements of scholarships/ free ships.
- 5.1.2 Specify the type, number and amount of institutional scholarships/ free ship given to the students during the last four years and whether the financial aid was available and disbursed on time?

The Government of Maharashtra provides the following types of scholarship.

Year	Type of Scholarships	Number of Scholarships	Amount of Scholarships in RS
	SC	49	333365.00
2012-	ST	03	10005.00
2013	NT	14	69800.00
	SBC	01	4995.00
	OBC	126	617230.00
	EBC	-	-
	Minority	-	-
	Free ship	30	130905.00
2013-	SC	62	454290.00
2014	ST	-	-
	NT	21	114220.00
	SBC	02	9310.00
	OBC	194	1030430.00
	EBC	-	-
	Minority	-	-
	Free ship	45	196315.00

	SC	64	456880.00
2014-	ST	-	-
2015	NT	19	94270.00
	SBC	-	-
	OBC	211	1082890.00
	EBC	-	-
	Minority	20	59780.00
	Free ship	48	199900.00
	SC	51	387310.00
2015-	ST	-	-
2016	NT	23	134730.00
	SBC	01	5770.00
	OBC	246	1458360.00
	EBC	-	-
	Minority	-	-
	Free ship	43	201270.00

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

Sr.	Types	Types 2012-2013		2013-2014		2014-2015		2015-2016	
No.		No. of students	%	No. of studen ts	%	No. of stude nts	%	No. of students	%
01	State	223	56.31	324	74.1	362	82.	364	74.2
	Govt.				4		08		8
02	Central	-	-	-	-	-	-	-	-
	Govt.								
03	Other	-	-	-	-	-	-	-	-
	National								
	Agencies								
04	Other								
	Yashoda								
	bai								
	Phadake								
	Scholrshi								
	p								

The college caters to the academic needs of the students belonging to the rural and hilly area. There are lots of students who belong to the non-creamy layer of the society or who are from economically weaker sections of the society. The college provided financial assistance to these students, which is received from the State Govt., Principal forum etc. nearly **70-80%** students of the college get benefit from these scholarships.

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

- Students from SC/ST, OBC and economically weaker sections.
- Students with physical disabilities
- Students to participate in various competitions. (national and international level).
- Medical assistance to students: Health center, Health insurance etc.
- Organizing coaching classes for competitive exams.
- Skill development (spoken English, computer literacy, etc.,)
- Support for 'slow learners'
- Exposures of students to other institution for higher education.

#### 1. Students from SC/ST,OBC and economically weaker sections

- ❖ As mentioned earlier the college belongs to the rural and hilly area where around **70-80%** students of SC/ST/OBC/NT/SBC categories are involved in the steam of education.
- \* Reservation policy of State Government of Maharashtra strictly followed in admission process.
- ❖ The admissions are given to such student with normal fees by taking University contribution only.
- ❖ All the types of scholarships/free ships are informed to them in time and their proposals are sent to the state government and other funding agencies with proper documents.
- ❖ The scholarships are directly credited to the Bank account of student in Nationalized Bank account.
- ❖ Partial fee (installment) payment facility to poor and needy students.
- \* Remedial classes conduct by the institute.
- ❖ The faculty members of the institute informally help to the economically weaker students by providing financial support and individual level.

#### 2. The students with physical disabilities

- ❖ There is reservation for students belonging to differently-able category or physically challenged students as per UGC notifications. Their requirements and needs are given a special care and attention.
- \* Teaching and non-teaching staff of the college has taken personal care such students.
- Such facilities are given to the student such as ramp, etc.

#### 3. Overseas students.

No overseas student admitted in our college till today.

### 4. Students to participate in various competitions/National, International.

The following measuring has been taken to promote the participation, by making the provision for:

- ❖ T.A. for the participants.
- Coaching.
- \* Recognition and special attendance.
- ❖ The institute conducts additional examination for those students who have missed the regular examination.
- ❖ Teacher takes extra classes to the student.

### 5. Medical assistance to students: Health center, Health insurance etc.

- ❖ The institute keeps physical checkup camps where local doctors and keep a strict watch on the health of the stakeholders, the students and the staff.
- ❖ College doesn't have own health center but primary Heath center is at walk able distance from the institute and medical aid is available in case of emergency.
- ❖ College has first aid boxes for preliminary emergency medical assistance.
- ❖ The institute provides group insurance to the students at the premium of Rs.20/ per year.

### 6. Organizing coaching classes for competitive exams.

- ❖ The institute has the Cell named as 'Career guidance and placement cell', provides career related guidance to the students.
- ❖ The Career guidance and placement cell is organizing special coaching classes and extra lectures time to time for competitive examinations.
- ❖ The guest lectures are organized to the student for competitive examinations.

### 7. Skill development (Spoken English, Computer Literacy, etc.)

- ❖ For computer literacy of staff and students, certificate course in computer application is conducted by the department of Computer Science and Information Technology.
- The college also invites guest speakers from the industry which provides regional and global employment opportunities for the students.
- ❖ Women Development Cell organizes soft skills development training programs every year for girl students.

### 8. "Support for slow learners"

- ❖ The college teaching staff provides special care and support to slow learner with remedial classes, assignments etc.
- ❖ The faculty of the institute encourages the slow learners to ask questions in the classroom.
- Subject teacher provides notes.
- Subject teacher provides question bank to the students and ask them to write the answer. The teachers check the answers and gives feedback.
- Students are encouraged to ask their queries at any place of the institute premises (for those students who hesitate to ask questions in the classroom).

## 9. Exposures of students to other institution of higher learning/corporate/business house etc.

- ❖ The Chemistry Department organize visit to industry to get exposure.
- The students are going to other institution of higher learning, corporate house etc. for higher studies or for services in corporate sections.
- ❖ The guest speakers are invited to give guidance about the career opportunity and post-graduation education by the institute.
- ❖ Entrepreneurs are invited to share their experiences with the students, various opportunities and challenges in industries.
- ❖ Workshops are organized to develop skills of the students such as flower making, beautician ,tailoring, bags making etc.
- Some of the students go for PG courses i,e M.Sc. .,M.B.A. etc. other institution.
- ❖ Industrial collaboration has proved helpful to give exposure to the students.

### 10. Publication of student magazines:-

- ❖ Konkan Education Society publishes 'VIKAS' magazine twice in a year. Where the students express their views through articles, poems etc.
- The magazine includes:
  - Photographs of the events organized by the associations; photographs of the students who have achieved the ranks in the academic year.
  - Information about the editorial board, Board of directors.
  - Achievements of students, teaching and non-teaching staff.
  - Reports of the activities in the institute.

## 5.1.5 Describe the efforts made by the institution to facilitate entrepreneurial skills, among the students and the impact of the efforts.

- ❖ The promotion of the self-employment is one of the objectives of the Career Guidance and Placement Cell and to achieve this, cell conducts various lectures, workshops and in-house lecture series.
- ❖ Career Guidance and Placement Cell invites people from industry to develop entrepreneurial skills, among the students.
- ❖ The college have placement cell, for the benefit of the students. Many of the past students of the college are working in various industries.
- ❖ Poster and rangoli exibitution are arranged at annual gathering programme every year.
- ❖ Women Development Cell has been trying to develop entrepreneurial skills among the students by organizing various workshops and training such as flower making, Beautician ,Tailoring, bags making etc.

# 5.1.6 Enumerate the policies and strategies of the institution which promote participation of the students in extracurricular and co-curricular activities such as sports, games, quiz competitions, debate and discussions, cultural activities etc.

The institution has efficient co-curricular activity cells such as sports, cultural, NSS, DLLE, WDC, Science Associations etc. for which the co-ordinates are appointed to look after and promote the students for participation in different activities throughout the year. Students of our college participated in quiz competition, group discussion ,elocution, debits etc.

Students are motivated to participate in Yuva Mohastav, Sport, Avishkar Research, Convention organized by university of Mumbai.

The felicitation with Trophies and Certificates to the Successful students at Annual Day function encourages them to enroll themselves in extracurricular and Cocurricular activities.

## Additional academic support, flexibility in examinations to participating Students.

The college ensures consistent encouragement and motivation to the students who participate in various curricular, and extra —curricular activities. Sports and cultural committee supervises these activities and recommends the respective faculty to take special classes to compensate the gaps the learning process caused by absence in the regular classes.

- ❖ Additional examinations are conducted for such students who missed their regular examinations due to participation in various curricular, and extra −curricular activities.
- ❖ Academic support is provided to the students who participate in co-curricular and extra-curricular activities in the form of special guidance to make up for lectures missed during practice and tournaments.
- ❖ 10 Grace Marks are allotted to the **NSS** and **DLLE** students completing 120 hours.

### Special dietary requirements, sports uniform and materials

- \* Refreshment provided to students of NSS, Sports, Cultural and DLLE.
- ❖ Institute is proving sports uniform and necessary equipment's for sport activities.
- ❖ College offers T.A. and D.A to the players who participate in the Inter-Collegiate level competition.
- Every year college celebrates Annual Sports Festival a sports competition of the institute in which outdoor sports events like cricket, kabaddi, athletics, Volleyball, and indoor sports events like chess, carom, table-tennis etc. Conducted for college students.
- Special coaching facility is provided for students participating at University level sports competition.
- Trophy and Certificates are given to the winners of intra-mural sports Competition.
- 5.1.7 Enumerating 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,SET, GATE/CAT/GRE/TOFEL/GMAT/Central/State services, Defense, Civil services etc.
  - ❖ Institute has Career Guidance and Placement Cell which provides guidance to students for the preparation of competitive examinations.
  - Cell regularly arranges lectures on competitive examinations.
  - ❖ It displays notifications of competitive exams and job advertisements on student notice board.
  - ❖ Teacher guide and motivate to the students to appear for Competitive examinations, also gives information regarding syllabus examination pattern and writing skills etc.

## 5.1.8 What type of counseling services are made available to the students (Academic, Personal, Career, Psycho-social etc.)

Career guidance cell and woman development cell are also involved in counseling. In certain cases students are advised to seek help from specialist. Most of the faculty members sort out emotional as well as career related problems of students. Faculty guides the students to select proper career option after graduation.

### **Academic counseling:**

- ❖ The college faculty helps the students to choose the right stream at time of admission. They are informed about the scope and natures of various subjects that form the syllabus. They are given right kind of counseling which helps them to focus appropriately as per their career preferences.
- The institute provides regular counseling to the student to address issues related to their academic short fall and obstacles.
- ❖ The faculty members always provide counseling to the student about the method of the study and writing skills for exam etc.
- ❖ Institute arranges the parents-teacher meeting periodically and during this meeting principal and faculty members discuss with parents and students about their dropout rate and overall performance.

### **Personal Counseling:**

- ❖ WDC counsel the student about gender issues, teenager problems, problems of eloping etc.
- ❖ The above issues are taught and discussed in foundation course syllabus.

#### **Career:**

- ❖ Career Guidance and Placement cell offers career guidance to the students.
- Career Guidance and Placement cell organizes guest lectures and lecture series on career opportunities.
- ❖ Special training for Government service examination.
- 5.1.9 Does the institution have a structured mechanism for career guidance and placement of its students? If 'yes' detail on the service 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,

- \* Career Guidance and Placement cell offers career guidance to the students.
- ❖ Career Guidance and Placement cell organizes guest lectures and lecture series on career opportunities.
- ❖ In the lecture series, a special lecture is given to the students on interview skill.

- ❖ Special training for Government service examinations.
- ❖ Books related with competitive exams and job opportunities are available in central library.
- ❖ The students are informed about job fairs and placement opportunities.
- ❖ The library subscribes newspaper relating job advertisement such as employment news, rojgar nokari, Employment news etc.
- ❖ Campus interview are organized in the institute by chemical industries to provide job opportunities to the graduate and post graduate students of the college.

### Number of students selected during interview by the employers

Sr. No.	Year	Name of Industry	No of Students present for written test	No. of students present for intervie ws	Total Number of Students Selected.	Name of students selected & joined
1	2012-13	Sadhana Nitro chem. Limited,Roha	40	20	10	1.Mr.Ajay P. Konde 2.Mr.Prashant S.Mhatre 3.Mr.Parag M.Pawar 4.Mr.Pramod M.Naik 5.Mr.Satish D.Bhosale 6.Mr.Roshan R.Sanap 7.Mr.Chetan C.Shinde 8.Mr.Yogesh Y.Jadhav 9.Mr.Navin K.Bamugade 10.Mr.Sachin Z. Gaikar
2	2013-14	Rathi Dye Chem (P) Limited,Roha	25	21	08	1.Mr.Prashant V. Bhoir 2.Mr.Vishal V. Jangam 3.Mr. Pranay P. Konde 4.Mr.Dinesh D.Javarat 5.Mr.Sanjay Deshmukh 6.Mr.Bharat Y.Ladge 7.Mr.Nitesh T.Lakisare 8.Mr.Sumit H.Tawate
3	2014-15	Aqua care Solution and Engneering Ltd. Roha.	10	08	02	1.Mr.Rupesh G.Mengal 2.Mr.Dharmendra Sharma

4	2015-16		 05	02	1.Mr.Swapnil Sakpal
		Aqua care			2.Mr.JiteshBhosale.
		Solution and			
		Engneering			
		Ltd. Roha.			

## 5.1.10 Does the institution have a student's grievance redressal cell? If 'yes' (if any) the grievance reported and redressed during the last four years.

### Yes,

The college has student's grievance redressal cell. The grievance box is installed near the office of the college. This cell is responsible to resolve the grievances of the students by taking necessary action. As the institution has a healthy atmosphere. Till date no grievance received, if grievance received it will scrutinized by the grievances redressal committee and appropriate actions will be taken.

## 5.1.11 What is the institutional provisions for resolving issues pertaining to sexual harassment?

Institute has constituted a WDC in the year 2007 for prevention and action against sexual harassment of ladies staff and girl students. The committee adheres the rules given by the State Government of Maharashtra, the UWDC (University of Mumbai), Vishakha Guidelines deal with sexual harassment cases. However not a single case is file in the cell since 2007.

Following measures have been taken to prevent sexual harassment:

- Complaint box
- ❖ Banner showing various legal provisions against sexual harassment.
- ❖ Women Grievance and Redressal Cell
- 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,

There is anti-ragging committee in the college. They are very vigilant and keep an eye on all affairs. No case of ragging has been reported during the last four years. There is a committee constituted in the college to prevent the ranging issues. The members of the committee are as follow:

1.	Prin. Dr. Gurav S.S	Chairman	
2.	Dr. D. V. Bhagat.	Convener	
3.	Dr.V.S.N Rao	Member	
4.	Dr.Vijay S Chavan.	Member	
5.	Dr.V.R.Jadhavar	Member	
6	Mrs.Neelam Shelar	Member	
7	Mrs.Pranjali Konde	Member	

### 5.1.13 Enumerate the welfare schemes made available to students by the institution.

### **Scholarship** and free ships:

All Government Scholarship for SC, ST, NT, DT-NT, OBC, Minority and Economical weaker section and also the scholarship given by other agencies are availed by students.

### **Bank services (Zero balance service):**

In collaboration with bank of India, Nagothane, Raigad the students in opening an account with Zero Deposit and also provided ATM card.

#### **\*** Health service:

- ➤ Health check facility available in Primary health center, Nagothane at free of cost.
- The Health care center is just 1 km away from the institute.
- First aid boxes are available.
- ➤ The programmes are arranged for the awareness about health and hygiene among the students.

#### **❖** Diet and snacks:

The special diet is provided to the participants during NSS and sport and cultural activities.

### **\*** Teacher-Guardian System:

The teachers guardian meeting is arranged at the end of year. The meeting involves discussion about personal, academic and economic status of the student. The teachers help to students to solve their personal and academic problems and hence strong rapport is developing between student and teacher.

- ❖ College is giving financial helps to the needy students. Under WDC scheme girl students were informed about the problems of girls in adolescent age.
- Special Diet is provided to participants during N.S.S. camp who participate in Camp.

### **❖** Co-curricular and extra-curricular activities

College encourages students to participate in Co-curricular and extra-curricular activities.

#### \* Grievance Redressal Cell

The institution has grievance redressal cell to resolve the grievances if reported.

#### \* Career Guidance and Placement cell

The institution has a placement cell constituted in the possible information and guidance to facilitate the placement for its outgoing students and other college students.

5.1.14 Does the institute have registered alumni Association? If YES, what are its activities and major contributions for institutional, academic and infrastructure development?

### Yes,

The institute has alumni association. The association committee comprises of the following members:

Dr.V Sarda	Incharge
Mrs.Sonal Jain	President
Mrs.NeelamMahale	VicePresident
Mrs.MansiShelar	Secretory
Mrs.BhideManjari	Co-Secretory
Mrs.ChaitraliPatil	Treaser
Dr.S.D.Patil	Member
MrJ.V.Patil	Member
Mr.V.S.Shinde	Member
Mrs.PranjaliKonde	Member

#### **Activities**

- ❖ Institutes organizes annual meet of alumni.
- Institution organizes cultural programmes.
- ❖ The alumni share their ideas about the overall development of the institute.

### Major contribution for Institutional, academic and infrastructure development:

Financial assistance is provided in the form of Cash and kind donations by the Alumina.

### **5.2 Student Progression**

5.2.1 Providing the percentage of students progressing to higher education or employment (for the four batches) highlights the trends observed.

Student	2011-	2012-	2013-	2014-2015
progression	2012	2013	2014	%
	<b>%</b>	%	<b>%</b>	
U.G. to P.G.	25	35	37	47
P.G. to M.Phil.	NA	NA	NA	NA
P.G. to Ph.D.	04	05	05	08
Employed				
<ul> <li>Campus</li> </ul>	09	05	07	05
selection				
• Other than	59	65	60	62
campus				
recruitment				

## 5.2.2 Provide details of the programme wise pass percentage and completion or the last four years(course 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 college of the affiliating university within the city/ district.

The result of F.Y/S.Y./T.Y. B.Sc Regular/Comp.Sci/I.T and M.Sc-I & II of last four years.

Sr. No.	Class	Semester	Year 2012- 2013	Year 2013- 2014	Year 2014- 2015	Year 2015- 2016
1	F.Y.B.Sc.	I	92.59	94.87	86.00	91.89
2	F.Y.B.Sc.	II	100.00	100	97.98	87.04
3	S.Y.B.Sc.	III	97.29	98.17	98.29	100
4	S.Y.B.Sc.	IV	100	98.17	100	94.59
5	T.Y.B.Sc.	V				
6	T.Y.B.Sc.	VI	65.26	76.70	88.89	90.27
7	F.Y.B.Sc. Comp Sci.	I	100	75	76.92	95.24
8	F.Y.B.Sc. Comp Sci.	II	100	87.50	92.31	65
9	S.Y.B.Sc. Comp Sci.	III	100	100	100	84.62
10	S.Y.B.Sc. Comp Sci.	IV	100	100	100	66.67
11	T.Y.B.Sc. Comp Sci.	VI	35.71	75.00	14.29	57.14
12	F.Y.B.Sc. I.T	I	80.00	100	95.83	73.33
13	F.Y.B.Sc.	II	90.00	100	100	65.62

	I.T					
14	S.Y.B.Sc. I.T	III	100	100	95.00	90.91
15	S.Y.B.Sc. I.T	IV	100	100	95.00	50.00
16	T.Y.B.Sc. I.T	VI	76.92	46.67	10.00	5.26
17	M.Sc	IV	100	100	90.00	80

### Comparison of institute performance with other college:

Sr.	Name of the	% of T.Y.B.Sc Result			
No.	college	2012-13	2013-14	2014-15	2015-16
1.	Our	65.26	76.71	88.89	90.27
	institution				
2.	Pali Collge	35.71	75.00	54.29	57.14

Sr.	Name of the	% of T.Y.B.ScCom.Sci Result		ult	
No.	college	2012-13	2013-14	2014-15	2015-16
1.	Our institution	35.71	75.00	14.29	57.14
2.	G.M.V College Tala	39.25	50.24	52.00	42.20

Sr.	Name of	% of T.Y.B.Sc. I.T Result			
No.	the college	2012-13	2013-14	2014-15	2015-16
1.	Our	76.92	46.67	10.00	05.26
	institution				
2.	G.M.V	54.00	42.00	42.20	25.24
	College				
	Tala				

Sr.	Name of	% of M.Sc. Result			
No.	the college	2012-13	2013-14	2014-15	2015-16
1	Our institution	100.00	100.00	90.00	80.00
2					

## 5.2.3 How does the institution facilitate student progression to higher level of education and/or towards employment?

❖ The faculty of the college encourages the students to appear for entrance examination of various universities.

- ❖ College has kept the entire brochure on the notice board where the students get the information. In the library of the college employment news has kept for the students where they get the information of the jobs.
- ❖ Personal counseling is done by the faculty( NET,SET and PET)
- ❖ Healthy atmosphere is maintained for study.
- \* Exposure to various academic, social, co-curricular and extra-curricular programmes,
- ❖ Placement cell to assist the placement of the outgoing student.
- ❖ Well-equipped library.
- Well-equipped laboratories.
- Study tours and industrial visites.
- ❖ Alumni motivate students to pursue for higher level of education.

## 5.2.4 Enumerate the special support provided to students who are at risk of failure and drop out?

- ❖ The dropout rate of the institute is low.
- ❖ The college teaching staff provides special care and support to slow learner with remedial classes, assignments etc.
- ❖ The faculty of the institute encourages the slow learners to ask questions in the classroom.
- Subject teacher provides notes.
- Subject teacher provides question bank to the students and ask them to write the answer. The teachers check the answers and gives feedback.
- ❖ Students are encouraged to ask their queries at any place of the institute premises (for those students who hesitate to ask questions in the classroom).
- ❖ The teacher guardian counsels to such a students to minimize the dropout rate.
- ❖ Difficult topics and practical's are repeated by the teachers whenever Necessary.
- ❖ Parents of the students are encouraged to meet teaching faculty and suggestions are given to them to help their ward perform to the best of his/her potential.
- ❖ Attendance is regularly taken and the absentees are reported.
- ❖ Parents of the serious defaulter are communicated telephonically.
- Serious defaulters are directed to complete the pending assignments.
- ❖ The students are asked to solve past year question papers. The teacher assesses the papers and provides the adequate feedback to the learners.

### 5.3 Student participation and activities

5.3.1 List range of sports, games and other extracurricular activities available to students. Provide details of participation and program calendar.

Table showing the various indoor and outdoor sports facilities Available at institute.

Indoor Sports Facilities	Outdoor Sports Facilities
Badminton	Athletics
Table-Tennis	Volleyball
Chess	Kabaddi
Carrom	Cricket
Fencing	Kho-Kho

### The showing the participation of the college at

### **Inter-Collegiate level competition**

Sports discipline	2012-13	2013-14	2014-15	2015-16
Badminton	-	-	-	-
Chess	✓	✓	✓	✓
Carom	-	-	-	-
Fencing	-	-	-	-
Archery	-	-	-	-
Athletics	✓	✓	✓	✓
Volleyball	✓	✓	✓	✓
Kabaddi	✓	✓	✓	✓
Cricket		✓	✓	✓

**Cultural activities:**One act play, mono acting, singing, folk dances, street play, Rangoli competition, poster making, essay competition, debate competition, quiz competition and traditional day. **Details of our Achievements** 

Academic year	Name of Students	Events	Level	Position
2012-13	Shelar Nikita Naresh	Poster Making YOUTH	District	3 <sup>rd</sup>
	Mungale Nikita Jayvant	Rangoli YOUTH	District	2 <sup>nd</sup>
	More Abhaya Avinash	Elocution (Marathi) YOUTH	District	2 <sup>nd</sup>
	More Abhaya Avinash	Swachhata Mitra Karandak	Taluka	1 <sup>st</sup>
	More Abhaya Avinash	Swachhata Mitra Karandak	District	3 <sup>rd</sup>
	Rajput Milan Kailas	Elocution (Marathi) KES	District	Participated
	Kale Sayali Avinash	Elocution (Marathi) KES	District	Participated
	Jana Vikrant Manoranjan	Elocution (English) KES	District	Participated
	Pandhar Jidnyasa Sanjay	Elocution (English) KES	District	3 <sup>rd</sup>
	Khandekar Vinita Vilas	Elocution (hindi) KES	District	1 <sup>st</sup>
	Ayare Vishakha Vitthal	Essay Competition(Marathi) KES	District	Consolation
	Ayare Vishakha Vitthal	Essay Competition(English) KES	District	2 <sup>nd</sup>
	Mengal Rupesh Ganpat	Poster Competition KES	District	3 <sup>rd</sup>
	Shirke Sasmit Sudin	Poster Competition KES	District	3 <sup>rd</sup>
	Jambekar Sushnt Shekhar	Poster Competition KES	District	3 <sup>rd</sup>
2013-14	Khan Shahista S.	Elocution (hindi) KES	District	3 <sup>rd</sup>
	More Abhaya Avinash	Elocution (Marathi)	District	3 <sup>rd</sup>
	Pandhar Jidnyasa Sanjay	Elocution (English)	District	2nd
	Jaiswal Pooja Phulchand	Elocution (English)	District	1 <sup>st</sup>
	Ayare Vishakha Vitthal	Essay Competition(Marathi)	District	2nd
	Ayare Vishakha Vitthal	Essay Competition(English)	District	1st
	Chavan Ashvini Umaji	Essay Competition(Hindi)	District	Consolation

		KES		
	More Abhaya Avinash	Swachhata Mitra Karandak	Taluka	1 <sup>st</sup>
	Patil Chaitrali Sudhir	Swachhata Mitra Karandak	Taluka	3 <sup>rd</sup>
	College student of DLLE	Street play(UDAN)	District	3 <sup>rd</sup>
	Pandhar Jidnyasa Sanjay	Elocution (English) YOUTH	District	Consolation
2014-15	Mhashelkar Suraj Sadanand	Poster Competition KES	District	2nd
	Jadhav Aniket Mahendra	Poster Competition	District	2nd
	Jangam Nikhil Arun	Elocution (English)	District	2 <sup>nd</sup>
	Pandhar Jidnyasa Sanjay	Elocution (English)	District	1 <sup>st</sup>
	Adhikari Safa Erfan	Elocution (Hindi)	District	1st
	Mhashelkar Suraj Sadanand	Elocution Competition(Marathi)	District	3 <sup>rd</sup>
	Pathak Ruby Krupashankar	Essay Competition(Hindi)	District	Consolation
	Ghavate Antara Maruti	Essay Competition(Marathi)	District	3rd
	Nija Jhony C.	Essay Competition(English)	District	3 <sup>rd</sup>
	Yadav Pramod	Essay Competition(English) KES	District	Consolation
	Jadhav Aniket Mahendra	Poster Competition YOUTH	District	3 <sup>rd</sup>
	Dandekar Dhanashree Maruti	Elocution Competition(Marathi) YOUTH	District	2 <sup>nd</sup>
2015-16	Mhashelkar Suraj Sadanand	Elocution Competition(Marathi) KES	District	3 <sup>rd</sup>
	Pandhar Jidnyasa Sanjay	Elocution (English) KES	District	1 <sup>st</sup>
	Gadmale Kranti Vishvanath	Essay Competition(Marathi) KES	District	Consolation
	Dabir Nikhat Khalil	Essay Competition(English) KES	District	Consolation

Intercollegiate zonal competition is arranged in our college on the behalf of the University of Mumbai in first week of august. Student who are selected at this round are eligible for the final round which will be held in last week of august.

### **❖** National Service Scheme

Academic Year: 2012-13

Sr.	Activities	Venue	Participant	Beneficiaries
1	Environmental Day 5/06/2012	College	Forest Officers, Principal,PO & Volunteers	40
2	Anti-abuse day Street play	College	volunteers	200
3	Plantation 11 <sup>th</sup> July 2012	College	Programme officer, Principal Dr. Anil Patil	100
4	Distribution of Note Books 18/07/2012	Primary School , Nagothane	Dr. Anil Patil, Programme Officers	100
5	Orientation programme 14/08/2012	College	Prof.Mr. SudhirPuranik	135
6	Saddabhavana Din 20 <sup>th</sup> August 2012	College	Principal, Programme Officers	150
7	Teachers Day Celebration 5 <sup>th</sup> Sept. 2012	College	Principal Staff & volunteers	155
	HemoglobinCheckup Programme 16/09/2012	College	Dr. G. G. Wadge and Team	65
8	Visit to police Station27 <sup>th</sup> August 2012	Police station	API Mr. DevidasSonawane and other Staff	35
9	poster exhibition on eco-friendly Ganpati 5/9/2012	College	Principal, Programme Officers &volunteers	45
10	VivekiPaddhatineJodidarachiNiwad	College	Mr. Avinash Patil- President ANIS, Maharashtra	150
11	Peace oats 2 <sup>nd</sup> October 2012	College	Dr. G. A. MeshramProgramme Officers & volunteers	120
12	Disaster Management Workshop 10 <sup>th</sup> -11 <sup>th</sup> Oct 2012	College	Mr. SagarPathak- DDM Cell	120
13	Special Police Volunteers 23 <sup>rd</sup> Sept. 2012 and 29 <sup>th</sup> Sept.2012	Nagothane	Programme Officers & volunteers	30
14	PhatakeMuktDipawali Abhiyan 28/10/2014	Nagothane Area	ANIS Nagothnae& volunteers	120
15	Phatake Mukt Dipawali Abhiyan	Rally in	ANIS Nagothnae &	120

	28/10/2014	Nagothane	volunteers	
16	Participation in UTKRASH	University	PratikshaKadam	01
17	Lecture on Swami Vivekananda 15 <sup>th</sup> Dec. 2012	College	Swami Vivekananda Sanstha	
18	QuamiAkata Week 19 <sup>th</sup> Nov to 25 <sup>th</sup> Nov.	College Oats of National Integration	Principal PO and Volunteers	100
	15 <sup>th</sup> Point scheme for minorities of India 20/11/2012	College	Speech by Dr. Anil K. Patil	120
	Holi Book Reading 21/11/2012	College Library	Volunteers	35
	cultural Programme 23/11/2012	College	volunteers	30
	Role of Indian women's in India Cultural 24/11/2012	College	Mrs.SulbhaGokhale  – J. H. Ambani Petrochemicals	55
19	Participation in Street Play 30 <sup>th</sup> Nov. 2012	University	Volunteers	40
20	HIV-AIDS Day Programme 1/12/2012	Rally in Nagothane	PO & Volunteers	125
		HIV-AIDS Slide Show In college	Mrs Dr. T. Gitanjali- Forties Hospital Mumbai Dr. R. Gupta, Principal, & Staffs Volunteers	120
		HIV-AIDS Test In College	Dr. R. Gupta, Principal, & Staffs Volunteers	62
21	CFL Distribution Programme 3 <sup>rd</sup> Dec. 2012	AdiwasiWadi Pimpalwadi	SOBATI scio- cultural institution Pen	50
22	Rally for the safety of Women's 3/01/2013	Nagothane	Police Station Nagothane, NSS Cell	125
23	Street Play performance 4 <sup>th</sup> January 2013	College	SOBATI scio- cultural institution Pen	200
24	Road Safety Programme 09/01/2012	Road safety week	Street play by volunteers	25
25	Youth Day 12/01/2013	College	Principal PO and volunteers	120
26	Voting Campaign Programme 25/01/2013	Nagothane Awareness Rally	Volunteers	100

27	Blood donation 16/01/2013	Nagothane	Volunteers, Principal, Programme Officers & volunteers	40

Academic Year: 2013-14

Sr. No.	Activities	Venue	Participant	Beneficiaries
1	Plantation 6/07/2013	Adopted Area	Programme officer, Principal Dr. Sandesh Gurav,	100
2	Distribution of Note Books 18/07/2013	Primary School Nagothane	Dr. S S Gurav, Programme Officers	150
3	Orientation programme 10/08/2013	College	Prof.T. P. Mokal	130
4	Sadbhavana Din oats 20 <sup>th</sup> August 2013	College	Principal, Programme Officers	150
5	Road safety programme 23/08/2013	College	Mr. RameswarDarade Mr. Javare	100
6	HemoglobinCheckup Camp 27/08/2013	College	LMC Members Mr. Narendrasheth Jain	150
7	Poster Exhibition on Eco-friendly Ganpati Festival 5/09/2013	College	Volunteers	100
8	Special Police volunteers in Ganpati festival16/09/2013	Nagothane, Amdoshi, Reliance	Volunteers	25
9	NSS Day Celebration 24/09/2013	Lecture on Aim & Objectives of NSS.	Principal Dr. S. S. Gurav	135
	27/00/2012	D.11 .	D II 1d N d	
	27/09/2013	Rally in adopted area	Rally around the Nagothane to protect Sadbhavana	0.5
	28/09/2013	Easy & Poster		85

		competition on road safety		30
	Mahatma Gandhi Jayanti 2/10/2013	Examination on Mahatma Gandhi Bibliography.	Mahatma Gandhi Mission, Jalgaon	60
11	Hemoglobin Checkup Camp 27 <sup>th</sup> August 2014	College	Head Master Sanakki, Principal Dr. Sndesh Gurav and other village peoples	150
12	poster exhibition on eco-friendly Ganpati 5/9/2014	College	Principal, Programme Officers & volunteers	45
13	Swachch Bharat Mission activities 2 <sup>nd</sup> October 2014	Adopted Area	Sarpanch, Programme Officers & volunteers	40
14	Special Police Volunteers	Nagothane	Programme Officers & volunteers	30
15	PhatakeMuktDipawal i Abhiyan-2013. 28/10/2013	Nagothane Area	a.Filling of Forms of pledge against phatakemuktdipawali-2013. B. Distribution of 2000 phatakemuktAbiyanPatrak around Nagothane Town. c. Phatakemuktabhiyan rally around Nagothane City.	500
16	PhatakeMuktDipawal i Abhiyan 28/10/2014	Rally in Nagothane	ANIS Nagothnae& volunteers	120
17	HIV-AIDS Day Programme 1/12/2013	Rally in Nagothane	PO & Volunteers	120
18		HIV-AIDS Slide Show	Dr. R. Gupta, Principal, & Staffs Volunteers	100
19		HIV-AIDS Test	Dr. R. Gupta, Principal, & Staffs Volunteers	45
20	Self-Protection Training 20/12/2013	Training For girls	Reliance defence commando Programme officer	45
21	Krantijyoti Savitribai Phule Jayanti 3/01/2014	Lecture	Mrs. S. P. Nandgaonkar	75
22	Road Safety Programme	Road safety week	Street play by volunteers	25

	10/01/2014			
23	Blood donation 16/01/2016	Nagothane	Volunteers, Principal, Programme Officers &volunteers	40
24	Voting Campaign Programme 25/01/2014	Nagothane Awareness Rally	Volunteers	100

Academic Year: 2014-15

Sr. No.	Activities	Venue	Participant	Beneficiaries
1	Plantation 15 <sup>th</sup> July 2014	College	Programme officer, Principal Dr. Sandesh Gurav,	100
2	Distribution of Note Books 18/07/2014	Wangni Primary School	Sarpanch Sow BharatiJadhav Dr. S S Gurav, Programme Officers	75
3	Orientation programme 14/08/2014	College	Prof.Mr. SudhirPuranik	135
4	Saddabhavana Din 20 <sup>th</sup> August 2014	College	Principal, Programme Officers	150
5	Road safety programme 4/9/2014	College	Mr. Darade Mr. Javare	100
6	Hemoglobin Checkup Camp 27 <sup>th</sup> August 2014	College	Head Master Sanakki, Principal Dr. Sndesh Gurav and other village peoples	150
7	poster exhibition on eco-friendly Ganpati 5/9/2014	College	Principal, Programme Officers & volunteers	45
8	Swachch Bharat Mission activities 2 <sup>nd</sup> October 2014	Adopted Area	Sarpanch, Programme Officers & volunteers	40
9	Special Police Volunteers	Nagothane	Programme Officers & volunteers	30
10	PhatakeMuktDipawali Abhiyan	Nagothane Area	ANIS Nagothnae&	120

	28/10/2014		volunteers	
11	PhatakeMuktDipawali	Rally in	ANIS	120
	Abhiyan 28/10/2014	Nagothane	Nagothnae& volunteers	
12	HIV-AIDS Day	Rally in	PO &	98
12	Programme	Nagothane	Volunteers	70
13	1/12/2014	HIV-AIDS Slide	Dr. R. Gupta,	120
		Show	Principal, & Staffs Volunteers	
14		HIV-AIDS Test	Dr. R. Gupta, Principal, & Staffs Volunteers	65
15	Road Safety Programme 10/01/2015	Road safety week	Street play by volunteers	25
16	Halti-kunku programme 14/01/2015	Adopted Area	WDC Chairman, PO and volunteers	40
17	Voting Campaign Programme 25/01/2015	Nagothane Awareness Rally	Volunteers	57
18	Blood donation	Nagothane	Volunteers, Principal, Programme Officers & volunteers	40
19	Marathi Bhasha Din	College	Prof. M. A. Jagtap Pricipal Dr. S. S. Gurav	125

### Academic Year:2015-16

Sr. No.	Activities	Venue	Participant	Beneficiaries
1	International Yoga Days 21/06/2015	College	Dr. VNS Raghavrao, Principal Dr. S. S. Gurav, PO, Staff, Non-teaching staff & volunteers.	50
1	Plantation 7 <sup>th</sup> July 2015	College	Programme officer, Principal Dr. Sandesh Gurav,	100
2	Distribution of Note Books 18/07/2015	Amdoshi Primary School	Dr. S S Gurav, Programme Officers	75

3	Orientation	College	Prof.Dr. S. R.	125
	programme 13/08/2015	C	Kanekar	
4	Saddabhavana Din 20 <sup>th</sup> August 2015	College	Principal, Programme Officers	125
5	Blood Group Check- up camp	College	Primary health club, Nagothane	156
6	Teacher day celebration 5/9/2015	College	Principal, PO, Staff &volunteers.	120
7	Special Police Volunteers	Nagothane	Programme Officers & volunteers	50
8	poster exhibition on eco-friendly Ganpati 5/9/2015	College	Principal, Programme Officers & volunteers	45
9	Swachch Bharat Mission activities 2 <sup>nd</sup> October 2015	Primary School, Adopted Area	Teachers,Sarpanch, Programme Officers & volunteers	60
10				30
11	PhatakeMuktDipawali Abhiyan 22/10/2015	Nagothane Area	ANIS Nagothnae& volunteers	60
12	PhatakeMuktDipawali Abhiyan 22/10/2015	Rally in Nagothane	ANIS Nagothnae& volunteers	75
		Rally in Nagothane	PO & Volunteers	90
	HIV-AIDS Day Programme	HIV-AIDS Slide Show	Dr. Kumar, Principal, & Staffs Volunteers	130
13	1/12/2015	HIV-AIDS Test	Dr. R. Gupta, Principal, & Staffs Volunteers	40
14	Road Safety Programme 10/01/2016	Road safety week	Street play by volunteers	25
15	Youth Day Programme 12/01/2016	College	Principal, PO and volunteers	120
16	Voting Campaign Programme 25/01/2016	Nagothane Awareness Rally	Volunteers	100
17	Blood donation 23/01/2016	Nagothane	Volunteers, Principal, Programme Officers & volunteers	40

Academic Year: 2016-17

Sr. No.	Activities	Venue	Participant	Beneficiaries
110.	Yoga Din	College	Dr. V. N. S. Raghavrao, Principal Dr. S. S. Gurav Staff and volunteers	45
1	Plantation 7 <sup>th</sup> July 2016	College	Programme officer, I/C Principal Dr. Dinesh Bhagat,	100
2	Distribution of Note Books 18/07/2016	Nelson Mandela Ashram School, Nagothane	H M. Mr. NavnathDongargaonkarDr. S D. Tupare, Programme Officers& volunteers	300
3	Orientation programme 13/08/2016	College	Prof.Dr. MadhukarBadgujar	130
4	Saddabhavana Din 20 <sup>th</sup> August 2016	College	Principal, Programme Officers	150
5	HemoglobinCheckup Camp 27 <sup>th</sup> August 2016	College	Head Master Sanakki, Principal Dr. Sndesh Gurav and other village peoples	150
6	Road safety programme 4/9/2016	College	Mr. RameshwarDarade Mr. Javare	75
7			Poster exhibition - Volunteers	45
			Rangoli- Volunteers	25
	NSS Day Celebration	College	Lecture on health problem- Dr. Kumar -Reliance Industries	120
8	Swachch Bharat Mission activities 2 <sup>nd</sup> October 2016	Adopted Area	Sarpanch, Programme Officers & volunteers	40
9	Special Police Volunteers	Nagothane	Programme Officers & volunteers	30
10	PhatakeMuktDipawali Abhiyan 28/10/2016	Nagothane Area	ANIS Nagothnae& volunteers	68
11	PhatakeMuktDipawali Abhiyan 28/10/2016	Rally in Nagothane	ANIS Nagothnae& volunteers	68
12	HIV-AIDS Day Programme	Rally in Nagothane	PO & Volunteers	100
13	6/12/2016	HIV-AIDS Slide Show	Dr. R. Gupta, Principal, & Staffs Volunteers	110

14		HIV-AIDS Test	Dr. R. Gupta, Principal, & Staffs Volunteers	38
15	Fire safety Programme 10/12/2016	College	Fire& safety, Officers	45
16	Road Safety Programme 06/01/2017	Road safety week	Street play by volunteers	50
17	SavitribaiPhule Programme 03/01/2016	College	WDC Chairman, PO and volunteers	40
18	Youth Day Programme	College	Prof. S. D. Patil, Dr. S. D. Tupare, Dr. D. V. Bhagat, Volunteers & staffs	110
19	Voting Campaign Programme 25/01/2017	Nagothane Awareness Rally Oaths to volunteers	Volunteers	70
20	Blood donation 16/01/2017	Nagothane	Volunteers, Principal, Programme Officers & volunteers	35
22	Yoga Camp 1-3 Feb 2017	Nagothane	Mr. Amit Patil and Mr. Panashilkar	56
23	Special Police Volunteers	Roha- Raigad	Police Station, Nagothane	25

### **Blood Donation:**

Sr.No.	Year	No's of volunteers	No's of bags Collected	Blood Bank
1	2012-13	75	56	Civil Hospital Alibag, Raigad
2	2013-14	55	35	Civil Hospital Alibag, Raigad
3	2014-15	100	65	Civil Hospital Alibag, Raigad
4	2015-16	40	46	Civil Hospital Alibag, Raigad
5	2016-17	68	35	Civil Hospital Alibag, Raigad

### **Health Programme:**

Sr. No.	Year	Name of	Volunteers	Beneficiaries
		Programme		
1	2012-13	Blood group Checking	30	155
2	2012-13	Haemoglobin Checkup	45	95
3	2012-13	Eye checkup	25	35
4	2012-13	Blood Test against HIV- AIDS	25	78
5	2012-13	Poster exhibition on HIV-AIDS	45	200
6	2012-13	Rangoli Exhibition	20	100
7	2013-14	Haemoglobin Checkup	30	110
8	2013-14	General Health Checkup	36	25
9	2013-14	Pulse polio vaccination	20	120
10	2013-14	HIV-AIDS Slide show	110	110
11	2014-15	Blood group Checking	30	155
11	2014-15	Haemoglobin Checkup	35	65
12	2014-15	Blood Test against HIV- AIDS	25	48
13	2014-15	Heath related lecture	100	100
14	2014-15	HIV-AIDS Slide show	95	95
15	2014-15	Poster exhibition on HIV-AIDS	60	350
16	2014-15	Rangoli Exhibition	30	350
17	2014-15	Cancer awareness programme	40	40
18	2014-15	Tobacco Ghutka awareness Rally	120	120
19	2015-16	Cancer awareness lecture by Dr. Gokhale	75	75
20	2015-16	Viral infection lecture by Dr. G.	105	105

		G. Wadge		
21	2015-16	Blood Gr. Detection camp	25	150
22	2015-16	Lecture on HIV AIDS	100	100
23	2015-16	Poster exhibition on HIV-AIDS	40	300
24	2015-16	Rangoli Exhibition	50	300

### ❖ Details of Research Project Participated in Last Five Years For Avishkar Research Convention Held By University Of Mumbai By Science Association Committee

Academic Year	Total No of Research Projects Participited For Avishkar Research Convention	Total Number of Student Participated	Total No. of Projects selected for University level	Total No. of Projects selected for State level
2012-13	12	24	04	-
2013-14	15	36	03	1
2014-15	19	38	04	-
2015-16	01	02	-	-
2016-17	10	20	01	-
Total	57	120	12	1

### **\*** WDC (woman development cell)

### Academic Year 2012-13

Sr. No.	Program	Date	Organized by	Level	No of Beneficiaries	Resource Person
1	One day Workshop on 'Safety of Today's Youth'	17-7- 2012	College WDC Cell	College	70 girls	Dr. Anita Jamadar -Lady Police officer

2	Meri Beti Pyari Beti Abhiyan –	26-9-2012	WDC & N.S.S unit of the University of Mumbai	University	8girls 5 boys	Skit Compition at C.D.Deshmukh college Roha,And Kalina Campus
3	A talk on a Law	23/10/2012	College WDC Cell	College	100 Boys & girls	Advocate Sau Reshma Patil
4	Self employment workshop		College WDC Cell	College	100 girls	Miss Mayuri Shinde Assistant Professor
5	Jagar Janivancha Abhiyan	2012-2013	College WDC Cell	College	200girls	Project on issues like Gender equality and Women safety
6	Open Discussion-	22-12-2012	N.S.S & College WDC Cell .	College	100 Boys & girls	Dr S.D.Tupare Mrs S.V.Choudhari

### Academic Year: 2013-14

Sr No	Program	Date	Organized by	Level	No of Beneficiaries	Resource Person
1	Attended one day workshop on 'Sexual Harassment' -29- 7-2013	29-7-13	Women development Cell, University of Mumbai & J.S.M College Alibag, WDC Cell	College	2	Smt. Kranti Jejurkar, Chairman of Women development Cell.Mumbai
2	Three days 'self employment workshop on tailoring' –	12, 13,14, August 2013	College WDC Cell	University	150 Students	1)Mrs Yuaragandhara Upadhye  2)Mrs Sunita Baban zende - Skilled Tailors
3	A talk on a carrier guidance:-	23-12- 2013	College WDC Cell	College	200 Boys & girls	Smt Rekha Sathy -Chanakya Mandal
4	Celebration of Birth Anniversary of Smt Savitribai Phule	3-1-14	College WDC Cell	College	100 girls	Principal,& College staff

### Academic Year: 2014-15

Sr. No.	Program	Date	Organized by	Level	No of Beneficiaries	Resource Person
1	One day Self Employment skill development program me-	12/12/2014	Women development Cell, University of Mumbai & J.S.M College Alibag, WDC Cell	College	2	Mrs Neena Begumpure, Assistant Art teacher, from Petrochemical school, IPCL  2 Mrs Manali Sahastrabudhye -Art of Weaving Bags
2	PariSanwad' on Gender equality –	26/7/14	College WDC Cell	Universi ty	150 Students	Mr Pratik Zaware, Miss Priti, Shruti Patil, Renuka Bawadekar,Mr. Dhanesh Warma,from S.Y.BSc
3	Shravansari 2014	9/8/2014	College WDC Unit	College	15 Ladies staff members &30 girls	Mrs Manjusha Inamdar  Lecturer in Marathi, from Petrochemical Juniour College , IPCL, Nagothane
4	Celebration of Birth Anniversary of Smt	3-1-15	College WDC Cell	College	20 girls	All Staff

	Savitribai					
	Phule					
6	International	8-3-2015	College	College	40 girls	All Staff And
	Women's		WDC Cell			Girls &Principal
	Day					

Academic year: 2015-2016

Sr. No.	Program	Date	Organized by	Level	No. of Beneficiaries	Resource Person
1	Rangoli Exhibition on Topic –Beti Bachao, Beti Padhavo	12/2/16	College WDC Cell	College chemistry dept. corridor	15 Girls	Mr Pratik Zaware, Miss Priti, Shruti Patil, Renuka Bawadekar,Mr. Dhanesh Warma,from S.Y.BSc
2	Celebration of Birt Anniversary of Sm Savitribai Phule		College WDC Cell	College	20 girls	Speech of Principal Dr. Sar Gurav Sir
3	International Women's Day	8-3-2016	College WDC Cell	College	20 Ladies staff members &30 girls	<ul> <li>Adv Sonal Jain, Nagothane</li> <li>Adv Kishori shinde,Ali bag</li> </ul>

### ❖ Marathi Wangmay Mandal: Every year college celebrate 'Marathi Bhasha Din'

### > Sports and Tournaments:

Calendar for the Intercollegiate Zonal and Inter Zonal Tournaments 2012-17.

Sr.No.	Events		Total No. Colleges Participated	Total No. Students Participated
01	Chess	27 <sup>th</sup> July 2012	15	75

02	Volley ball	26 <sup>th</sup> Oct.2013	08	100
03	Cricket	19 <sup>th</sup> Nov.2013 to 28 <sup>th</sup> Nov.2013	28	448

### > Annual social gathering:

The tentative programme of the annual social gathering is in the first or second week of month of January. Before to that the time table of college sports competition is announced each year. One week has given for this activity. It is mostly completed by the first week of December. In the annual social gathering various cultural completions are organized by the college like traditional day, and debate, Elucation ,singing mono acting, Fashion show, dance, Mr and Miss. college competition.

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.

The achievements of students during the last four years:

### GYMKHANA DEPARTMENT

Year 2012-13

Sr.No.	Name of event	Level	Total No. Boys played	Total No. girls played	Total
1	Chess	University	06	-	06
2	Athletics	University	02	-	02
3	Cricket	University	16	-	16
4	Fencing	University	09	-	09
5	Annual Sports	College	75	100	175
Total			108	100	208

Year 2013-14

Sr.No.	Name of event	Level	Total No. Boys played	Total No. girls played	Total
1	Chess	University	06	-	06
2	Swimming	University	-	01	01
3	Swimming	State	-	01	01
4	Swimming	International	-	01	01
5	Volley ball	University	12	-	12
6	Cricket	University	15	-	15
7	Annual Sports	College	150	50	200
Total			183	53	236

Academic Year: 2014-15

Sr.No.	Name of event	Level	Total No. Boys played	Total No. girls played	Total
1	Chess	University	06	-	06
2	Swimming	University	01	02	03
3	Swimming	State	-	02	02
4	Volley ball	University	12	-	12
5	Athletics	University	01	01	02
6	Taekwondo	University	03	_	03
7	Annual Sports	College	150	75	225
Total			173	80	253

Year 2015-16

Sr.No.	Name of event	Level	Total No. Boys played	Total No. girls played	Total
1	Chess	University	06	-	06
2	Swimming	University	01	01	02
3	Swimming	State	-	01	01
4	Kabaddi	University	16	-	16
5	Badminton	University	04	_	04
6	Cricket	University	16	-	16

7	Carom	Universitty	02	-	02
8	Annual Sports	College	150	70	220
Total			195	72	267

## 5.3.3 How does the college seek and use data and feedback from its graduates and employs, to improve the performance and quality of the institutional provisions.

At the end of the academic year the feedback from the students is taken. The feedback form are filled by the students are analyzed by the principal of the institute and it is communicated to the concern faculty. The suggestions which are suggested in the feedback are analyzed and necessary steps are taken for the improvement of the quality. At the meetings of the student's council, the student has a freedom to put their demands regarding their problems.

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 publication/materials brought out by the students during the previous four academic sessions.

Articles of following staff and students published in VIKAS magazines .

Sr.No	Name of Auther	Article Published
1	Mrs. Smita Chudhari	Jagar Yuva Shakticha
2	Dr. Shrikrishna Tupare	Dr. Babasaheb Ambedkar
		Pragalbha Patrakarita
3	Miss.Jidnyasa Pandar(F Y)	Mitri
4	Diksha Gaikwad(F Y)	Kharach aplyala Swatantra
		Milale ahe ka?
5	Divyani Pardeshi (T Y )	Magcha bakawar basnare
		vidyarthi ani yash?

5.3.5 Does the college have a student council or any similar body? Give details on its selection, constitution, activities and funding.

Yes,

College has its student council

Selection and constitution of student representative council:

❖ As per the guidelines of University of Mumbai, the student representative council (SRC) is existing in the college.

- ❖ The Principal is the chairperson of the student representative council. Class representatives are selected on merit basis.
- NSS, Sports and Cultural Associations nominate their representatives.
- SC and NT ladies representative are nominated by the principal.
- ❖ The General Secretary is elected from student representative council voting.
- ❖ The election is carried out as per the University directions.

### **Activities of SRC:**

The Council plays important role in planning and execution of curricular as well as co-curricular activities carried out in that academic year.

- ❖ The representatives participate in various functions of the institute such as welcome function, sports events.
- ❖ The council arranges welcome and farewell function to the first year and last year students respectively.
- Student representatives always help in all activities and functions arranged in institution.
- Student council performs various tasks such as planning, organizing and executing various events.
- ❖ Celebration of the teacher's day.

### **Funding:**

College provides funds to the activities carried out by the student council.

## 5.3.6 Give details of various academic and administrative bodies that have student representatives on them.

The following academic and administrative bodies have Students' representative:

- Student Representative Council
- Cultural Association
- Science Association
- Career Guidance and Placement Cell
- Sports and Gymnasium
- NSS
- ❖ Alumni Association
- ❖ Woman development Cell
- Magazine committee
- **❖** IQAC
- Anti-Ragging Committee.

## 5.3.7 How does the institution network and collaborate with the alumni and former faculty of the institution.

The institute has Alumni Association and it has membership of former students. The institute arranges alumni meeting to discuss issues related to the overall development of the institute. The relationship is maintained through e-mails, social media, letters, phone calls and personal contacts.

### **Criterion - VI**

## GOVERNANCE AND LEADERSHIP





# **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:

"Avail the facility of education in the down trodden Community for development of Society."

### **❖** Mission:

"Education for all" is the mission of Kokan Education Society and vis-à-vis College.

## **The Goals and Objectives of the College are as follows:**

- > To impart quality and valuable service in the field of education.
- > To attain community and social development.
- ➤ To ensure and inculcate perfect discipline among the students.
- > To aim at overall personality development of the students.
- > To inculcate moral values amongst the students.
- ➤ To enable students to face the challenges of the competitive world.
- To help the students in discovering their latent talents.
- > To instill awareness about social and ecological issues among students and help them in being socially conscious citizens.

# **Action initiated to realize the Goals**

- > To impart quality service in the field of education, our institution appoints duly qualified staff for each and every subject/department. To impart valuable service the teachers are persuaded to undertake faculty development programmes time to time.
- > To attain community and social development our institution pays special attention to minority and backward class students.
- > To ensure and inculcate perfect discipline among students we communicate to them the rules and regulations of our college at the beginning of the academic year itself. This automatically helps us in maintaining strict discipline and decorum.
- ➤ To aim at overall personality development of the students, we conduct various extracurricular and co-curricular activities such as Elocution Competition, Debate Competition, Quiz Competition, Essay Writing Competition, etc. on current and contemporary issues.
- > To inculcate moral values amongst the students, the College organizes workshops, guest lectures and exhibitions.
- > To enable students to face the challenges of the competitive world, we train them through extra coaching in carrier development cell.
- > To help the students in discovering their latent talents, we conduct cultural activities and sports to give them opportunities to exhibit their hidden talents.
- > To instill awareness about social and ecological issues among students and help them being socially conscious citizens, we organize various programmes under the NSS,

Lifelong Learning and Extension Activity, Nature Club, Women Development Cell, Science Association, etc.

#### Other details of the Goals:

#### **Access to the Disadvantaged:**

In this connection our faculties identify the slow and fast learners through test, tutorials and give the extra coaching to the slow learners and also help them to acquire the necessary laboratory skills. The various scholarships and prizes are also given to the SC, ST, DT, NT, OBC, EBC and Minority students.

## **A** Equity:

We make sincere attempts to see that, when it comes to following of rules, regulations, discipline, decorum, system etc. of the institution, all the students (without making any distinction on the basis of sex, caste, creed, income level, etc.) are treated equally.

#### **Self Development:**

We give top priority to the student fraternity. In this connection all the teaching and non-teaching staff is always ready to provide the students with all kind of help or assistance.

# **Community and national development:**

Our N.S.S. units organize various community and rural development programmes like Youth For Sustainable Development (Y. F. S. D.) Camps, Blood Donation camp, Health Checkup Camp, AIDS awareness, Anti plastic drive, Tree Plantation in the adopted village.

### **&** Ecology and Environment:

We have botany and zoology departments to assist the student to make them aware of the emerging ecological and environmental issues. Nature club of the college organizes nature trails for creating awareness about environment and conserving biodiversity.

#### **Value Orientation:**

Ours is a value based system. To make our students aware of this the Women Development Cell organizes periodic value orientation programmes such as Shravansari, Raksha Bandhan, Navratri, etc. Curriculum also provides for value based education by way of interdisciplinary courses at first and second years of degree.

#### **Employment:**

Our institution has a Career Guidance and Placement cell which organizes campus interviews and seminars to inform students about employment options available to them.

#### **A** ICT Introduction:

In all laboratories LCD T.V. are available for demonstration of experiments as well as in all the classes we provide access to the introduction to ICT.

#### **&** Global and National Demands:

We leave no stone unturned in providing all the required facility to our students to help them to achieve global and national demands.

Our college is located in the rural area of Raigad district, with more percentage of socially, economically backward classes. Even college is adjacent to tribal area and the only source of higher education in this area. The vision and mission statements are keeping with intellectual potential and needs of this region. Most of the students

taking education in this college are from economically weaker section of the Society. Many of them are from framers family and first generation learners. The college is catering their needs. Because of college, the higher education has become accessible to the deprived lot of the society of this area. There is measurable change in the education level of this area and life style of the people since the establishment of the college.

## **❖** Higher education policy of the nation has the Following salient features

- ➤ Education in the rural area is an effective tool in bringing social change through community development.
- ➤ Higher Education provides people with an opportunity to reflect on the critical, social, economic, cultural, moral and spiritual issues facing humanity.
- ➤ Higher Education contributes to national development through disseminatic specialized knowledge and skills and therefore it is a crucial factor for survival. Research in the Higher Education is a mean of renovation and it is primarily aimed at producing quality man power capable of taking R&D functions.

Our vision and mission statement fulfill objectives of National policy of Higher education as follows:

College is trying to translate its vision into its activities with the following effects.

- Information of the college, courses offered by it is made available to the society through posters, hoardings, pamphlets and a well illustrated website www.https://apscnagotane.edu.in and prospectus.
- An open access to the college to the all sectors of the society, student and parents.
- ➤ College authorities, teaching staff is always in communication with the local community from villages in the vicinity and giving the information of the college from time to time.
- Admissions are open to all and the due care is taken to accommodate the students from deprived status and backward class according to government reservation policies.
- > Flexibility to pay the fees in installments for the economically backward students.
- All the available remedial schemes like conveyance to the student, stipend to the students, free ships, scholarships are made available to make the education feasible to them
- > Efforts to develop overall personality of student and career guidance for its establishment. It helps for the development of society in turn.

# 6.1.2 What is the role of top management, Principal and Faculty in design a implementation of its quality policy and plans?

# **❖** Management's commitment-

➤ Our Management is one of the most committed and dedicated in the service of catering to the contemporary requirements of education. Our management takes care of the better future of students who comes from the rural area by introducing advanced courses in college, according to the opportunities available in Industries, IT sector and to cope up with competitive exams.

#### **❖** Management's leadership-role-

- ➤ The members of management by paying frequent visits to the college, instruct, guide and encourage the staff and students.
- ➤ They play major role in motivating our staff members to work for students who come from backward and rural area by allowing them to participate in different curricular and extra-curricular activities.

# **❖** Management's involvement-

- ➤ In regular LMC meetings, the members of management take review of the academic activities.
- ➤ They raise substantial revenue from industrialists, alumni and well wishers for prompt infrastructural development.
- ➤ Budgetary provision for each department is made available after detailed discussion in LMC meeting.
- ➤ They give valuable suggestions wherever necessary in planning different activities like purchase, repair and maintenance, building development, lab maintenance and development, etc.
- ➤ Leaves of staff members which are used for orientation course, refresher course, conferences, etc. programmes related to faculty development are get sanctioned during LMC meetings.

Oals of Dwinsing

# \* Role of Principal -

- ➤ The Principal follows a democratic and active participative style of leadership, soliciting the total participation and active involvement of both teaching and non-teaching staff by conducting periodic meetings and arriving at a consensus.
- > The Principal has long term vision for both, academics and Administration.
- ➤ He guides, initiates, persuades and convinces the staff to actively involve themselves in realizing the goals and objectives of the Management of the institution.
- ➤ He also encourages the staff as well as students for Research projects.
- ➤ He also co-ordinates with outside agencies like University authorities, UGC, Joint Director's office and other government bodies to comply with necessary regulations.
- The Principal also follows an open door communication system and often allows the 173 to come up with their constructive suggestions and grievances if any.
- ➤ He goes out of the way to attend to the grievances of the staff.
- > Applies cost control techniques to all expenditure.
- Reasonably uses intermix of formal and informal relationship with students and staff.
- Takes initiative in launching new academic programmes and encourages staff to improve academic efficiency with emphasis on accountability.
- ➤ The staff members are also invited for discussions about various aspects of the working environment which automatically helps to create a healthy working atmosphere. In other words, the staff is given the authority and responsibility to complete the desired task in the best possible manner within the stipulated time.
- ➤ The Principal is very vigilant about discipline, commitment and devotion towards the work allotted to the staff. This blend of control with virtual participation of the staff is the distinguished feature of our institution which has allowed him to get the spontaneous and unrequited support from the staff. This kind of leadership has generated a sense not only of belonging but also of dedication among the staff members.

## **\*** Role of Faculty:

171

The faculty is actively involved in decision-making process. The teachers hold periodic meetings. The recommendations of the conveners of the committees are submitted to the Principal and he arrives at suitable decisions for implementation. The three members of the faculty represent in the Local Managing Committee. Thus, the faculty is involved in planning and decision making process.

#### **6.1.3** What is the involvement of the leadership in ensuring:

# **\*** The policy statements and action plans for fulfillment of the stated mission?

In the line of vision, the policy statement is declared as "Education for all" which is approved by the Leadership. In this regard, IQAC meets frequently and the views of the teaching as well as non-teaching staff are honored to arrive at decisions. The decisions of IQAC are further discussed with parents, students and Management and the Principal prepares action plan for the execution in the line of achieving mission objectives.

# **❖** Formulation of action plans for all operations and incorporation of the same into the institutional strategic plan?

The action plan for the effective implementation of the policy statement of the institute is prepared by the Principal as per decisions in IQAC and LMC, through a well-defined mechanism consisting of academic feedback from the teaching staff regarding academic requirements which are discussed in the various and appropriate committee meetings.

#### **!** Interaction with stakeholders:

The Principal of the college holds regular meetings with the Student Council where the suggestions and problems of students are discussed. The faculty members of the institute discuss the suggestions and problems with the parents in parents meetings. Thus, for effective implementation of the policy statement and action plan, all the stakeholders are taken into confidence through variety of approaches such as written communication or by arranging the meetings with alumni and students.

# **❖** Proper support for policy and planning through need analysis, research inputs and consultations with the stakeholders?

The research and extension activity plans of IQAC are discussed with Research Institutes and Non Government Organization concerned with the institute.

#### **Reinforcing the culture of excellence:**

The present leadership for reinforcing the culture of excellence promotes the faculties to increase the education status. At the end, scholarships and prizes are given to the meritorious students. The faculty members often visit reputed institutions in the state to learn about their best practices.

### **A** Champion organizational change:

Leadership is always vigilant in observing the changes in the global academic scenario and takes necessary steps in updating the programmes and facilities accordingly. Commencement of new courses, research activities, use of computer and internet facilities, ICT enabled class room teaching are some of the examples.

# 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 following procedures are adopted for effective implementation of policies and plans:

- ❖ The plan decided by IQAC of the institution is discussed in the meeting with all stakeholders and necessary modifications are undertaken as per needs of institution.
- ❖ On implementation of the plan, feedback is obtained from these stakeholders by calling-
- ➤ Local Management Committee Meeting
- > Student-Parent Meeting
- > Staff Meeting
- ❖ On receiving feedback after discussion of agenda in the above meetings, the suggestions are recorded and referred by institution's IQAC.
- ❖ The IQAC prepares corrective plan and submit the same to the various departments through Principal of the institution.
- ❖ At the end of the year, the meeting of stakeholders is called to evaluate effectiveness of policies and plans.
- ❖ Further, suggestions and criticisms from stakeholders are considered as input for future plans.

# **6.1.5** Give details of the academic leadership provided to the faculty by the top management?

➤ The top management consists of Local Managing Committee, Governing Body and also some members of IQAC-Steering Committee.

# **Academic Leadership by Governing Body:**

➤ The Governing Body members belong to social work, education, business, agriculture etc. They always provide valuable guidance in respect of result improvement, participation of student in social activities and academic management. They are instrumental in collaborating with industries for faculty improvement and research activities.

#### **Academic Leadership by Local Managing Committee:**

➤ The members of Local Managing Committee provide leadership in resolving ground level problems of faculties (if any). They provide advice in academic improvement and extend

their assistance in organizing industrial visits, facilitating on job training and encouraging faculties for research.

## **Academic Leadership by Principal:**

➤ Though the Principal is a part of decision making, he is also a part of implementation through various decisions. He plays role as a guide and mentor to the faculty members. He not only gives suggestions to the faculty for improvement but also provides necessary means and facilities to the faculty members.

### 6.1.6 How does the college groom leadership at various levels?

- ❖ The college has as a practice of forming organizing committee for every event to be organize in the college, This committee consist of teachers as a member as well as student volunteers, This formation of organizing committee helps to groom leadership among faculty members as well as students. The College conducts various programs and activities for faculty and students at two levels:
- ➤ Academic Level
- ➤ Non-Academic Level

### **At academic level the programs conducted are:**

- > Lectures by academicians
- ➤ Lectures by eminent personalities
- Listening CDs which contain lectures by renowned personalities.
- Documentary shows.
- ➤ Workshops on e-learning.

### **At non-academic level the programs conducted are:**

- ➤ Once in a year, a picnic is organised called as "Naturetrail".
- > Get together of teachers at end of the year.

Thus, the college has a significant role in grooming the leadership among faculty members by assigning duties and responsibilities to them to conduct academic and non-academic activities. Moreover, the appointments of faculty members on different associations and committees provide scope for leadership.

# 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?

It is a need of time to provide academic freedom to the departments; therefore the institution has adopted decentralized governance system. The Principle of our institute believes in delegation of authority and decentralization. Accordingly, the governing system of the institution prefers decision making in democratic, participative and decentralized manner. Therefore, the departments enjoy autonomy operations in respect of academic planning and

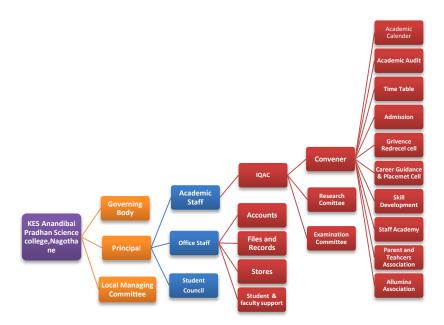
day to day planning. The faculty members have freedom to select or purchase the required books and also to plan teaching, learning, evaluation and designing co-curricular, extracurricular activities to support programme requirements and overall development of students.

# 6.1.8 Does the college promote a culture of participative management? If 'yes', indicate the levels of participative management.

Yes,

The institute has culture of participative management and the top management promotes it.

### The institute has adopted participative management culture in following ways:



Thus, the above structure of governance indicates high degree of participation of students, teachers and members of Governing body in maintaining culture of participative management.

# 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?

- ➤ The quality policies of our institution are developed by the IQAC of the institute by considering Vision, Mission, Goals and Objectives and well accepted Academic Assessment Criterions such as
  - ➤ Curricular Aspects
  - > Teaching-Learning and Evaluation
  - > Research, Consultancy and Extension

- ➤ Infrastructure and Learning Resources
- > Student Support and Progression
- > Governance, Leadership and Management
- > Innovations and Best Practices

The policy statements are driven and deployed in consultation with the stakeholders. The policies are reviewed frequently by obtaining feedback from the stakeholders.

# 6.2.2 Does the Institute have a perspective plan for development? If so, give the aspects considered for inclusion in the plan.

The institute has perspective plan for the development as follows:

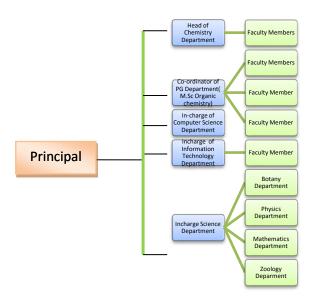
- ❖ Tie-up with industry
- Collaborations with other institutes and universities.
- Commencement of professional and innovative courses.
- \* PG courses.
- \* Research center.
- **Expansion** of on job training programmes.
- Formation of self-help group for youth.
- \* Consultancy center for farmers and fishermen.

# 6.2.3 Describe the internal organizational structure and decision making processes.

The internal organization setup for decision making in this institution is described below:

- Academic Decisions
- Administrative Decisions
- > Co-curricular and Extra-curricular Decisions

#### Chart showing organizational structure for academic decisions



#### The internal organizational structure of the college facilitates:

### **Strategic Planning**

- ➤ We adopt the bottom up planning approach.
- ➤ Planning, introduction of new courses with the suggestions made by the faculty members in the meeting with the LMC members.
- ➤ Planning and implementing activities of the college, associations conduct programmes in concurrence with faculty members and students.

#### \* Teamwork

Effective planning and implementations through:

- > The formation of various committees comprising of faculty members.
- ➤ Allocation of need-based specific tasks to ad-hoc committees.
- Periodical meetings of the members of the committees with the Principal.
- Academic and Administrative Committees are constituted where these committees are actively involved in the college administrative process.

# **Decision making process adopted by institution:**

In internal decision making process, the different steps are taken as under:

- > The problems are collected from the stakeholders.
- > The problems are analyzed with the suitability of organization.
- Weight age preferences are given to the problems requiring immediate action.
- > The plans are prepared with the involvement of IQAC members and other stakeholders.
- ➤ Plans preferred the majority are selected for implementation.
- > Preferred plan is implemented under the supervision of the Principal.
- > The implementation is evaluated by organizing meetings of faculty members, non-teaching staff, parents and students.

# 6.2.4 Give a broad description of the quality improvement strategies of the institution for each of the following.

### **\*** Teaching & Learning:

The institution has framed various strategies which enhance the quality improvement. These strategies are framed by the institute keeping in view the quality changes required for the development of the institute.

For good teaching and learning process, following strategies are made:

- Academic planning
- Teaching planning
- Continuous evaluation system
- Conducting extra lectures
- Conducting lectures during examination period.
- Permitting the teachers to participate in seminars, workshops and orientation courses.

- Conducting preliminary examinations for final year students.
- Extra efforts for slow learners.

### **A Research & Development:**

- > Institute encourages the teachers for conducting research work.
- ➤ The research committee is formed to support the research activities
- ➤ The college has received UGC grant and DST-FIST program grant through which research facilities are developed in the institute and the research activities of faculty members are enhanced.
- Among the staff 8 are Ph.D holders and remaining 6 are Pursuing Ph.D degree and 1 is pursuing M.phil.
- Faculty members have published research papers in national and international journals.

# **Community Engagement:**

The institute has organized various activities like blood donation, tree plantation, Police-Mitra, survey of tribal communities, street play, rallies, voters campaigning, clean India Campaign, etc.

#### **\Delta** Human Resource Management:

- ➤ The institution recruits faculty members and administrative staff based on the guidelines provided by the university.
- ➤ The timetable committee is formed and the sanctioned workload is distributed to each faculty.
- ➤ The academic as well as administrative work is distributed through the formation of different committees.
- > Good and healthy environment is provided by fulfilling automation requirements.
- ➤ The faculties and administrative staff are evaluated by considering their performance and they are appreciated or punished.

#### **❖** Industry Interaction:

❖ The institute arranges industrial visits. The institute has entered in MoU with the industries for research and other purposes.

# 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?

Regular feedbacks are taken from the students. Parent meetings are arranged to solve the problems of the students. The head of the institution provides the information to the management and acts as an interface between parents and the staff of the institute. Apart from this, the Principal, through various meetings, reviews the functioning and progress of the various committees and their activities in the institute. The Principal of the institute constantly monitors the administration process.

6.2.6 How does the management encourage and support involvement of the staff in improving the effectiveness and efficiency of the institutional processes?

- ❖ The Management of the institution plays supportive role to encourage faculty and staff in maintaining their efficiency and effectiveness in discharging their duties. The management encourages the staff in the following manner:
- ➤ Provides financial support to develop infrastructure.
- > Duly promotions are given to the staff members.
- > Organizes social welfare activities for staff and their families.
- > Get-to-gather is organized every year for the staff.
- ➤ Best Teacher Award called as "Adarsha Shikshak Puraskar" and Best Employee Award called as "Adarsha Karmachari Puraskar" are given to teachers and non-teaching staff respectively at the Society level.
- > Timely felicitation of staff on their achievements.

# 6.2.7 Enumerate the resolutions made by the Management Council in the last year and the status of implementation of such resolutions.

The following resolutions are made by the management council:

Sr. No	Year	Resolution	Status	
1	2013-2014	Resolution No. 2 C Dt.17 Oct	The building construction is	
		2014 For the construction of	completed in June 2015 and	
		extension college building for	handed over to the college.	
		laboratories(A Wing)		
2	2014-15	Resolution no.6 – Dt. 6 Sep. 2013	Application was sent to the	
		increasing the intake capacity of	University along with necessary	
		M .Sc organic chemistry (from	fees which is approved by	
		10 to 20 ).	university and the permission is sought from 2014-15	
3	2014-15	Resolution no.04 –Dt. 20 Feb	Rs.1700000 received from DST-	
		2015 Separate bank account for	FIST are deposited in the bank	
		DST-FIST to be open in state	Acc No-34689927552 and it is	
		bank of India ,Nagothane.	utilized for the said purpose	
4	2015-16	Resolution No.04 Dt.11 Aug	The Foot over bridge connecting	
		2015 for applications for footover	the college campus to the	
		bridge to be submitted to highway	Nagothane village crossing over	
		and railway authorities	both Railway line and highway has	
			been sanctioned and half part is	
			completed	
5	2015-16	Resolution no .04 Dt 12 Sep 2015	Entire old building has been	
		for demolition of old building	demolished and on the same site a	
		whose some part collapsed due to	plan of a new building	
		broading of railway line and	construction is prepared.	
		blasting activities of the railway.		
6	2015-16	Resolution No.05 Dt.12 Sep 2015	college office ,principal cabin,	
		the college office ,principal cabin,	library and chemistry and	
		library and laboratories in old	computer science laboratories in	
		building to be demolished are to	old building are sifted in the	
		be sifted in the adjacent new	adjacent new building (A wing)	
		building (A wing)		

7	2015-16	Resolution No.06 Dt 12 Sep2015	Construction of working tables of	
		Construction of working tables	Kaddapa for practical's ,electrical	
		of Kaddapa for practical's	fitting ,gas and water pipeline	
		electrical fitting ,gas and water,	fitting etc has been completed in	
		pipeline fitting etc to be done in	the new building (A wing)	
		the new building (A wing)		
8	2015-16	Resolution No. 07 Dt.12 Sept	The building construction is	
		2015 For the construction of new	completed in June 2016 and	
		college building(B Wing)	handed over to the college.	

# 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?

Yes.

Affiliating university has a provision for according the status of autonomy to an affiliated institution. Since the institute is located in rural-hilly area it is beneficiary to the students to have the degree of University of Mumbai. Hence no efforts are made oget autonomy so far.

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?

The institute has Grievance Redressal Cell to consider grievances of girl students and other students separately. But the continuous interaction with stakeholders have promoted healthy environment in the premises as well as in the administrative set up resulting in non receiving of complaints.

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?

There is no any case filed neither against the institution nor by the institution in last four years period.

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?

There is proper mechanism available to check the institutional performance. Feedbacks are taken from students periodically at two tier level i.e. 10 point feedback about teaching – learning and 15 point feedback on infrastructure, administration and library. The Discipline committee of the institute analyzes students' feedback. The feedback received is discussed with the Principal and concerned staff and assurance is sought to take corrective measures. The outcome of this mechanism has resulted in improving teaching-learning process. Also, the management of the institute has initiated changes in infrastructure and library facility.

### **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 Management and institution always extend helping hands with several efforts to develop professional approach among the staff members. Some of the measures for this purpose are:

- Encouraging staff members to apply for University Minor Research Projects.
- ❖ Permitting and providing financial assistance to attend workshops and seminars.
- ❖ Arranging soft skill development programs and computer skill development programs for staff.
- Arranging workshop by inviting professional persons to develop positive attitude, to know strengths, to develop teaching skills making provision of study leave and duty leave to enhance their professional qualification, etc.
- ❖ Facilitating faculty members to organize seminars and workshops.
- ❖ Permitting the faculty members to apply and attend orientation and refresher programs. Till date, 23 faculty members have attended orientation/Refresher/Short-term programs in different universities.

# 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 institute provides financial assistance to the faculty for faculty empowerment. The institute supports and ensures professional development of the faculty by research through M. Phil./Ph.D. degrees, providing financial assistance and duty leave for attending national conferences/seminars. Both teaching and nonteaching staff are motivated by the institute to participate in faculty empowerment programmes.

# 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.

The institution appraises the staff members at three levels –

- Self Appraisal
- > Appraisal by Principal.
- > Appraisal by Students

The teachers are required to submit self appraisal report in the format given by the University of Mumbai, which is further evaluated by the Head of the Department and Principal.

The Principal writes confidential report of every staff at the end of the year and communicates extra-ordinary performance and poor performance if any in writing for further improvement.

The students appraise the staff member in 10 point feedback form which is analyzed by the Principal and communicated to the concerned staff.

# 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?

The review of performance appraisal report has proved helpful to the management in the following manner:

- **Staff** members remain loyal to their duties and institutional policies.
- ❖ High degree of discipline has been observed among staff members.
- ❖ The staff members have cultivated a good habit of timely work completion.
- ❖ The staff members attend the students with extra time.
- ❖ The staff members have developed professional approach.
- ❖ Punctuality and attentiveness observed among staff members.

Since the members of staff are dedicated, honest and hardworking, the need of taking major decisions has not arrived. However, the stakeholders are communicated the performance appraisal system by the following means:

- Organizing students-parent meeting.
- Organizing staff-student meeting.

# 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 Kokan Education Society and institution always promote welfare activities for teaching and non-teaching staff. The schemes of the institution are availed by all staff members are as follows:

- ❖ Advance salary is given to all staff members on late receiving of Government grants.
- Timely disbursement of salary.
- ❖ Payment of salary is given till the receiving of University approval.
- ❖ The Principal of the institution has given guarantee letter to the Banks, where the teaching and non-teaching staff availed the loan from the bank.
- Give recognition and appreciation to staff members by felicitating them for special achievements and consistent performance by offering "Adarsh Shikshak Puraskar" by the Kokan Education Society.

- ❖ In Kokan Education Society, Staff Credit Society (Patasanstha) is existing. The teaching and non-teaching staffs take the loan from the credit society.
- ❖ Apart from this, facilities of Maharashtra Government and University of Mumbai have implemented through following welfare schemes:
  - ➤ 15 casual and 10 Medical leaves are given to the employees during the academic year.
  - There is a provision of Maternity leave and Paternity leave which are given to the staff.
  - > Duty leave is given, if applicable.

# 6.3.6 What are the measures taken by the Institution for attracting and retaining eminent faculty?

- ❖ The appointments are made through duly constituted selection committee as per the University of Mumbai and Government of Maharashtra guidelines.
- \* The teachers are encouraged to promote research and extension activities.
- ❖ The faculties are given duty leave and special leave to pursue their research assignments.
- ❖ Several staff welfare schemes are initiated.

# 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?

To monitor effective and efficient use of available financial resources, the following steps are taken by the management:

- ❖ The financial budget is prepared by the Principal with the help of in-charge of every department.
- The financial budget is placed in the Local Management Committee and discussed to make effective use of financial resources and forwarded for further implementation.
- ❖ The institute's administration fulfills academic and non academic requirements within the purview of budget with the help of Purchase Committee and approvals are obtained from Local Managing Committee wherever required.
- ❖ The financial statements are audited by the auditor appointed by the Kokan Education Society.
- ❖ The audit report of the institution is submitted to the Kokan education society for open discussion in General Body Meeting of the Society.

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.

The internal audit is done by the Patil Randive & Associates., Pune. The CA, J.J. Randive, is appointed as the auditor in the General Body meeting of the Society.

Recently, the books of accounts are audited for accounting year 2015-16 and report is submitted to the Society.

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 funding are:

- ❖ The Government Salary and Non-salary Grants.
- \* Academic fees received from students.
- ❖ Amount received from funding agencies like DST-FIST, UGC, MPCB (Maharashtra Pollution Control Board) etc.

Deficit if any is contributed by the management - Society. Audited income and expenditure statement of academic and administrative activities of the previous four years, i.e. 2012-13, 2013-14, 2014-15 and 2015-16 are joined herewith for your perusal as annexure.

#### The details of reserve fund are follows:

Sr.No	Date	Bank Name	F.D Number	Amount
01.	06/05/1992	State Bank of India, Alibag	F.D.N. 24815	Rs. 20,000/-
02.	13/01/1993	State Bank of India, Alibag	F.D.N. 462765	Rs. 20,000/-
03.	27/10/1994	State Bank of India, Alibag	F.D.N. 339027	Rs. 20,000/-
04	09/08/1995	State Bank of India, Alibag	F.D.N. 345192	Rs. 20,000/-
05.	17/08/1996	State Bank of India, Alibag	F.D.N. 062557	Rs. 20,000/-
06	29/11/2013	State Bank of India, Alibag	F.D.N. 334866086071	Rs. 4,00,000/-
07	03/12/2013	State Bank of India, Alibag	F.D.N. 33495926011	Rs. 1,00,000/-

# 6.4.4 Give details on the efforts made by the institution in securing additional funding and the utilization of the same (if any).

- ❖ DST-FIST Rs.2000000/- sanctioned and Rs.1700000/- are received and utilized (for equipments Rs. 1200000/- and computer and Networking Rs.400000/- and Reference books Rs.100000/- =Total Rs.1700000/-).
- ❖ Funds from University of Mumbai for minor research projects.(Four years total )= Rs. 1,35,000/-(Completed 45,000/- and ongoing 90,000/-)
- ❖ Funds from University Grant Commission for major research projects.(Morbale,Bhagat)=Rs. 1,35,000/-
- ❖ Funds sanctioned from MPCB Rs.800000/-.
- Voluntary contribution of staff members.

# 6.5 Internal Quality Assurance System (IQAS)

# **6.5.1** Internal Quality Assurance Cell (IQAC)

Has the 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?

The institute has constituted IQAC which initiates the following steps in respect of data analysis and planning and overcoming barriers of learning.

## **Collection and Analysis:**

- ❖ The institute takes feedback from students and it helps to understand and overcoming learning barriers.
- The institute analyses results.
- ❖ The institute collects the data about learning outcomes from students, alumni, employers, industries and parents.
- ❖ The data is collected from suggestion box.

#### The committee has following members:

Sr. No.	Name	Designation
16.	Dr. Sandesh S. Gurav	Incharge
17.	Dr. Dinesh V. Bhagat	Member
18.	Dr.V.S.N Raghav Rao	Member
19.	Dr.Kurra Sarada	Member
20.	Dr. Satish D. Patil	Member

21.	Dr. Vijay S. Chavan	Member
22.	Dr. Shrikrishna D. Tupare	Member
23.	Dr. Vilas R. Jadhavar	Member
24.	Mr. Vikas S. Shinde	Member
25.	Mr.Hemant F Jadhav	Member

How many decisions of the IQAC have been approved by the management/authorities for implementation and how many of them were actually implemented?

The most of the decisions taken IQAC are supported by the management/authorities for implementation. For example, last three years, IQAC has taken ten decisions. Out of them, eight are actually implemented and rests of the decisions are in the process of implementation.

Sr.No	Year	IQAC Decision	Implementation Status
1	2014-15	Construction of Extension Building In 'A' Wing	Constructed
2	2014-15	Organizing Avishkar Research Convention	Successfully Organized
3	2014-15	Organizing Career Fair	Successfully Organized
4	2015-16	Organizing Chemistry workshop for new syllabus	Successfully Organized
5	2015-16	Organizing Physics workshop for new Syllabus	Successfully Organized
6	2015-16	Construction Of new Building 'B' Wing	Constructed
7	2016-17	Organizing State Level Conference	Successfully Organized
8	2016-17	Organizing Alumni Meet(Gathering)	Successfully Organized
9	2016-17	Construction of new building for Gymkhana-Canteen, Co-curricular Activity room.	Plan and estimate is ready.
10	2016-17	Organizing Workshop for NET/SET Students.	To be Organized.

Does the IQAC have external members on its committee? If so, mention any significant contribution made by them.

The IQAC had three external members on its committee and they are-Mr.Narendra P. Jain, Mr.Anil K Kale. Mr. Abbas I.Nagothanewala. These members

give valuable suggestions about training and placement, renovation of infrastructure, research environment, results, students' involvement in the society, etc.

# How do students and alumni contribute to the effective functioning of the IQAC?

The ideas and suggestions given by the students and alumni are useful for the effective functioning of the IQAC. The institute takes 10 points feedback from the students to gauge teachers' performance about their teaching style, depth of knowledge, delivery of content, etc.; and 15 points feedback form about the institute. The Principal meets the students informally and students provide feedback orally to the Principal. The actions are initiated on the basis of feedback obtained from the students in which the institute, teachers and management get a chance for improvement. Also, the institute arranges meetings of alumni association where the members of association give suggestions to improve.

# How does the IQAC communicate and engage staff from different constituents of the institution?

The IQAC committee analyses the collected data taken from students' feedback and discusses with faculty and Principal. The faculty uses the same for planning and overcoming the barriers of learning. The result of students in the examination is the best indicator to overcome learning barriers. On the recommendation of IQAC the corrective measures are initiated such as:

- Providing the question banks to the students.
- **Extra/remedial classes for slow learners to solve their problems.**
- ❖ The faculty sets benchmarks from feedback report and develops strategies.

Most of the staff members of the institute are the members of IQAC; therefore, IQAC gets inputs and contributions from the staff members in IQAC meeting.

# 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 operationalization.

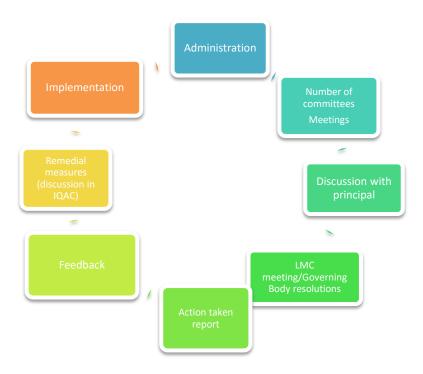
An integrated framework for quality assurance of the academic and administrative activities is as under.

# **Integrated framework of academic activities:**

Teaching, Learning processes	Evaluation
1. Teaching plan problem session	1. Surprise test Quiz,
2. Bridge courses	2. Assignments
3. Actual teaching (Lectures, Seminar,	
Group Discussion, Question answer session	3. Unit Test
Question Paper solving)	
4. Internal Assessment	4. Project

5. Evaluation	5. Paper checking
6. Communication	6. Result display
7. Feedback	7. Evaluation
8. Analysis	8. Final result
9. Remedies/measures	
10. Improvements	

## Integrated framework of administrative activities:



# 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.

Yes,

Teachers of the institute are allowed to participate in Orientation and Refresher Courses where they are trained by academic staff college.

No of teachers Participated					
Year	Orientation Course	Refresher course	Short-term courses	Total	
2012-13	01			01	
2013-14	03	06		09	

2014-15	 		00
2015-16	 10		10
2016-17	 	03	03
		Grand Total	23

# 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?

No formal academic audit or other external review of academic provision has done. However, informally academic provisions are reviewed by local members and academic persons involved in governing body; and their suggestions are used to improve academic standards.

# 6.5.5 How are the internal quality assurance mechanisms aligned with the requirements of the relevant external quality assurance agencies/regulatory authorities?

The institute arranges lectures of HR managers, entrepreneurs, lawyers, doctors to meet the requirements of relevant quality assurance agencies through placement cell, various associations, NSS, DLLE etc. The internal quality assurance cell of the institute keeps pace with guidelines provided by NAAC, UGC, Director of Higher Education and the University of Mumbai in order to improve the overall quality and excellence of the institute.

# 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?

- From the first day of the college, the teaching-learning process starts.
- On the first day of the academic year, the Principal addresses the teaching staff.
- ❖ The Principal throws light on teaching-learning process for the newly admitted students through welcome lecture at the beginning of the year.
- ❖ The class in-charge collects daily attendance records of the students from respective subject teachers which are communicated to the Principal.
- ❖ The Principal attends the lectures of faculty and provides feedback, suggestions to the faculty if required.
- ❖ The institute conducts tests for third year students where the students can check their knowledge, preparation prior to university examination.
- ❖ The lectures are adjusted if a teacher takes leave.
- ❖ The evaluation and the assessment of students is carried out continuously at IQAC level and department level. The students are continuously evaluated through

- internal examinations, assignments, project work, viva, classroom performance, communication skills and practical's.
- ❖ The teachers have developed personal contact with the parents. They can discuss the problems of the students with parents.
- ❖ The institute takes feedback from the students about both the teacher and the institute which help to design policies for improvement.

#### **Outcomes:**

- a) Teachers update their knowledge
- b) The students do not bunk the classes.
- c) The students take active part in co-curricular and extra-curricular activities.
- d) The students acquire good marks in examinations.
- e) Student-teacher rapport has a tuning in the institute.

# 6.5.7 How does the institution communicate its quality assurance policies, mechanisms and outcomes to the various internal and external stakeholders?

The quality assurance policy, mechanism and outcomes are communicated to internal as well as external stakeholders through:

- Prospectus
- Institute's website
- News paper
- Regular staff meetings of teaching as well as non-teaching staff.
- Parent-teacher meetings
- **❖** Alumni meetings
- Students Council meetings
- Social awareness programmes conducted by the NSS and DLLE units of the institute.
- \* Through notices.
- Standing Committee meeting

# **Criterion - VII**

# INNOVATIVE PRACTICES









# **CRITERION VII**

# INNOVATIONS AND BEST PRACTICES

## 7.1 Environment Consciousness

#### **7.1.1** Does the Institute conduct a green audit of campus and facilities?

Green audit means the assessment of the environmental impact of an institute. The institute's campus has following green assets:

- ❖ Hanging baskets wall with over 40 hanging plants.
- ❖ The NSS volunteers have planted over 100 trees in the premises out of which around 35 have survived.

It all indicates "Green Campus" of the institute. The assessment of environmental impact i.e. the formal green audit is not undertaken by the institution, however, the sincere efforts are put in for Green Campus. The green campus is treated as worthy as Green Assets of the institute.

# 7.1.2. What are the initiatives taken by the college to make the Campus Eco friendly?

Following initiatives are taken in the institute to make the campus eco-friendly:

#### **Energy Conservation:**

Buildings of the institute are well ventilated with glass windows to maximize natural air conditioning and lighting. It helps in conservation of electricity. Still the institute has installed CFLs and LED bulbs. Lights and fans are switched off by floor peons, staff and students after engaging of the classes so that the use of electricity can be minimized. It helps in energy saving.

The computers in the Principal's office, library, college office, different departments have LCD monitors to reduce the usage of electricity. Thus, the students and staff are sensitized and made sensible for energy conservation.

Under the consultancy service of Department of Physics the experts are also invited to give presentations on energy conservation. e.g. Lecture of Dr. Nitin Lingayat from Dr.Babasaheb Ambedkar Technological University, Lonere.

#### **❖** Use of Renewable Energy-

Since our Institute is located on the top of the hill, sunlight is available for the whole day, hence we are trying to make use of this natural resource as a renewable energy source for the campus.

#### **\*** Water Harvesting-

In chemistry laboratory rain water is collected and stored and is utilized for experiments throughout the year.

#### **Check dam construction**-(Vanrai Bandhara)

National Service Scheme volunteers constructed about 5 check dams i.e. *Vanrai Bandhara* at adopted villages such as *Wangni- 3*, *Amdoshi-2*. It is an effort made by the institute for water conservation.

### **&** Efforts for Carbon Neutrality-

- ➤ LPG is used in Chemistry laboratory. LPG is eco-friendly fuel.
- ➤ Chemistry laboratory uses combination of electricity and LPG energy to neutralize carbon. Electricity is used for distilled water plant only. Whereas LPG is used for heating the test tubes and heating of allied glass-wares as and when needed to meet the need of light energy.
- In Bio-fertilizers the degradable garbage, leaves and other wastages are used as a natural resources of fertilizer for the plantation which prevent production of carbon as they are not burnt. Thus, the institute works on every aspect to maintain carbon neutrality.

#### **❖** Plantation:-

Beautiful green scenery around the institute always reminds the prosperity. Herbal Garden and Botanical Garden in the institute campus is maintained by the students. Other than this, the institution organizes tree plantation activities within the campus and on the lands in NSS adopted area.

#### **A** Hazardous Waste Management:

The institution has dug waste pits scientifically by using bricks, small stones, sands, etc. through which hazardous waste are disposed after filtration. The utmost care is taken so that drain of hazardous waste is minimal in our institution. Mild reagents, Chemicals, solvents are mostly used wherever possible to regular Chemistry Practical.

# **&** E-Waste Management-

E-waste arises from computers and other modern electronic mediums. The rate of e-garbage is minimal in our institution. Few of the outdated computers are sent for recycling through private agency by following the proper right off procedure.

## 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.

In the last four years period, innovations were introduced at three levels:

#### **Academic interaction level:**

#### • Innovation in Teaching Learning Process

- ➤ Charts are used mostly by Botany and Zoology departments to explain the cytology and life cycles of plants and animals.
- > Specimen, Permanent Slides are used to Observe the various Stages in the development of Plants and animals
- ➤ Internet Facilities are used for bioinformatics Practicals.
- ➤ Ball and Stick Models are used for Organic Chemistry
- ➤ Charts of Periodic table are used in chemistry
- > ICT tools such as LCD Projectors, TV are used for power point presentations on various topics to elaborate the available information.
- ➤ University of Mumbai has Selected our Institute for the Pilot Project of "Virtual Classroom" among the first eight affiliated colleges.

#### e-learning

e-Learning is made available in the library with 4 computers having internet connection, INFLIBNET, N-List database have 3500 e-journals and 80000

e-books. The students are provided with downloading facilities under the supervision of the Librarian.

#### **Competitive exam awareness drive**

Competitive Examination and Career Guidance Cell arranges guidance lectures, workshops for various competitive examinations like UPSC, MPSC, Staff selection, Banking, Railways, and BARC etc. Mr. Suhas Patil

Ex. Deputy Commissioner of Central Excise who is a resident of Raigad district guides our students for these examinations for every year.

Books worth Rs. 1, 00,000/- on various competitive exams are being used by the students in the central library.

#### **❖** Audio-Visual Aids

All faculty members have prepared their PPT presentation on the syllabus of their respective subjects. Motivational videos are screened for the students. Students are motivated towards analytical, conceptual and creative thinking through these motivational videos.

#### College Website

- The institute has designed website for providing information to the stakeholders.
- ➤ The website is updated time to time and the students are made aware of new things pertaining to college and university activities.
- > The menu bar of website comprises of the following points
- > Administration
- Courses
- > Academic Information
- ➤ Co-Curricular Activities
- > NAAC
- ➤ Library
- ➤ News and Event of college.

#### **Excursion / Education Tour / Industrial Visit**

- ➤ The institute organizes excursion / education tour/ Industrial visit for the students to broaden their views in the subject
- > The activities like Nature trails are arranged by Nature Club to study the flora and fauna of different localities.

#### **❖** Feedback Mechanism

The institute takes the feedback from students, parents, alumni about the institutional infrastructure, administrative staff and faculty members.

#### **❖** Student Insurance

Our each and every student is insured. This insurance policy Covers death risks and gives benefit of Rs.100000/- insurance cover.

#### **❖** Infrastructural Level

- Establishment of a computer laboratory with internet connection.
- > Establishment of computerized library.
- ➤ Science laboratories (Chemistry, Physics, Botany & Zoology) are well-equipped with instruments.
- ➤ Construction of a multipurpose seminar hall with LCD Projector, sound system is available in the campus.
- ➤ All blackboards are replaced by green dust free boards.
- ➤ Computers with LCD monitors.
- ➤ University of Mumbai has selected our Institute for the Pilot Project of "Virtual Classroom" among the first eight affiliated colleges.
- ➤ The whole campus is under CCTV surveillance. It is used in both external and internal campus to watch over and protect students, faculties and properties.

#### Student Level

#### • College Annual Magazine-

- ➤ The KES published annual magazine is named as "VIKAS" twice in a academic year on 15<sup>th</sup> August and 26<sup>th</sup> January
- ➤ In this magazine reports of associations and departments, photographs of rankers, activities performed, collection of knowledgeablearticles ,poems etc. are published.

#### **\*** "SPRING FEST"

SPRING FEST is an annual cultural and sports event in which students use the college platform to explore and express their talents.

### **Active Participation in Cultural Programme:**

The college students actively participate at University level Youth Festivals every year. Students participate in intercollegiate events like elocution, debate, Rangoli, skit, poster making, one act play ,music, dance, fine art, mime etc.

College celebrates Rose day, Fish Pond day, Saree and Tie day, Chocolate Day, traditional day, Mr. and Miss. APSCN.etc.,

For **Mr. and Miss. APSCN** event. We apply different criteria like academic performance test on general knowledge, stage performance & curricular & co curricular aspects etc.,

# **Solution** Booming Frestos- Freshers Party

It is like well-come party for new comers at the beginning of academic year. It boosts confidence in fresher's. It promotes interaction between faculty, students (new and seniors). It includes sharing thoughts, tips about studies, discipline, making fun show, the caring for new comers by the seniors, etc.

#### ❖ "Farewell Party"

It is like send off party for Third Year students and M.Sc. Part II students at end of academic year.

#### **❖** Open Forum −Parent − Teacher Meeting

Every year the institute invites the parents for teacher-parent meets. It is like an open forum for dialogues with teachers, parents and students to discuss the problems and to introduce probable innovations.

## 7.3 Best Practices

7.3.1 Elaborate on any two best practices in the given format which have contributed to the achievement of the institutional objectives and/ or contributed to the Quality improvement of the core activities of the college.

Two best practices which have contributed to the achievement of the institute objectives and contributed to the quality improvement of the core activities of the institute are given as follows:

- In the year 2012-13 a purposeful attempt was made by the institution to undertake two best practices viz. Women development cell and research and Consultancy services. Both these practices are implemented successfully with high degree of consistency in achieving the objectives of practices. As a result of the efforts of Women development Cell the strength of girl's students has shown successive increase from 56.85% in the year 2011-2012 to 64.06% in the year 2016-
- 17. Parents have faith in the secured and safe atmosphere of college campus.
- The efforts made in the research area have resulted into the DST-FIST program 2014 grant of Rs.1700000 are received for the infrastructural development of research activities in the institute. The number of research exposure publications & MRPs are increased in this post re accreditation period. Number of Research publications our staffs has published are 135 research papers in National & International Journals along with the 9 number of MRPs. The college and university of Mumbai have jointly organized a interdisciplinary state level conference on science for Sustainable development on 19<sup>th</sup> Dec 2016.

### **Best Practice-1**

Title of the Practice: 'Women Development Cell'.

**Goal:** To promote gender equality conscience among girl Students & village people.

**Aim:** To increase the strength of girl students in the institute.

Women development cell is statutory body for the prevention/action against sexual harassment of women. It looks into the grievances /complaints of Teaching, Nonteaching staff and students especially in cases of gender discrimination.

- ❖ As per the guidelines of university the college has UWDC and CWDC from 2006.
- ❖ It organizes workshops, seminars and talks to convey the message of gender equality.
- It also works for increasing the social awareness in students through posters/slogans/essay/rangoli competition
- **\*** Objectives:
  - To aware about laws, rights, and opportunities in education.
  - > To develop self-respect.
  - > To increase the respect towards women.
  - To increase the strength of girl students in the institute.

- To increase physical Strength through karate & self defense technique
- To give self employment oriented skills to girl students
- To promote research in improving woman status.

#### **\*** The Context:

Maharashtra state is regarded as socially advanced state by having role of saints in social reengineering to give empowerment to women in enjoying their rights. Maharashtra leads in establishment of giving first lady doctor, the first girls' school, promoting widow marriage and so on. In spite of this, the right of equality to women is rejected in this 21<sup>st</sup> century period also.

Our institution has taken up a practice to promote a sense of "Women Development" by involving boys and girls students through programmes like Workshops, Rangoli, Poster exhibitions. In the context the girl students have proved their ability in the field of Chemical industries, IT Sector, police services, administrative services, defense services and business occupations.

#### **\*** The Practice:

This practice was implemented through Women Development Cell of our institution. This cell organizes various activities every year which are mentioned below:

## 1. Suggestions from students :

WDC conducted meetings prior to implementation of this practice and the valuable suggestion were invited. Out of total 319 girl students in the college 57 girl students gave suggestions through student representatives, 39 suggestions through suggestion box. These suggestions were compiled and selected.

### The suggestions are:-

- > The faculties and parents of girl students should have good rapport to counsel the students.
- ➤ Birth and death anniversaries of great personalities who have contributed in women empowerment should be celebrated.
- ➤ The street plays should be performed on gender issues with the help of local authorities, self help group and NGOs.
- ➤ Open discussion between parents and Police Officers and lawyers should be organized to remove fear in the mind of girl students and parents.
- ➤ The institute should constitute "Anti Ragging committee" to prevent ragging and teasing incidences.
- The girl students should be provided self defense training.
- > Efforts should be taken for availing skills to girls for self employment in their future life.

#### **Facilities provided to women-students and staff:**

- ➤ On the occasion of International Women Day, the educational material is given to 12 poor and needy girls at free of cost.
- The staff members paid fees of 5 economically backward girl students.
- ➤ Girls common room is well ventilated and has washrooms ,dressing mirrors, sanitary pad wending machines with incinator, first aid box etc.
- ➤ There is suggestion/complaint box outside college office where girls can give their suggestions to improve in all areas.
- ➤ In case of illness girl students are taken to nearby Primary Health Center, Nagothane for medical treatment accompanied by a lady teacher.
- ➤ Our following staff members give Scholarships to girls students for their achievements in academic every year.
- Mrs P. N. Jyothi
- Dr. Satish D. Patil
- Our one of the staff member **Dr. Mrs. V. Sarada** adopted one handicapped girl **Pranali Bhingare** from G.R.Agarwal high school Nagothane for her higher education .**Dr.Sandesh S.Gurav**, Principal of Our college have adopted one adiwasi girl for her education through Sobati Sanstha, Pen, Raigad

# 2. Implementation of suggestions:-

- Three days 'self employment workshop on tailoring' for girl students
- > One day workshop on 'Sexual Harassment' by Adv. Smt.kishorishinde and Adv.Sonal Jain.
- ➤ One day Workshop on 'Safety of today's youth' was organized and DYSP. Dr. Anita Jamadar Lady Police Officer was available as resource person .similar type of workshop was organized by API Mr.Balasaheb Darekar and PI.Mr. Sampatrao Bhosale.
- > Smt. Rekha Sathye of Chanakya Mandal was invited to guide the girl students of college on "Carrier Guidance".
- ➤ One day workshop on Self Employment skill development programme "Making of artificial flowers" by Mrs. Neena Begumpure Assistant Art teacher, from Reliance Petrochemical School, Nagothane and Miss Mayuri Shinde, Assistant Professor of our college
- ➤ One day workshop on Self Employment skill development program me "Art of Weaving Bags" by Mrs Manali Sahastrabuddhye
- ➤ The distribution of cloth bags prepared by NSS volunteers to the women of Ramnagar, Jogeshwari Nagar, Nagothane in the Haldikunkum Programme for the Anti-plastic awareness in the society.
- ➤ A Speech on Beat Martial Art is arranged by B. A. Darekar, PI Nagothane Police Station to the girl students for their Self defence.
- ➤ On the occasion of "International Women's Day" Adv. Sonal Jain and Adv. Kishori Shinde are invited to discuss the social issues, constitution and self-defence. The girl students and lady teachers were felicitated by the invitees.
- ➤ Under privileged and vulnerable students are given support in studies by scholarships and allowing them to pay their fees in installments.
- ➤ The informal surveys prepared during the admission process for each academic year are utilized to earmark students who need, financial support and to ensure social justice for students from the underprivileged and vulnerable section of the Society.

#### **Evidence of Success:-**

It is matter of pride that the efforts of Women Development Cell gave fruitful results and brought success stories for institution such as:

- ❖ The admission of girl students increased from 56.85% to 64.06% in the post reaccreditation period. Parents of girls have started giving first preference to our institution in admitting their wards.
- ❖ The girls are motivated to join police force and also to pursue higher education.
- ❖ WDC took efforts to create the respects about the girls among the boys
- ❖ The facility of vending machine is being used and appreciated by girls
- ❖ Parents have faith in the secured and safe atmosphere of college campus.
- ❖ Student council has large representation by girl students.
- \* Ragging, Eve teasing/harassment is totally banned in the premises.
- Offenders will be punished.

Help Line Numbers-Police-100/02194-222034

#### **Best Practice-2**

**Title of the Practice:** To strengthen the research activity Innovations and Best Practices introduced which have created a positive impact on the functioning of the institution are given below:

❖ The number of research exposure publications & MRPs are increased.

135 Research papers have been published by our faculties in National & International Journals in the post reaccreditation period.

#### **Details of Paper Publication are mention in following table:**

Sr.	Name of Faculty		Level		
No.		State	National	International	
1.	Dr. S.S. Gurav	01	02	04	07
2.	Dr. V.S.N.Raghava	01	18	8	27
	Rao				
3.	Dr.(Mrs.)	01	27	02	30
	Vallabhaneni				
	Sarada				
4.	Dr.D.V.Bhagat	01	00	07	08
5.	Dr.S.D.Patil	01	06	09	16
6.	Dr.S.D.Tupare	01	01	09	11
7.	Mr. J.V.Patil	01	-	-	01
8	Mrs.P.N.Jyothi	01	03	-	04
9.	Dr.V.R.Jadhavar	01	03	03	07

10.	Dr. V.S. Chavan	05	02	01	08
11.	Mrs.S.V.Chaudhari	01	01	-	02
12.	Mrs.S.T.Morbale	01	00	03	04
13.	Mr.M.D.Shirsath	01	00	01	02
14.	Mr. V. S. Shinde	01	01		02
				-	
15	Mr.H. F.Jadhav	02	02	02	06
Total		20	66	49	135

Our Staffs has presented 135 research papers in National & International Conferences

### **\*** Minor Research projects

Our staff & students have been working for MRP funded by UGC & University of Mumbai & 09 MRPs are completed yet.

#### **Details of Minor Research Projects are mention in following table:**

Sr. No.	Name of staff	Number of Minor Research Projects funded by		Total
		UGC	University of Mumbai	
1	Dr. S. S. Gurav	00	03	03
2	Dr. D. V. Bhagat	01	01	02
3	Dr. S. D. Tupare	00	03	03
4	Mrs. S.T.Morbale	01	00	01
	Total	02	07	09

# **❖** To cope up with the increasing demand of infrastructure two new building are constructed.

- ➤ By taking the consideration of increase in strength of students college has build up new buildings of dimension 1100 Sq.metre & a construction of one more building of dimension 300 Sq.metre will be started in future.
- ➤ In these new buildings four new Chemistry Laboratories are constructed.

# ❖ The number of 'MOU' with Neighboring Chemical Industries ,Colleges PHC centre ,MPCB, NICL are strengthen

Our college has 'MOU' with following organization

## A] Industries

- 1) Sadhana Nitro Chem. Ltd., Roha Dhatav
- 2) Unichem Laboratories Ltd., Roha Dhatav
- 3) Vidhi Dyestuffs MFG. Ltd., Roha Dhatav
- 4) Sudarshan Chemical Ind. Ltd., Roha Dhatav

5) Neelikon Food Dyes & Chemical Ltd., Roha – Dhatav

## **B] Senior Colleges**

- 1) K.E.S. Laxmi Shalini Women College, Pezari.
- 2) K.E.S. C.D.Deshmukh College, Roha.
- 3) J.S.M. College, Alibag.
- 4) P.E.S. Bhausaheb Nene College, Pen.

## **C] Primary Health Centre**

Primary Health Centre, Nagothane

#### D] Maharashtra Pollution Control board

# E] Group Insurance of Student with National Insurance Company Limited

Industrial visits for UG & PG students are organized every year to give Industrial Exposure to the students.

Campus interviews are organized by the industries for the placement of students.

# **❖** The strength of PG Course is increased to provide PG educations to maximum students.

Our college has started PG Course (Organic Chemistry) in the year 2008-09 with intake capacity of 10 students per batch. However by requirements of students & parents, from this year (2015-16) college has increase the strength from 10 to 20 students per batch as it is not possible for girl students to go to Mumbai, Pune and other cities to complete their M.Sc.

# **❖** To organized state level seminar on various topics such as Science , Safety of environment

In the year 2015-16 the syllabus of S.Y.B.Sc. Chemistry and Physics Subject has Changed w.r.t. this change

- ➤ College has organized District Level one Day Workshop on revised Syllabus of Chemistry of S.Y. B.Sc. Sem III & Sem IV
- ➤ College has organized District Level one Day Workshop on revised Syllabus of Physics of S.Y. B.Sc. Sem III & Sem IV
- ➤ College has organized one Day Workshop on Power Point Presentation for UG & PG students.
- ➤ One day Seminar on Preparation of Projects are organized for Computer Science & IT students.

#### **Contribution to environmental awareness / protection**

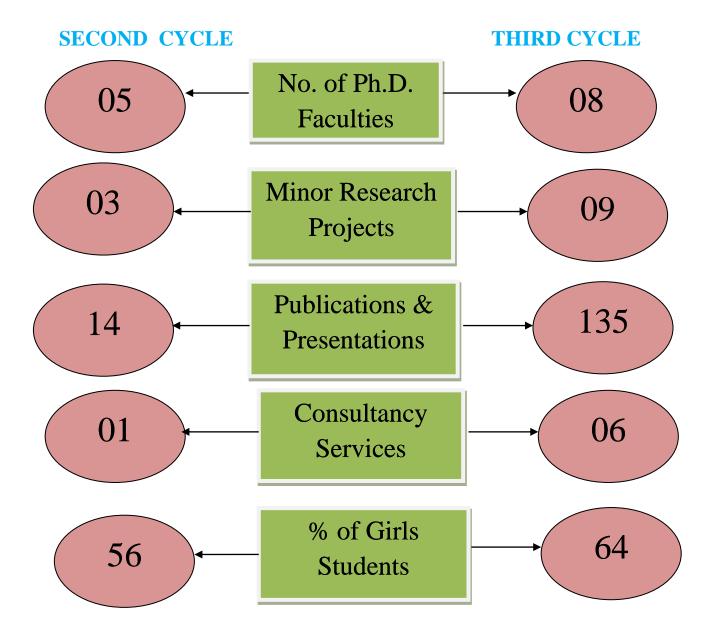
➤ Micro-scale and green techniques are adopted in laboratory work wherever possible

- > Tree plantation programme is organized by NSS unit of the college to make green and cool campus.
- > Poster exhibition on eco-friendly Ganpati festival
- ➤ A rally was organized for the save tree campaign
- > Street plays were organized on Social issues such as Industrial Waste management, Anti Plastic Drive, Protection of Girl Child, School Dropout & Child Labor.

# Recommendations and action taken for Quality enhancement of the institution

Recommendations of the previous peer team (March 2012)	Action taken in post reaccredation period
More career focused add on courses availing UGC support be offered.	Career focused courses are offered.
The use of ICT teaching learning strengthened. All the teachers to be more vigorously trained to become computer savvy.	ICT Teaching learning strengthened. All teachers used it vigorously.
Student support services such as training soft skills, especially English communication skills for the rural students through spoken English course using language lab and engaging professional communication experts.	Student support services such as training soft skills, English communication skill for rural students through spoken English are enhanced.
As the college is located in the chemical zone better industry linkage to be established/ sustained; more visiting faculty from industry be arranged.	As the college is located in the chemical zone better industry linkage are developed.
One NCC unit may be raised.	Proposal for NCC unit is in process.
Structured bridge courses and remedial courses be offered to the academically weaker students in a more focused way.	Bridge courses and remedial courses are offered to economically weaker student in more focus way.
Workshops and seminars to be organized.	Five workshops and one conference are organized in last five year.
Personality development activities to be given adequate thrust.	In N.S.S., DLLE and Cultural activities thrust is given on personality development of the student.
Provision should be made for the students to pursue subjects like Mathematics, Physics, Botany, Zoology at third year level of UG and subsequently Post graduate courses in the same subjects may be introduced.	Considering the chemical industries in the region the strength of M.Sc. (Organic Chemistry) is increased from 10-20 in the year 2014-15 and provision for T.Y.B.Sc. (Botany) was made available to the students. But the response was poor. Hence could not be started.
Hostel facility should be created for both girl and boy students.	Since the students are coming from area 15 km radius. Bus and Railway transport facility is available and is cheaper so no need of Hostel facility to students.
Library and office needs to be automated.	Library is automated by using library management soul software and barcoding is used for issuing purpose. Office uses word, excel,isams for their day to day working. Examination software is used for evaluation purpose.

# QUALITY ENHANCEMENT OF INSTITUTIONS IN POST REACCREDITATION PERIOD



# Evaluative reports of Departments



# **Chemistry Department**



# Vision

The development of fundamental understanding, with the emphasis on new structural, synthetic and theoretical techniques applicable in both academic and industrial context.

# **Mission**

We aim to provide the students with sound preparation for requirements of modern industry and provide competency, in basic academic research as well as a cohesive, clearly structured overview of Chemistry.

# **Goals and Objectives**

- ➤ To provide a complete description of Chemistry we live in.
- > To give more systematic direction to interdisciplinary chemistry.
- ➤ To develop scientific attitude and sense of observation among the students.
- ➤ To obtain more attention from students towards chemistry and its temperament.
- > To create opportunities to develop inborn skills.

# C. INPUTS FROM THE DEPARTMENTS

#### **CHEMISTRY DEPARTMENTS**

Evaluative Report of the Chemistry Department

1. Name of the department : Chemistry
2. Year of Establishment : 1992

3. Names of Programmes / Courses : UG: Chemistry

Offered (UG, PG, M.Phil., Ph.D. : PG : Organic Chemistry

Integrated Masters; Integrated Ph.D etc.)

4. Names of Interdisciplinary course : Nil.

and the departments/units involved.

5. Annual/ semester/choice based credit : CBSGS

system (programme wise).

6. Participation of the department in the : Computer Science

courses offered by other departments

7. Courses in collaboration with other : Nil.

Universities, industries, foreign

Institutions, etc.

8. Details of courses/programmes : Nil.

discontinued (if any) with reasons.

9. Number of teaching posts:

Post	Sanctioned	Filled
Professor	-	-
Associate Professor	-	-
Assistant Professor	08	08+04

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt. /Ph.D. / M. Phil. etc.).

Sr No	Name of Faculty	Qualification	Designation	Specialisation	No of Y of Experi		No of Ph.D. Students guided for the
					UG	PG	last 4 years
1	Dr.D.V.Bhagat	M.Sc.,SET, M.Phil,Ph.D.	H.O.D. Chemistry	Organic Chemistry	22	08	Nil
2	Dr.S.D.Patil	M.Sc.,SET, NET,M.Phil, Ph.D	Assistant Professor	Organic Chemistry	21	08	Nil
3	Dr.S.D.Tupare	M.Sc.,M.Ed SET,NET, M.Phil,Ph.D	Assistant Professor	Organic Chemistry	17	08	Nil
4	Mr.J.V.Patil	M.Sc.,B.Ed., M.Phil	Assistant Professor	Inorganic Chemistry	19	08	Nil
5	Dr.V.R.Jadhava	M.Sc,B.Ed.,	Assistant	Industrial	17	08	Nil

	r	M.Phil.,Ph.D	Professor	Chemistry			
6	Mrs.S.V.Chaud	M.Sc.B.Ed.	Assistant	Industrial	20	08	Nil
	hari	M.Phil.	Professor	Chemistry			
7	Mrs.S.T.Morbal	M.Sc.,SET	Assistant	Organic	08	08	Nil
	e		Professor	Chemistry			
8	Mr.M.D.Shirsat	M.Sc.,M.Phil.	Assistant	Agro	16	08	Nil
	h		Professor	Chemistry			
9	Miss.S.B.Shirke	M.Sc.	Assistant	Organic	02	02	Nil
			Professor	Chemistry			
10	Miss.S.S.Take	M.Sc.	Assistant	Organic	02	02	Nil
			Professor	Chemistry			
11	Mrs.C. S. Patil	M.Sc. D.Ed.	Assistant	Organic	-	01	Nil
			Professor	Chemistry			
12	Miss.P.A.	M.Sc.	Assistant	Organic	-	01	Nil
	Muddhebihalkar		Professor	Chemistry			

#### 11. List of senior visiting faculty:

- > Dr.Harischandra Parbat, Associate Prof., Wilson College of Arts and Science, Mumbai.
- ➤ Dr.Deepak Mangaonkar, Associate Prof., Mithibai College of Arts and Science, Mumbai.
- > Dr.G.B.Sathe, Head Dept. of Chemistry ,Dapoli Urban Bank Senior Science College, Dapoli.
- > Dr.Meshram,University of Mumbai
- > Dr.Mayur Desai, Gogate College, Ratnagiri
- > Dr.Ramanna, Head Dept. Of Chemistry, University of Mumbai
- Miss. Nilam Mhatre, Department of Chemistry, University of Mumbai.

12. Percentage of lectures delivered and practical classes handled programme wise by temporary faculty.

Course	Working Period	Theory and Practical Delivered
B.Sc.	June 2012 to April 2016	20%
M.Sc.	June 2012 to April 2016	20%

13. Student -Teacher Ratio (programme wise).

Course	<b>Number of Faculty</b>	<b>Number of Students</b>	Ratio
B.Sc. & M.Sc.	12	377	32:1

# 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled.

Post	Post Sanctioned	Post Filled
Lab Assistant	01	01
Lab Attendant	02	02

15. Qualifications of teaching faculty with D.Sc./D.Litt/ Ph.D/ M.Phil/P.G.

Sr.No.	Qualification	Number of Faculty
1.	M.Phil.	07
2.	Ph.D.	04
3.	P.G	12

- 16. Number of faculty with ongoing projects from a) National b) International funding agencies and grants received : 03
- 17. Departmental projects funded by DST-FIST; UGC, DBT, ICSSR, etc. and total grants received: UGC –Rs 135000,

DST-FIST- Rs17,00000 University of Mumbai –Rs 135000.

- 18. Research Centre /facility recognized by the University: Nil
- 19. Publications:
- a) Publication per faculty:

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

- ❖ National-11
- ❖ International-33
- ❖ Total-44
- \* 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.):

\* Monographs

\* Chapter in Books

(Dr.D.V.Bhagat)

Nil

\* Books Edited : Nil

\* Books with ISBN/ISSN numbers with details of publishers: ISBN-978-93-5149-325-9

Sheth Publishers Private

#### Number of Publication per faculty:

Sr. No	Name of Teacher	Number of Publication	Name of Journal	National/ Internationa	Impact Factor
•		S		1	
1.	Dr.D.V.Bhagat	07	International Journal of Advanced Research in Biological Sciences	International	1.615
			International Journal of Recent Scientific Research	International	2.6

			IJISET - International Journal of Innovative Science, Engineering & Technology, Bionano Frontier Inernational Publication House,	International  International	5.1
			International Journal of Chemical Science,	International	
			Bionano Frontier Inernational Publication House	International	
			Bionano Frontier Inernational Publication House	International	
2.	Dr.S.D.Patil	16	International Journal of Environmental Sciences (Integrated Publishing Association),	International	0.1097
			International Journal of Environmental Sciences (Integrated Publishing Association	International	0.1097
			International Journal of Environmental Sciences (Integrated Publishing Association),	International	0.1097
			An Indian Journal (Trade Science Inc. – INDIA	National	
			Orbital- The Electronic Journal of Chemistry (Campo Grande)	National	0.2692
			International Journal of Research in Chemistry and Environment	International	0.453
			An Indian Journal (Trade Science Inc. – INDIA),	National	
			International Journal of Research Studies in Science, Engineering and Technology	International	1.063
			IOSR Journal of Environmental Science, Toxicology and Food Technology	International	1.83
			International Journal of Green and Herbal Chemistry	International	1.839
			World Journal of Pharmaceutical Research	International	5.990
			Journal of Chemical	National	3.406

			Biological and Physical Sciences		
			International Journal for Research in Applied Science and Engineering Technology	International	5.969
			World Journal of Pharmacy and Pharmaceutical Sciences	International	5.210
			World Journal of Pharmaceutical Research		6.805
3.	Dr.S.D.Tupare	12	IJOC Scientific Research	International	0.3
			Letter in Organic chemistry	International	0.8
			IJOC	International	0.4
			E J of B and P Science	International	2.026
			I J A. P.Biomedical Sciences	International	0.8
			International Journal of Chemical Science	International	0.4
			Shodhankan	National	-
			Special issue of Indian Stream R Journal for National conference	National	2.1506
			Special issue of Indian Stream R Journal for National conference	National	2.1506
4.	Dr.V.R.Jadhavar	07	The Journal of Aquatic Biology	National	-
			Indian Stream Research Journals	National	-
			International Journal of Environment and Earth Sciences	International	-
			International Journal of Scientific Research	International	0.3371
			Indian Journal of Research,	National	0.3208
			World Journal of Pharmacy and Pharmaceutical Sciences	International	5.210
			World Journal of Pharmacy and Pharmaceutical Sciences	International	6.647
5.	Mrs.S.T.Morbale	03	Rsc Advances	International	3.29
			Rsc Advances	International	3.29
			DER pharma letter	International	3.29

20. Areas of consultancy and income generated 21. Faculty as members in

Nil

a) National Committees : Nil b) International Committees : Nil c) Editorial Boards : Nil

22. Student projects:

a) Percentage of students who have done in-house projects: 3 Projects at Avishkar including inter departmental/programme. 3 Projects at National

Youth

Congress

b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories Industry/

other agencies. : Nil

23. Awards/ Recognitions received by faculty and students : Nil

24. List of eminent academicians and scientists/ visitors to the department:

Sr.	Dignitary	Status	
No.			
1.	Dr.AnilK.Patil		
2.	Dr.H.B.Gurav	Rajiv Gandhi College of Arts, Commerce &	
		Science, Vashi	
3.	Dr.S.T.Gadade	Dean Faculty of Commerce	
4.	Dr. Sadanand.B.Dharap	Chairman BOS, University of Mumbai and Principal	
		Bhausaheb Nene College, Pen-Raigad	
5.	Dr.Vikas.V.Vaidya	RamnarainRuiaCollege,Matunga	
6.	Prof. AnandPukale	Dr.BabasahebAmbedkarCollege,Mahad	
7.	Dr. Sunil Patil	Changu Kana Thakur A.C.S. College, New Panvel	
8.	Dr. SandeshJaybhaye	Birla College of Arts, Science and Commerce,	
		Kalyan	
9.	Dr.Mrs.SugandhaShetye	Dept. of Chemistry, K.J. Somaiya college of Science&	
		commerce, Vidyavihar, Mumbai.	
10.	Dr.UlhasPandit	B.N.Bandodkar College of Science, Thane	
11.	Dr. Manish Hate	RamnarainRuiaCollege,Matunga	
12.	Dr.SunitaShirvalkar		
13.	Dr. JyothiPatwardhan	RamnarainRuiaCollege,Matunga	

#### 25. Seminars/ Conferences/Workshops organized & the source of funding:

01

a)District level Workshop on Revised syllabi of S.Y.B.Sc. 2015-16 : 01
b) State level Conference : 01
c) National : Nil
d) International : Nil

26. Student profile programme/course wise:

Name of the	Class	Year	Application	Selected	Enrolle	d	Passing
course/			received		Male	Female	Percentage
Programme							
B.Sc.	F.Y.	2012-13	450	108	44	64	

	S.Y.	2012-13	120	114	50	65	
	T.Y.	2012-13	120	90	34	56	60.22
B.Sc.	F.Y.	2013-14	400	117	37	80	
	S.Y.	2013-14	120	109	41	68	
	T.Y.	2013-14	120	117	46	71	74.78
B.Sc.	F.Y.	2014-15	490	102	27	75	
	S.Y.	2014-15	120	117	44	73	
	T.Y.	2014-15	120	108	42	66	88.89
B.Sc.	F.Y.	2015-16	420	111	43	68	
	S.Y.	2015-16	120	112	42	70	
	T.Y.	2015-16	120	114	41	73	90.27
M.Sc.	Part-I	2012-13	50				
	Part-I	2013-14	48	10	07	03	
	Part-I	2014-15	56	20	10	10	
	Part-I	2015-16	53	20	06	14	
M.Sc.	Part-II	2012-13	10				100
	Part-II	2013-14	10				100
	Part-II	2014-15	10	10	07	03	90.00
	Part-II	2015-16	20	20	10	10	80.00

#### 27. Diversity of Students:

Name of the Course	% of the student from the same state		% of the student from abroad
B.Sc.	100%	Nil	Nil
M.Sc.	100%	Nil	Nil

<sup>28.</sup> How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc? :

29. Student progression:

<b>Student Progression</b>	Against % enrolled
U.G. to P.G.	42.85%
P.G. to M.Phil	-
P.G. to Ph.D.	10%
Ph.D. to post-Doctoral	-
Employed:	
Campus Selection	10%
Other than campus recruitment	42.85%
Entrepreneurship/Self-employment	04%

#### 30. Details of Infrastructural facilities

a) Library

Central Library Books: 7579

Periodicals: 27

e-journals : INFLIBINET DATABASE 80000 e-books + 3500 e-journals

Seating Capacity: 40

b) Internet facilities for Staff &Students : Yes

- c) Class rooms with ICT facility:01
- d) Laboratories:

Sr.No.	Name of Laboratories	Area
1.	Physical Laboratory	600 Sqft
2.	Main Laboratory	1398.6 Sqft
3.	Organic Laboratory	800 Sqft

31. Number of students receiving financial assistance from college, University, Government or other agencies:

Class	Year	Total No. of Student	Government(GOI)	YashodhabaiPhalke Awards
F.Y.B.Sc.	2012-13			
S.Y.B.Sc.	2012-13			
T.Y.B.Sc.	2012-13			
F.Y.B.Sc.	2013-14	12	31575	6000/-
S.Y.B.Sc.	2013-14			
T.Y.B.Sc.	2013-14			
F.Y.B.Sc.	2014-15	12	31575	6000/-
S.Y.B.Sc.	2014-15			
T.Y.B.Sc.	2014-15			
F.Y.B.Sc.	2015-16	364	2187040/-	64000/-
S.Y.B.Sc.	2015-16			
T.Y.B.Sc.	2015-16			

- 32. Details on student enrichment programmes (special lectures / workshops / Seminar) with external experts:
- 1)Every year Department organizes expert lectures on various issues in coordination with science association. The List of Resource persons for P.G.is
  - ❖ Dr.HarischandraParbat, AssistantProfessor, Chemistry Department, Willson College.
  - Dr.DeepakMangaonkar,
  - ❖ Dr.G.B.Sathe,Department of Chemistry,Dapoli Urban Bank Senior Science College.
  - Dr.Meshram.
  - ❖ Dr.Mayur Desai,
  - Dr.Ramanna,
  - ❖ Miss.NilamMhatre,Department of Chemistry,University of Mumbai.
- 2) One day Workshop on Revised syllabi in S.Y.B.Sc. Chemistry Which Organized by Board Of Studies University of Mumbai.
- 33. Teaching methods adopted to improve student learning:
  - ❖ Teaching through audio visual aids.
  - ❖ Teaching with the help of structural models to simplify the subject.
  - Outreach programs like Projects, Industrial visit, Research laboratory visit etc.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Active participation of faculty members and students in Social Gathering, NSS Camps, NCC Activity, Various Competitions Organized by various Associations.

# 35. SWOC analysis of the department and Future plans. Strengths:

- ❖ A highly motivated team of well qualified and subject specialized academic staff.
- Well-equipped, spacious, Classrooms and Laboratories.
- ❖ Most of staff are trying to increase their research activities such as MRP,Paper publications, Paper presentation in National and International Conferences.
- One of the staff member has been working as member of syllabus committee of University of Mumbai for framing syllabus of F.Y.,S.Y.,T.Y.B.Sc.Chemistry
- Dr. V.R.Jadhavar is guiding the M.Sc.Student of SMD college Kolad under YCMU Nashik.
- ❖ Dr.S.D.Tupare has worked as External Examinar for M.Sc. Part I&II at Dr.BAM University of Aurangabad
- ❖ All staff members are working as Examiners, Moderators for University of T.Y. B.Sc. Chemistry Examination.
- Consultancy services
- > water quality analysis
- ➤ Air pollution monitoring

#### Weaknesses:

❖ Infrastructure facilities to be improved.

#### **Opportunities:**

- ❖ To Organize national level conference, seminars and workshops
- ❖ To work for receiving UGC,DST and CSIR for minor and major research projects.
- ❖ Development of the instrumental lab and research lab.
- **&** Campus interview is to be strengthen.
- ❖ Increase number of MRP funded by UGC and University of Mumbai.

#### **Challenges:**

- ❖ To inculcate Research temper among students.
- ❖ To enhance employability of students.
- ❖ To improve the writing and communication skill among students & staff.

#### **Future Plans:**

- ❖ To start P.G.Programme in Analytical Chemistry
- ❖ To start interdisciplinary research in the department
- ❖ To increase MRP's funded by UGC.
- ❖ To establish the collaboration with various Chemical, Pharmaceuticals industries and research laboratories through MOU.
- ❖ To organize National/International level conference.
- ❖ To organize workshop on NET/SET.
- ❖ To organize Programmes on personality development through seminar method for students.
- ❖ To organize Seminar, Workshop and Conference.

# **DEPARTMENT OF PHYSICS**

1. Nameofthedepartment: PHYSICS

2. YearofEstablishment : 1992

- 3. Names of Programmes/Courses offered (UG, PG ,M. Phil. ,Ph.D., Integrated Masters; Integrated Ph.D. ,etc.) : **B.Sc.**
- 4. Names of Interdisciplinary courses and the departments/units involved: **NIL**
- 5. Annual/semester/choice based credit system(programme wise):

#### **Choice based Credit System**

- 6. Participation of the department in the courses offered by other departments: NIL
- 7. Coursesincollaboration with other universities, industries, for eigninstitutions, etc. : **NIL**
- 8. Details of courses/programmes discontinued(if any) with reasons : NIL
- 9. Number of teachingposts

Designatio	Sanctioned	Filled
Professors	-	-
AssociateProfessors	01	01
Asst.Professors	02	01

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualification	Designation	Specializatio	No.ofYears Experience	No.ofPh.D. Students guidedforthe last4years
Dr. S.	M.Sc., Ph.D.	Principal,	Physics	26	Nil
Gurav		Asso. Professor			
Mr. V.	M.Sc., B.Ed., SET	Asst. Professor	Physics	8	Nil
Shinde					
Mr. Y.	M.Sc., B. Ed.	Asst. Professor	Physics	5	Nil
Mhatre					

11. List of senior visiting faculty: NIL

12. Percentage of lectures delivered and practical classes handled (programme wise)

By temporary faculty: 30%

13. Student-Teacher Ratio(programme wise) : 44:1

14. Numberofacademicsupportstaff(technical)andadministrativestaff;sanctioned andfilled 01 Filled: 01

15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D./M..Phil./PG. :-

Ph.D.	PG
1	2

16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received :

Numberoffacul	Ongoing Projects	Type	Funding Agency	<b>Grant Received</b>
01	02	Minor Resear	University of Mumbai	30,000+40,000=70,000
		Project		

- 17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR ,etc. and total grants received : **NIL**
- 18. Research Centre/facility recognized by the University : NIL
- 19. Publications:
  - \* a) Publicationperfaculty:

Sr. No.	Name of Faulty	LEVEL	No. of Publications
01	Dr. S. S. Gurav	International Level	NIL
		National Level	01
		State Level	01
02	Mr. V. S. Shinde	International Level	NIL
		National Level	01
		State Level	01

\*Number of papers published in peer reviewed journals (national/international) byfacultyandstudents : -

#### National= 02, State=2 Total=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.): NIL

\*Monographs : NIL \*ChapterinBooks : NIL \*BooksEdited : NIL

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

\*CitationIndex

\*SNIP

\*SJR

\*Impactfactor

\*h-index

\*Index

\*NIL

\*NIL

\*NIL

\*NIL

20. Areas of consultancy and income generated : **Department Offer Consultancy Service for "Save Energy Save Electricity".** 

- 21. Faculty as members in
  - a) National committees b)International Committees) Editorial Boards....

Sr. No.	Name of the Faculty	Editorial Board	Conference
1	Dr. S. S. Gurav	Chairman	State level Interdisciplinary Conference on "Science 1
			Sustainable Development" Organized at KES Anandit
2	Mr. V. S. Shinde	Co- convener	Pradhan Science College, Nagothane

22. Student projects

- a) Percentage of students who have done in-house projects including inter departmental/programme :- **NIL**
- b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies :-NIL
- 23. Awards/Recognitions received by faculty and students : NIL
- 24. List of eminent academicians and scientists/visitors to the department.
- 1)Hon. Prof. Surendra Datar:-HOD, Physics, JSM College Alibag
- 2)**Hon. Prof. Manohar Nyayate:-**B.N. Bandodkar College of Science **Thane** and Member, BOS in Physics, University of Mumbai.
- 3) **Dr.S.V.Salvi:-**Former Reader, Institute of Science, Mumbai.
- 4) **Dr.S.G.Dahotre**-Asst.Prof.in Physics- Dr. Babasaheb Ambedkar Technological University, Lonere
- 5)**Dr .Nitin Lingayat** Asst. Professor in Electrical Engineering- Dr. Babasaheb Ambedkar Technological University, Lonere
- 6) Dr. Sanjeev Karpe:-
- 25. Seminars/Conferences/Workshops organized & the source of funding
  - a) State Level: State level Interdisciplinary Conference on "Science for Sustainable Development" Organized at KES Anandibai Pradhan Science College, Nagothane, In this workshop Dr. S. S. Gurav is Chairman,& Mr. V. S. Shinde is working as a co-convener
  - b) National :-NILc) International: NIL
  - 26. Student profile programme /course wise:

Nameofthe	Applications	Calcatad	Enrolled		D
Course/programme(ref question no. 4)	received	Selected	*M	*F	Pass percentage
F.Y.B.Sc.	300	70	35	35	55.71%
S.Y.B.Sc.	100	60	30	32	96.77%

<sup>\*</sup>M=Male \*F=Female

#### 27. Diversity of Students:

Nameofthe Course	%of studer fromthe samestat		%of students from abroad
F.Y. B.Sc	99%	1%	NIL
S.Y.B.Sc.	99%	1%	NIL

- 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

Studentprogression	Against%enrolled
UGtoPG	20%
PGtoM.Phil.	NIL
PGtoPh.D.	10%
Ph.D.toPost-Doctoral	NIL
Employed	About 50 students have been employed.
-Campus selection	
Other than campus recruitment	
Entrepreneurship/Self-employment	5%

30. Details of Infrastructural facilities

a) Library : YES.

Books in Departmental library: 50
b) Internet facilities for Staff & Students: YES
c) Class rooms with ICT facility : YES
d) Laboratories : YES

31. Number of students receiving financial assistance from college, university,

Government or other agencies : 50 students

32. Details on student enrichment programmes(special lectures/workshops/

Seminar) with external experts:

33. Teaching methods adopted to improve student learning: -

#### Demonstration and explanation with power point and LCD facilities.

34. Participation in Institutional Social Responsibility (ISR) and Extension activities:

Our students actively participates in various projects related to Social activities and extension activity such as National Service Scheme & DLLE

Mr. V. S. Shinde is working as NSS Programme Officer from Last four years.

#### SWOC analysis of the department and Future plans.

#### **Strengths:**

- ❖ A highly motivated team of well qualified and subject specialized academic
- ❖ Well-equipped, spacious, Classrooms and laboratories.
- ❖ All the faculties engaged in research work.
- Consultancy services
- > save electricity
- ➤ 2)Use of Solar energy.

#### Weaknesses:

No third year B.Sc. program in physics in the institute.

# **Opportunities:**

- ❖ To Organize national level Conference, seminars and workshops.
- ❖ To take the various grants from UGC, DST and CSIR for minor and major research projects.

Development of the research lab.

#### **Challenges:**

- ❖ To inculcate Research temper among students.
- To enhance employability of students.
- ❖ To improve the writing and Communication Skill of the students.

#### **Future Plans:**

- ❖ To start T.Y.B.Sc program in physics
- ❖ To increase number of Research Projects.
- \* To enhance the collaboration with various industries and research laboratories.
- organize National/International level conference.
- ❖ To organize Programs on personality development.
- ❖ To increase industrial exposure by industrial visits.

# **DEPARTMENT OF BOTANY**

- 1. Name of the department :BOTANY
- 2. Year of Establishment :1992
- 3. Names of Programmes/Courses offered (UG,PG,M.Phil.,Ph.D., Integrated Masters; Integrated Ph.D.,etc.): UG
- 4. Names of Interdisciplinary courses and the departments/units involved: NIL
- 5. Annual/semester/choice based credit system(programme wise): Semester
- 6. Participation of the department in the courses offered by other departments: YES
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc. : NA
- 8. Details of courses/programmes discontinued (if any) with reasons : NA
- 9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors		
AssociateProfessors	01	01
Asst.Professors	01	01

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualifi cation	Designation	Specialization	No.ofYear s of Experienc e	No.ofPh.D. Student Guided for the Last 4years
Dr.(Mrs.)V.sarada	Ph.D.	Asso.Professor	Mycology	22 years	
Dr.V.S.Chavan	Ph.D.	Assist.Professo r	Phycology	18 years	

- 11. List of senior visiting faculty: NA
- 12. Percentage of lectures delivered and practical classes handled (programme wise)
  By temporary faculty: NA
- 13. Student-Teacher Ratio(programme wise) : 30:1
- 14. Number of academic support staff (technical)and administrative staff; sanctioned and filled : 02. Filled: 02
- 15. Qualifications of teaching faculty with DSc/ D.Litt/Ph.D/MPhil/PG. : Ph.D.
- 16. Number of faculty with ongoing projects from a)National b)International funding agencies and grants received : NA
- 17. Departmentalprojectsfundedby DST-FIST;UGC, DBT, ICSSR,etc.andtotal grantsreceived : NA
- 18. ResearchCentre/facilityrecognizedbytheUniversity: NA
- 19. Publications:
  - \* a) Publicationperfaculty: 20
  - \* Number of papers published in peer reviewed journals(national/international) by faculty and students: 20
  - \* 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.): NA
  - \* Monographs : NA
  - \* Chapter in Books :NA

- \* Books Edited : NA
- \* Books with ISBN/ISSN numbers with details of publishers: \_\_\_
- \* Citation Index:
- \* SNIP:
- \* SJR:
- \* Impact factor :
- \* h-index :
- 20. Areas of consultancy and income generated: NIL
- 21. Faculty as members in
- a)National committees b)International Committees c)Editorial Boards....
- 22.Student projects
  - a)Percentage of students who have done in-house projects including interdepartmental /programme
  - b)Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
- 23. Awards/Recognitions received by faculty and students : YES
- 24. List of eminent academicians and scientists/visitors to the department.
- 25. Seminars/Conferences/Workshops organized & the source of funding
- a) National : NA
- b) International: NA
- 26. Student profile programme/coursewise: NA
- 27. Diversity of Students:

Name of the Course	%of students from the same state	% of students from other States	%of students from abroad
F.Y. B.Sc	99%	1%	NIL
S.Y.B.Sc.	99%	1%	NIL

28. How many students have cleared national and state competitive examinations such as NET, SLET, GATE, Civil services, Defense services, etc?:NIL

29. Studentprogression

Studentprogression	Against%enrolled
UGtoPG	3%
PGtoM.Phil.	NIL
PGtoPh.D.	NIL
Ph.D.toPost-Doctoral	NIL
Employed  Campusselection  Other than campus recruitment	About 50 students have been employed.
Entrepreneurship/Self-employment	NIL

30. Details of Infrastructural facilities

a) Library : YES. 100 Books

in Departmental library

b) InternetfacilitiesforStaff&Students: YES

c) Class rooms with ICT

facility: YES

d) Laboratories : YES

- 31. Number of students receiving financial assistance from college ,university, government or other agencies : 50 students
- 32. Details on student enrichment programmes(special lectures/workshops/seminar)with external experts: NIL
- 33. Teaching methods adopted to improve student learning: Demonstration and explanation with power point and LCD facilities.
- 34. Participation in Institutional Social Responsibility (ISR)and Extension activities: Our students actively participates in various projects related to social activities and extension activity.
- 35. SWOC analysis of the department and Future plans:

#### **Strengths:**

❖ A highly motivated team of well qualified and subject specialized academic

- staff.
- Well-equipped, spacious, Classrooms and laboratories.
- ❖ All the faculties engaged in research work.
- Consultancy services
- ➤ Bio fertilizer
- > Soil testing

#### Weaknesses:

❖ No third year B.Sc. program in botany in the institute.

#### **Opportunities:**

- ❖ To Organize national level Conference, seminars and workshops.
- ❖ To take the various grants from UGC, DST and CSIR for minor and major research projects.
- Development of the research lab.

#### **Challenges:**

- ❖ To inculcate Research temper among students.
- ❖ To enhance employability of students.
- ❖ To improve the writing and Communication Skill of the students.

#### **Future Plans:**

- ❖ To start T.Y.B.Sc program in botany.
- ❖ To increase number of Research Projects.
- ❖ To organize National/International level conference.
- ❖ To organize Programs on personality development.
- ❖ To increase nature trails.

# DEPARTMENT OF ZOOLOGY

- 1. Name of the department: Zoology
- 2. Year of Establishment:1992
- 3. Names of Programmes/Courses offered (UG, PG, M. Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.): UG
- 4. Names of Interdisciplinary courses and the departments/units involved: NIL
- 5. Annual/semester/choice based credit system(programme wise) :CBCS Semester
- 6. Participation of the department in the courses offered by other departments: YES
- 7. Courses in collaboration with other universities, industries, foreign, institutions, etc. : NA
- 8. Details of courses/programmes discontinued (if any)with reasons : NA
- 9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors		
Associate Professors	01	01
Asst. Professors	01	01

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M. Phil.etc.,)

Name	Qualification	Designation	Specialization	No.ofYears of Experience	No.ofPh.D Students guidedorthe last4year
Dr.V.S.N.R.Ra	Ph.D.	Asso. Professor	Fisheries	25 years	
	M.Sc ,M.Phil,B.EdP. hD(Final Synopsis Submited in feb2017.		Fisheries	24 years	

- 11. List of senior visiting faculty: NA
- 12. Percentage of lectures delivered and practical classes handled (programme wise)
  By temporary faculty: NA
- 13. Student-Teacher Ratio(programme wise) : 25:1
- 14. Number of academic support staff (technical) and administrative staff; sanctioned and filled : 02. Filled: 02
- 15. Qualifications of teaching faculty with DSc /D.Litt Ph.D /MPhil/PG. : Ph.D.
- 16. Number of faculty with ongoing projects from a)Nationalb)International funding agencies and grants received : NA
- 17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR, etc. and total grants received: NA
- 18. Research Centre/facility recognized by the University: NA
- 19. Publications:

a) Publication faculty: 20

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

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

\* Monographs : NA

\* Chapter in Books :NA

- \*Books Edited : NA
- \* Books with ISBN/ISSN numbers with details of publishers: \_\_\_
- \* Citation Index:
- \* SNIP:
- \* SJR:
- \* Impact factor :
- \* h-index :
- 20. Areas of consultancy and income generated: NIL
- 21. Faculty as members in
  - a)National committees b)International Committees c)Editorial Board
- 22.Student projects
  - a)Percentage of students who have done in-house projects including interdepartmental/programme
    - b) Percentage of students placed for projects in organizations outside the institution i.e.in Research laboratories/Industry/ other agencies
- 23. Awards/Recognitions received by faculty and students : YES
- 24. List of eminent academicians and scientists/visitors to the department.
- 25. Seminars/Conferences/Workshops organized & the source of funding
  - a) National: NA b) International: NA
- 26. Student profile programme/course wise: NA
- 27. Diversity of Students:

Name of the Course	%of students from the same state	%of students from other States	%of students from abroad
F.Y. B.Sc	99%	1%	NIL
S.Y.B.Sc.	99%	1%	NIL

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	Against % enrolled
UG to PG	3%
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D .to Post-Doctoral	NIL
Employed  Campus selection Other than campus recruitment	About 50 students have been employed.
Entrepreneurship/Self-employment	NIL

30. Details of Infrastructural facilities

a) Library : YES. 50 Books

in Departmental library

b) Internet facilities for Staff &Students: YES

c) Class rooms with ICT facility: YES

d) Laboratories : YES

31. Number of students receiving financial assistance from college, university,

Government or other agencies : 50 students

- 32. Details on student enrichment programmes(special lectures/workshops/seminar)with external experts: NIL
- 33. Teaching methods adopted to improve student learning: Demonstration and explanation with power point and LCD facilities.
- 34. Participation in Institutional Social Responsibility(ISR)and Extension activities:

  Our students actively participates in various projects related to social activities and extension activity.
- 35.SWOC analysis of the department and Future plans.

#### **Strengths:**

- ❖ A highly motivated team of well qualified and subject specialized academic staff.
- ❖ Well-equipped, spacious, Classrooms and laboratories.
- ❖ All the faculties engaged in research work.
- Consultancy services
- ➤ 1)Animal Husbandry
- > 2)Fish farming

#### Weaknesses:

❖ No third year B.Sc. program in Zoology in the institute.

# **Opportunities:**

- ❖ To Organize national level Conference, seminars and workshops.
- ❖ To take the various grants from UGC, DST and CSIR for minor and major research projects.
  - Development of the research lab.

#### **Challenges:**

- ❖ To inculcate Research temper among students.
- ❖ To enhance employability of students.
- ❖ To improve the writing and Communication Skill of the students.

# **Future Plans:**

- ❖ To start T.Y.B.Sc program in Zoology.
- ❖ To increase number of Research Projects.
- ❖ To organize National/International level conference.
- ❖ To organize Programs on personality development.
- ❖ To increase nature trails.

# **Computer Science Department**



# **Vision**

To develop professionals having sound computer proficiency.

# **Mission**

To impart quality computer education to the students and to groom them to be technologist, professionals and dedicated citizens.

# **Goals and Objectives**

- > To enable the students to understand the basic knowledge underpinning these disciplines
- ➤ To provide educational facilities for training the students for career in computer field.
- ➤ To develop entrepreneurial skills of the students so as to enable them to utilise the centrally available resources.
- ➤ To develop students with high level of performance and competence as required by current and future industries
- ➤ To generate trained Computer Science degree holders
- ➤ To impart basic Computer Science knowledge to the students of interdisciplinary studies.
- ➤ To develop firm ground in computer technological skills.

# DEPARTMENT OF COMPUTER SCIENCE

- 1. Name of the department: COMPUTER SCIENCE
- 2. Year of Establishment : 2002
- 3. Names of Programmes/Courses offered(UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D. ,etc.): UG
- 4. Names of Interdisciplinary courses and the departments/ units involved: NIL
- 5. Annual/semester/choice based credit system(programme wise): Semester
- 6. Participation of the department in the courses offered by other departments: YES
- 7. Courses in collaboration with other universities ,industries ,foreign institutions, etc. : NA
- 8. Details of courses/programmes discontinued(if any)with reasons : NA
- 9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors		
Associate Professors		
Asst. Professors	05	04

10. Faculty profile with name, qualification, designation, specialization, (D.Sc./D.Litt./Ph.D./M.Phil.etc.,)

Name	Qualificat ion	Designation	Specialization	No.of Years of Experience	No. of Ph.D. Students Guided for the last4years
Mrs.Pranjali G. Konde	M.Sc.	Asst. Professor	Computer Science	09	
Tejashree V. Patil		Asst. Professor	Computer Application	03	
Miss.Suvidha S. Sanap	M.C.A(app eared	Asst. Professor	Computer Application	01	
Mr.V.S. Devkate	M.S.C.	Asst. Professor	Mathematics	01	

- 11. List of senior visiting faculty: NA
- 12. Percentage of lectures delivered and practical classes handled(programme wise)
  By temporary faculty: NA
- 13. Student-Teacher Ratio(programme wise) : 9:1
- 14. Number of academic support staff(technical)and administrative staff; sanctioned and filled: 01. Filled: 01
- 15. Qualifications of teaching faculty with DSc/D.Litt/Ph.D/MPhil/PG. : PG.
- 16. Number of faculty with ongoing projects from a)Nationalb)International funding agencies and grants received : NA
- 17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR,etc.and total grants received: NA
- 18. Research Centre/ facility recognized by the University: NA
- 19. Publications:
  - \* a) Publication per faculty: NA
  - \* Number of papers published in peer reviewed journals (national/international) by faculty and students:
  - \* Number of publications listed in International Database (For Eg:Webof Science,

Scopus, Humanities International Complete, Dare Database- International Social Sciences Directory, EBSCO host, etc.): NA \* Monographs : NA \* Chapter in Books :NA \* Books Edited : NA \* Books with ISBN/ISSN numbers with details of publishers: \_\_\_ \* Citation Index: \* SNIP: \* SJR: \* Impact factor : \* h-index : 20. Areas of consultancy and in comegenerated : NIL 21. Faculty as members in a) National committees b) International Committees c) Editorial Boards.... 22 .Student projects a) Percentage of students who have done in- house projects including inter departmental/programme b) Percentage of students placed for projects in organizations outside the institution i.e. in Research laboratories/ Industry/ other agencies 23. Awards / Recognitions received by faculty and students : NA 24. List of eminent academicians and scientists/ visitors to the department. 25.Seminars/Conferences/Workshops organized & the source of funding a) National: NA

b) International: NA

26. Student profile programme/ coursewise: NA

#### 27. Diversity of Students:

Name of the Course	%of students from the same state	%of students from other States	% of students from abroad
F.Y. B.Sc	99%	1%	NIL
S.Y.B.Sc.	99%	1%	NIL
T.Y.B.Sc.	99%	1%	NIL

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	Against % enrolled
UG to PG	3%
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D.to Post-Doctoral	NIL
Employed  Campus selection Other than campus recruitment	About 50 students have been employed.
Entre preneurship/Self-employment	NIL

30. Details of Infrastructural facilities

a) Library : YES.

Departmental library-50 Books

b) Internet facilities for Staff & Students: YES

c)Class rooms with ICT facility: YES

d) Laboratories : YES

31. Number of students receiving financial assistance from college, university,

Government or other agencies : 9 students

32. Details on student enrichment programmes(special lectures/workshops/ seminar) with external experts: NIL

- 33. Teaching methods adopted to improve student learning: Demonstration and explanation with power point and LCD facilities.
- 34. Participation in Institutional Social Responsibility (ISR) and Extension activities: Our students actively participate in various projects related to social activities and extension activity.
- 35. SWOC analysis of the department and Future plans:

#### **Strengths:**

- ❖ A highly motivated team of well qualified and subject specialized academic staff.
- Well-equipped, spacious, classroom and laboratories.
- Consultancy services
  - 1) Certificate course in computer Application

#### Weaknesses:

No P.G. course in Information Technology in the institute.

#### **Opportunities:**

- ❖ To organize national level Conference, Seminars and Workshops.
- Development of the research lab.

#### **Challenges:**

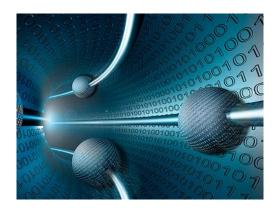
- ❖ To inculcate Research temper among students.
- ❖ To enhance employability of students.
- ❖ To improve the writing and communication Skill of the student.

#### Future plan

- ❖ To organize programmes like State/ National level seminars and workshops, talks and guest lectures by eminent personalities in the areas of Information Technology.
- ❖ To arrange more industrial visits especially to Computer firms.
- ❖ To avail placement services to the B. Sc. Computer Science students.



# Information Technology Department



# Vision:

To develop professionals having proficiency in IT.

# Mission:

To impart quality IT education to the students and to groom them to be technologist, professionals and dedicated citizens.

# **Goals and Objectives:**

- ➤ To train the mind; develop the power of understanding, critical and logical thinking among students.
- > To enable the students to understand the basic knowledge of IT.
- ➤ To provide to the University, State agencies and the private sector high quality students in the field IT.
- ➤ To help the students to accustom themselves with updated knowledge of the subject by arranging/ participating guest lectures, quiz competitions, workshops, seminars and projects.
- ➤ To prepare students to face privatization and globalization by providing basic knowledge and skills.

# DEPARTMENT OF INFORMATION TECHNOLOGY

- 1. Name of the department: INFORMATION TECHNOLOGY
- 2. Year of Establishment : 2004
- 3. Names of Programmes/Courses offered (UG, PG, M. Phil .,Ph.D., Integrated Masters; Integrated Ph.D., etc.): UG
- 4. Names of Inter disciplinary courses and the departments/units involved: NIL
- 5. Annual/semester/choice based credit system (programme wise): Semester
- 6. Participation of the department in the courses offered by other departments: YES
- 7. Courses in collaboration with other universities, industries, foreign institutions, etc. : NA
- 8. Details of courses/programmes discontinued(if any)with reasons : NA
- 9. Number of Teaching posts

Designation	Sanctioned	Filled
Professors		
Associate Professors		
Asst .Professors	05	04

10. 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	No. of Ph.D. Students Guided for the Last 4years
Mrs.Nilam V. Mahale	M.Sc.	Asst. Professor	Information Technology	07	
Miss. Suvarna R. Mhatre	M.C.A	Asst. Professor	Computer Application	04	
Miss.SonalV.Pawar	M.C.A	Asst. Professor	Computer Application	01	
Miss. Uzma I. Adhikari	M.C.A (appeared)	Asst. Professor	Computer Application	04	

- 11. List of senior visiting faculty: NA
- 12. Percentage of lectures delivered and practical classes handled(programme wise)
  By temporary faculty: NA
- 13. Student-Teacher Ratio(programme wise) : 17:1
- 14. Number of academic support staff(technical)and administrative staff ;sanctioned and filled : 01. Filled: 01
- 15. Qualifications of teaching faculty with DSc /D.Litt/Ph.D/MPhil/PG. : PG.
- 16. Number of faculty with ongoing projects from a) National b)International funding agencies and grants received : NA
- 17. Departmental projects funded by DST-FIST;UGC, DBT, ICSSR ,etc. and total grants received : NA
- 18. Research Centre/facility recognized by the University: NA
- 19. Publications:
  - \* a) Publication per faculty: NA
  - \* Number of papers published in peer reviewed journals(national/international) by faculty and students:
- \* Number of publications listed in International Database(For Eg:Web of Science, Scopus ,Humanities International Complete, Dare Database-International Social Sciences Directory, EBSCOhost, etc.): NA

- \* Monographs : NA
- \* ChapterinBooks :NA
- \* BooksEdited : NA
- \* Books with ISBN/ISSN numbers with details of publishers: \_\_\_
- \* Citation Index:
- \* SNIP:
- \* SJR:
- \* Impactfactor:
- \* h-index :
- 20. Areas of consultancy and incomegenerated: NIL
- 21. Faculty as members

in

a) National committeesb)InternationalCommitteesc)Editorial Boards

. . . .

# 22. Studentprojects

- a) Percentage of students who have donein-houseprojects including interdepartmental/programme
- b) Percentage of students placed for projects in organizations outside the institutioni.e.in Research laboratories/Industry/ other agencies
- 23. Awards/Recognitions received by faculty and students : NA
- 24. List of eminent academicians and scientists/visitors to the department.
- 25. Seminars/Conferences/Workshops organized & the source of funding a) National:NA
  - b) International: NA
- 26. Student profile programme/coursewise: NA
- 27. Diversity of Students:

Nameofthe Course	%of students fromthesa mestate	%ofstudentsfr omotherStates	%of students from abroad
F.Y. B.Sc	99%	1%	NIL
S.Y.B.Sc.	99%	1%	NIL
T.Y.B.Sc.	99%	1%	NIL

- 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	Against%enrolled
UG to PG	3%
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL
Employed  Campus selection Other than campus recruitment	About 50 students have been employed.
Entrepreneurship/Self-employment	5

- 30. Details of Infrastructural facilities
  - a) Library : YES. 50 Books in Departmental library
  - b) Internet facilities for Staff &Students: YES
  - c) Class rooms with ICT facility: YES
  - d) Laboratories : YES
- 31. Number of students receiving financial assistance from college, university,

Government or other agencies: 9 students

- 32. Details on student enrichment programmes (special lectures/workshops/ Seminar) with external experts: NIL
- 33. Teaching methods adopted to improve student learning: Demonstration and explanation with power point and LCD facilities.

- 34. Participation in Institutional Social Responsibility(ISR)and Extension activities:

  Our students actively participates in various projects related to social activities and extension activity.
- 35. SWO Can analysis of the department and Future plans:

# **Strengths:**

- ❖ A highly motivated team of well qualified and subject specialized academic staff.
- Well-equipped, spacious, classroom and laboratories.
- Consultancy services
  - 2) Certificate course in computer Application

### Weaknesses:

No P.G. course in Information Technology in the institute.

# **Opportunities:**

- ❖ To organize national level Conference, Seminars and Workshops.
- Development of the research lab.

# **Challenges:**

- ❖ To inculcate Research temper among students.
- ❖ To enhance employability of students.
- ❖ To improve the writing and communication Skill of the student.

# Future plan

- ❖ To start M.Sc.(Information Technology) **P.G.** Course.
- ❖ To organize programmes like State/ National level seminars and workshops, talks and guest lectures by eminent personalities in the areas of Information Technology.
- ❖ To arrange more industrial visits especially to IT firms.
- ❖ To avail placement services to the B. Sc. IT students.
- ❖ To arrange Exhibition cum competitions on Embedded Systems.

# 



## ANNEXURE - I CERTIFICATE OF COMPLIANCE

# **Certificate of compilation**

This is certify that K.E.S. Anandibai Pradhan Science College, Nagothane-Raigad fulfills all norms

- 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 detail enclosure with regard to compliance of condition 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- 30/03/2017

Place-Nagothane

Principal /Head of the Institution

(Dr. Sandesh S.Gurav)

K.E.S.Anandibai Pradhan Science College ,Nagothane

ANNEXURE - II DECLARATION BY HEAD OF INSTITUTE

**Declaration by the Head of the Institution** 

I certified that the data included in this Re accreditation Report (RAR) are

true to the best of my knowledge. This RAR is prepared by the institution after

internal discussions, and no part thereof has been out sourced. I am aware that the

Peer team will validated the information provided in this RAR during the peer team

visit.

Date- 30/03/2017

Place-Nagothane

Signature of the

**Head of the Institution with seal** 

(Dr. Sandesh S.Gurav)

K.E.S.Anandibai Pradhan Science College ,Nagothane

# ANNEXURE - III LETTER OF 2(F)&12(B)

Ph. 23236351, 23232701, 23237721, 23234116 23235733, 23232317, 23236735, 23239437

UGC Website: www.ugc.ac.in



विभवविद्यालय अनुदान आयोग बहादुरशाह जफर मार्ग नई दिल्ली 110 002 UNIVERSITY GRANTS COMMISSION BAHADURSHAH ZAFAR MARG NEW DELHI-110 002

F.8-357/2006 (CPP-I)

The Registrar, University of Mumbai, Mumbai-400 032 (M.S). August, 2007

2 9 AUG 2007

Sub:- List of Colleges prepared under Section 2 (f) & 12 (B) of the UGC Act, 1956-Inclusion of New Colleges.

Sir,

I am directed to refer to the letter No. APSCN/264 dated 04.07.2007 received from the College on the subject cited above and to say that the name of the following College has been included in the list of Colleges prepared under Section 2 (f) & 12 (B) of the UGC Act, 1956 under the head Non-Government Colleges teaching upto Bachelor's Degree:

Name of the College	Year of Establishment	Remarks
Konkan Education Society's Anandibai Pradhan Science College, Nagothane, Tal. Roha, District Raigad-402 106 (M.S).	1992	The College is eligible to receive Central assistance in terms of the Rules framed under Section 12 (B) of the UGC Act, 1956.

The indemnity Bond and other documents submitted in respect of the above College have been accepted by the Commission.

Yours faithfully,

(Mrs. Urmil Gulati) Under Secretary

### Copy forwarded to:-

The Principal, Konkan Education Society's Anandibal Pradhan Science College, Nagothane, Tal. Roha, District Raigad-402 106 (M.S).

- The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary Education & Higher Education, Shastri Bhavan, New Delhi-110 001.
  - The Secretary, Government of Maharashtra, Higher Education Department, Mumbai (M.S).
- The Additional Secretary, UGC, Western Regional Office, Ganeshkhind, Poona University Campus, Pune (M.S)-411 007.
- 5. Publication Officer, UGC-Website, New Delhi.
- 6. Section Officer (F.D.-III Section) U.G.C., New Delhi.
- 7. All Sections, U.G.C, New Delhi.

8. Guard file.

3

Tel Robe C. Nagothana
The Robe Raigad
Inward No. APSCH | 615
Dots 08109107

(Om Prakash) Section Officer

# ANNEXURE - IV AFFILIATION LETTER FROM UNIVERSITY

PC/1/certificate Letter

# University of Mumbai

Tal. Rohe - Reigad
Inward No. KHOPE-CH. JAH. 196



AFFILIATION SECTION
No. Aff.II/ICD/2016-17/17-11
November, 2016
7th December, 416

# TO WHOMSOEVER IT MAY CONCERN

This is to certify that the Konkan Education Society's, Anandibai Pradhan Science College, Nagothane, Bapusaheb Deshpande Educational Complex, Nagothane Tal. Roha, Dist- Raigad-402 106, is affiliated to the University of Mumbai, and the following Courses are conducted in the said college.

Sr. No.	Courses	Duration	Affiliation (Permanent/ Temporary)	Validity period
1	B. Sc	3 Year	Permanent	Permanent
2	B. Sc. (Computer Science)	3 Year	Temporary	From 2002-2003 To *2016-2017
3	B. Sc. (Information Technology)	3 Year	Temporary	From 2002-2003 To *2016-2017
4	M. Sc. (Organic Chemistry)	2 Year	Temporary	From 2008-2009 To *2016-2017

\* The procedure of continuation and Extension of affiliation is in process. The same will be communicated as soon as the process will be complied.

This Certificate is issued on the request of the Principal of the said College for submitting the same to the NAAC, Bangalore, accordingly.

Dr. Anil Patil Director

Board of College and University Development

### ANNEXURE - V GRANTS LETTER

विश्वविद्यालय अनुदान आयोग पश्चिम विभागीय कार्यालय गणेशिखंड, पुणे - ४११००७ University Grants Commission Western Regional Office Ganeshkhind, Pune – 411007.

दूरमाष Phone: कार्यालय OFF:- 020 - 25696897 020 - 25691178

> फॅक्स Tele Fax.: 020 – 25691477 Website – www.ugc.ac.in

ज्ञान-विज्ञान विमुक्तये

F. No 5-145/13(WRO)

The Principal,
Konkan Education Society'S Anandibai Pradhan Science
College,
Nagothane,
Roha,

Subject: XII Plan allocation under General Development Assistance to Colleges.

Sir/Madam,

Raigad - 402106.

I am directed to convey the approval of the UGC to Konkan Education Society'S Anaudibai Pradhan Science College,Roha, Raigad- 402106 the XII plan allocation of Rs.6378650/- 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

Rs.5102920/
Rs.1275730/
Grant-in-aid General (31) 20% of total allocation

Total

Rs.6378650/-

- 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 & Bursor/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.
- UGC 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 Mumbai
- 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.



No.SR/FST/College-221/2014(C)
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE & TECHNOLOGY
DEPARTMENT OF SCIENCE & TECHNOLOGY
R & D (Infrastructure) DIVISION

K. E. S. A. P. Sc. C. Nagothane
Tal. Roha - Raigad
Inward No. 10.5 / 2015 - 10
Date: 26.11.2015

Technology Bhawan, New Mehrauli Road, New Delhi -110016

18<sup>th</sup> November, 2015

ORDER

Subject: Financial assistance (1<sup>st</sup> installment) to KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106, (Maharashtra) on FIST Program.

Sanction of the President is hereby accorded to the implementation of the aforesaid project at a total cost of Rs. 20,00,000/- (Rupees Twenty lakh only) for 5 years at KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106, (Maharashtra). The details of this are given below:

To strengthen the teaching facilities in all Science Departments of the College.

Capital Assets-Rs.19.00L:

E-Rs.12.00L - A) Teaching Facility: Rs. 12.00 L for 22 items for various departments (as per list).

IF-Rs. 3.0L [Books-Rs.3.00L]

Networking- Rs.4.0L [To set up Computer Lab]

General Components-Rs.1.00L

M-Rs.1.00L

Total: Rs.20.00 Lakh

- 2. The sanction of the President is also accorded to the release of Rs. 17, 00,000/- (Rupees Seventeen lakh only) to the Principal, KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106, (Maharashtra) under FIST Program as a 1<sup>st</sup> installment of the grant in 2015–2016 under 'creation of capital assets' head for the maximum cost of the aforesaid Equipment including (9.4%) Custom Duty & other duties. The break-up of 1<sup>st</sup> installment grant released now would be "Equipment!: Rs.12.00 lakh for procurement of the equipments mentioned above [Equipments of Foreign Origin to be acquired on FE Terms only]. Infrastructure facility; Rs.1.0 lakh for acquiring Books & "Networking and Computational facilities"; Rs.4.0 lakh. Under the "Networking & Computational facilities" the proposed lab will have 10 nos. Desktop systems and NW accessories.
- 3. The Department/College will appropriately limit the expenditure within the sanctioned amount in case of any expected excess expenditure. The College is requested to utilize the released funds in first one year
- 4. The KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106 (Maharashtra) shall implement the aforesaid project with the 'Terms and Conditions' already agreed to by the College, Further, as per Rule 211 of revised GFRs the accounts of this Project Grants at Grantee Organization shall be made available for inspection by the sanctioning authority/audit where ever the Organization is called upon to do so.
- There is no pending SE/UC on this Project as per details in the PFMS also. This is the first release of this project under FIST Program, which has been initiated, in this financial year so no previous UC is attached with this sanction order.

Contd 2/

3

- The College will furnish to the DST, Utilization Certificate and an audited Statement of Expenditure pertaining to the grant immediately after the end of each financial year.
- 7 The grant is being released subject to the Terms & Conditions' of the Program being agreed to by the KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106. (Maharashtra). The College/University/Institute will maintain separate audited accounts and would keep whole of the grant in a bank account earning interest, the interest earned should be reported to the DST. The interest thus earned will be treated as a credit to the Institute to be adjusted
- The expenditure involved is to be debited to Demand No. 86 - Department of Science & Technology: "3425" - Other Scientific Research (Major Head). 60 - Others (Sub-Major Head) 60 200 - Assistance to other Scientific Bodies (Minor Head),

25 - Research & Development Support 25.01 – Grants-in-aid for R&D Support
25.01.35–Grants for creation of capital assets for the year 2015-2016 (Plan) The above felease is made under 'R&D' Scheme.

- The amount of Rs. 17, 00,000/- (Rupees Seventeen lakh only) will be disbursed to the Principal, KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106, (Maharashtra) in it's A/c No. 34689927552, IFSC Code: SBIN0008237 with State Bank of India,
- The sanction issues under the powers delegated to the Ministries and with the concurrence of the Integrated Finance Division, Department of Science & Technology vide their C.Dy.No. 3886/IFD/2015-2016 dated. 10.11.2015
- The sanction order is entered vide FIST No. 299 dated 18-11-2015 in the register of

tohuto hongo A. Bhattachary Scientist 'D

Email: a bhattacharyya@nic.in

Copy forwarded for information and necessary action to

Pay & Accounts Officer, Department of Science & Technology, New Delhi - 110 016

1 Pay & Accounts Officer, Department of Science & Technology, New Delin - 170 Cash Section (with two spare copies)

3 Principal, KES Anandibai Pradhan Science College, Nagothane, Roha, Raigad-402106, (Maharashtra) (PI Note the New Project No.) (In case the amount sanctioned transferred under this sanction is not received by the P.I within 15 days from the date of issue of the under this sanction.) sanction, the PI may intimate the fact with details of the IFD Diary No. & Date to the Joint Secretary and Financial Adviser at the e-mail address fin.adv.dst.dbt@gmail.com for looking

4 Office of the Director & Audit, Scientific Department, AGCR Bldg., 3rd Floor, IP Estate.

5. Office of Accountant General, Maharashtra, Mumbai

6. Head, R & D (Infrastructure), DST New Delhi

7 FIST-Secretariat

8 CoA / IFD, DST, New Delhi. 9 Sanction Folder

\$

A.Bhattaehar Scientist 'D

Email: a bhattacharyya@nic.in

# MAHARASHTRA POLLUTION CONTROL BOARD

Phone: 24010437/24020781 24045589/24037124/24035273 Fax: 24024068 /24023516



Kalpataru Point, 3<sup>rd</sup> & 4<sup>th</sup> floor, Sion, Matunga SchemeRoad No. 8, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E) Mumbai - 400 022.

No. MPCB/JD(APC)/NAMP/

4376

Date: 14.10.2015

# SANCTION LETTER

To.
The Principle
Anandibai Pradhan Science College, Nagothane,
Tal – Roha,
Dist – Raigad.

Sub.: Approval for Establishment of Two Ambient Air Quality Monitoring (AAQM) Stations at Roha under National Ambient Monitoring Programme (NAMP).

Ref.: 1. SRO - Raigad, MPCB letter dtd 14/09/2015.

Sir

With reference to above MPCB pleased to inform you that the proposal submitted by Sub Regional Officer, MPCB, Raigad with respect to the operation of 2 numbers of NAMP stations namely 1. Filter House of MIDC Water Works, Roha, Raigad 2. Roha Industrial Association office, Roha, Raigad have been approved and agreed to sanction operation of above stations, initially for 1 years period which can be extended based on the performance of monitoring activity.

The MPC Board, in principle, agrees to pay following charges towards operation & Maintenance (O&M) for 2 NAMP stations (monitoring twice a week for 24 hrs. at each station). The detail head wise budget allocation is as follows.

Sr	Budget Head	
No.		Amount (Rs.)
1.	Capital Expenditure*:(For the First year only)	For first year
1.1	Procurement of RDS ( Brushless)-2 Nos, For Roha area (Cost of each RDS, on actual basis maximum Rs. 1.65 Lacs)	3,30,000=00
2.	Operation and Maintenance : Recurring cost	
2 1	Annual Maintenance cost @ Rs. 2.35 Lacs per station per annum for 2 stations.  This cost includes cost of chemicals, glass wares, contingencies, salary of 1 scientific assistant, 1 lab / field assistant. MPCB will provide filter papers.	4,70,000=00
	Total	8,00,000=00

Some

Who

The O & M payment shall be released half yearly in advance. The college has to submit the statement of expenditure (SoE) and utilization certificate (UC) of funds to MPCB once in every six months.

The monitoring locations along with Latitude and Longitude positions of the site of monitoring are enclosed for your reference.

· If agreed, submit enclosed copy of Memorandum of Understanding (MoU) duly signed and returned to MPCB at the earliest to enable this office to release 1st

This is issued with the approval of Member Secretary.

Thanking you,

DA: As Above

Yours faithfully,

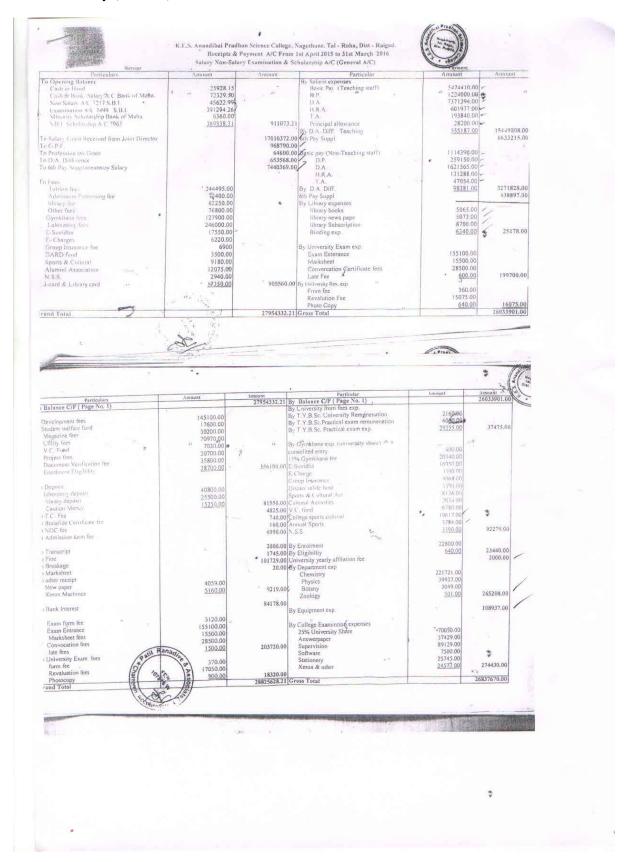
(V. M. Motghare) 14/2/15 Joint Director, APC

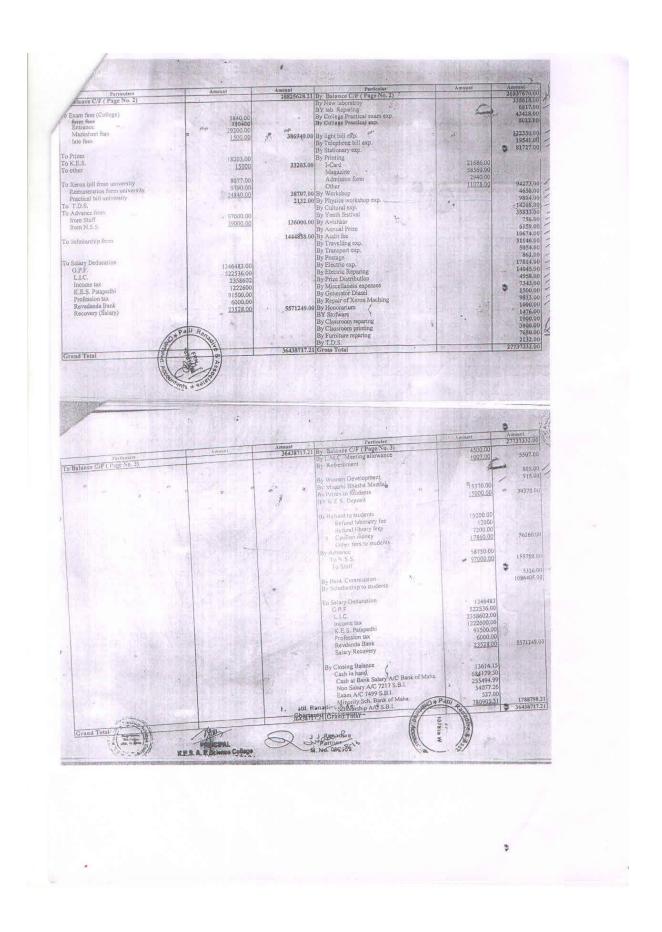
## Copy to.

- 1] Chief Accounts Officer MPC Board, for information and necessary action for release of payment as stated above.
- 2] RO Raigad / SRO Raigad MPCB for Information and necessary follow up. Also, They are directed to make the budget provision for Air Quality Monitoring under NAMP and seek grants from the accounts.

### ANNEXURE -VI AUDIT REPORTS

# B.Sc. Chemistry (2015-16)





# B.Sc. Computer Science and Information Technology (2015-16)

	Amount	Amount	month of 1" April to 2015 to 31"		
To Opening Balance cash in hand			By Bank Commission	Amonut	Amount
cash at bank A/c.11211497	8143.10 177817.22		By College Exam Exp (Prac	it,)	2909.00
cash at bank A/c. 11211492	535 1030626 27		By Salary (Teaching Staff)		25666.00 546968.00
Cash at bank A/c:11211497 To Tution fees	D 1007 I 117 / 1	1462	By C.H.B. Salary 901.43 By Management Share		21090.00
To Adm Pees	776700.00 18800.00		By Adm Charges		965636.00
To Lin Pees To Other fees	94300.00		By Misc Exp By Sweeper Chages		10101.00
To Gymkhana fees	21270.00 39300.00		By Generator Maint		12000.00
To Marksheet fees	650.00		By Printing & Stationary By Revaluation Fee		23387.00 182509.00
To Comp Practical fees To Lab Fees	193685.00		By College Theory Exam Ren	non.	16350.00
E-Suvidha fees	507750.00 4750.00		By Eligibility fees		17034.00
To Echarge fees To Insurance fees	1640.00		By Enrolment fees By T.A.Bill exp		11200.00
To D.A.R fees	1740.00 870.00		By Gas Exp		7749.00
To Sports & Cultural Activity	2460.00		By Postage Exp.		1275.00
To I. Card fees ToDevelopment fees	4700.00		By Repair & Maint By Transport Exp		146130.00
To Student welfare fees	50000.00 4700.00	-	By Telephone Bill		2728.00
To Magzine fees To Utility fees	8800.00		By Reg. Fees By Fixed Deposit		3
ToV.C.fund fees	22250.00		By Lab Exp		
To Adm Form& Has. Formy	9 19200.00		By E.P.F Consulting Charges By Affiliation fees		6600,00
To Grand Total 3	79570.00	185485	5.00 5.43 By Grand Total	•	20000.00
la la		001110	J-Siby Grand Total		1138930.00
Lab. Deposit Jihrary Dep Caution Money	10250.00 10250.00 - 6150.00	32800.0		400.00	1380.00
To Alumini Asso. Fees To Bonafied fees	2775.00 80.00		Caution Money Refund Of Other Fees	150:00	
To T.C.Fees	1125.00		Retailed Wil Other Pees	48739.00	19489.00
To Revaluation Fee (College)	9240.00 200.00	13420.0	By Advance to Staff		20275.00
o Collège exam fee		13420.0	By Xerox Exam Question Paper		00-000
Form fee Marksheet fee	2100.00 10600.00		By T.D.S		835.00 3874.00
Entrance Of Examinations	140730.00		By University Exam Pract, Exp.		
Late fee o Breakages	500.00	153930.00	By News Paper Bill		9270.00 7654.00
o fine fees	15852.00		By Photocopy fee By Lib Sub/lia books		180.00
o Misc. receipt			By Tea& Refreshment		18251,00 2415,00
o N.S.S fees o University Examm Remm	900.00		By Electric Bill		26630.00
The second secon	320.00	18572.00	By 25% University Exam Share By Transfer UGC A./c.		29025000 700000,00
o Eligibility fees			By New Lab. Exp.		77655.00
o Photocopy fee			By Electricity Exp. By Advertisment Exp.		127130.00
o Photocopy fee o Bank Interest A./c.11211497524	23201.00				
o Photocopy fee o Bank Interest A./c.11211497524 A./c.11211497535	45932.00		By Co-ordinator Honorium		6912.00 3000.00
o Photocopy fee o Bank Interest A./c.11211497524 A./c.11211497535 A./c.11211497513		78184.00	By Co-ordinator Honorium		6912.00
o Photocopy fee  o Bank Interest  A/c.11211497524  A/c.11211497535  A/c.11211497513  o T.D.S	45932.00 9051.00	78184.00	By University Exam Fees Form Fees	c	6912.00
o Photocopy fee  o Bank Interest  A/c.11211497524  A/c.11211497535  A/c.11211497513  T.D.S	45932.00	78184.00	By University Exam Fees Form Fees Entrance Of Examinations	80600.00	6912.00
o Photocopy fee  o Bank Interest  A /c.11211497524  A /c.11211497535  A /c.11211497513  T.D.S  University Exam Fees	45932.00 9051.00	78184.00	By University Exam Fees Form Fees Entrance Of Examinations Marksheet Fees Convocation Fees	80600.00 6300.00 6750.00	6912.00
Photocopy fee bank Interest A /c.11211497524 A/c.11211497535 A/c.11211497513 T.D.S  D.University Exam Fees Form Fees Entrance Of Examinations	45932.00 9051.00	78184.00	By University Exam Fees Form Fees Entrance Of Examinations Marksheet Fees	6300.00	6912.00
Photocopy fee bank Interest A /c.11211497524 A/c.11211497535 A/c.11211497513 b.T.D.S b.T.D.S b.T.D.S b.T.D.S c.T.D.S c	45932.00 9051.00 9051.00 100 100 100 100 100 100 100 100 100	78184.00 3874.00	By Co-ordinator Honorium  By University Exam Fees Form Fees Entrance Of Examinations Marksheet Fees Convocation Fees Late Fees	6300,00	6912.00 3000.00
Photocopy fee Bank Interest A./c.11211497524 A./c.11211497535 A./c.11211497513 T.D.S  University Exam Fees Form Fees Entrance Of Examinations Marksheet Fees	45932.00 9051.00 9051.00	78184.00 3874.00	By University Exam Fees Form Fees Entrance Of Examinations Marksheet Fees Convocation Fees	6300,00	6912.00 3000.00



# M.Sc. Chemistry (2015-16)

E.P.F.   4075	April to 2015 to 31" March 2016  at side  Commission  deduction  Tax  107600.00  All Selfary  (Teaching & Non-Tec.Staff)  139653.00  All Selfary  (Teaching & Non-Tec.Staff)  139053.00  All Selfary  107600.00  All Selfary  107600.00  All Selfary  1187.00  Expossit  10 Deposit  10 Deposit  10 Deposit  10 Deposit  10 Deposit  10 Deposit  1187.00  A Stationary  1187.00  A Stationary  1187.00  A Stationary  1187.00  Insurance  10 Deposit  1187.00  1187.00  1187.00  1187.00  1187.00  1188.00  1187.00  1188.00  118	Receipt & payment For the month of 1" April to 2015 to 31" March 2016
Amount	Amount Amount Amount (Commission & Amount (Commission & Amount (Commission & 1240.00	Amount
Payment side	Amount	Taylinet State
124   124	1240.00	1240.00
Section   Sect	Tax	146089.00
10   10   10   10   10   10   10   10	3. Salary   107600.00	SysBon_00
Management State   Management Management Management Management Management Management Ma	## ASS. PACKEG Lect. Rentin	32000.06  8by College M. Sc. Practical Lect. Remin.  90000.00  8by Amanagement Share 200.00  9by Management Share 200.00  9by Misc edo 3519.00  14500.00  8by Science Material 1900.00  8by Electric Deposit 1900.00  9by Fried Deposit 1900.00  9by Princing & Stationary 3790.00  8by Princing & Stationary 3990.00  9by Advertisement 1850.00  By News Paper bill Exp 16148.00  1800.00  By Refund of Fees 30500.00  Lab Deposit 1800.00  Lab Deposit 1200.00  September 11 Exp 16148.00  1800.00  Lab Deposit 1200.00  Lab Deposit 1200.00  Lab Deposit 1200.00  Advance to Staff 2700.00  275.00  Advance to Staff 37700.00  37700.00
Dy Management Share   Dy	1870.00   1870	12800.00
Address	Marterial	A075E/R01
14500 00   By Kine Deposit   Store Material   20071   Store Material	Material eposit	14500.00   By Science Material   20991.00
Survicible   Fors	eposit in E Deposit in Bill Exp  2 Stationary  3 Stationary  3 Stationary  4 Stationary  4 Stationary  4 Stationary  4 Stationary  5 Stationary  4 Stationary  4 Stationary  4 Stationary  4 Stationary  4 Stationary  1 187,00  148,00  148,00  159,00  160 Fees  1200,00  17	1900.00
Internation   Color	1187.00   1187	880.00 By Friending & Stationary 1187.00 880.00 By Friending & Stationary 34977.00 By Advertisement 34977.00 By Advertisement 34977.00 By Advertisement 5185.00 By Regair & Maint 16148.00 By Regair & Maint 16148.00 By Refund of Fees 32322.00 By Refund of Fees 30500.00 By Refund of Other Fees 30500.00 By B
187.   187.	1187.00	1187.00
### Advertisement   34977. ### Advertisement   3	Sement   S	135779.00   By Advertisement   34977.00
1850.00	Paper bill Exp	1850.00
17000.00   By Affiliation fees   2322.0	1202.00   1200	130,000   By Affiliation fees   2322,00
### Proces   3400.00   Lab Deposit   1200.00	it 1200.00 p	3400.00
Supplement   Sup	P 1200,00   1200	Sept.   Sept
Caution Money   730.00	190   190	Caution Money
Fees	Staff   24970.00   27370.00	138789.00   Advance to Staff   24270.00   27370.00   37700.00   0.00
1365   1365	37700.00     37700.00	37700.00   37700.00
1358789.00   payment side   809625.00	\$89625,00	1358789.00   By Grand Total   809625.00
1358789.00   payment side   809625.00	\$89625,00	1358789.00   payment side   809625.00
138789.00   payment side   809625	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	1358789.00   payment side   809625.00   Sp. Balance C/F   20.00   By Group Insurance   450.00   330.00   By University Exam Pract. Exp   15579.00   By Library Suberiblion   5725.00   140.00   By Transport exp
By Balance C/F	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
Innec C/F	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
By Balance C/F	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
Hance C/F	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
Institled   20.00   By Group Insurance   4880	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Second		By Library Subscription         5725:00           140:00         By Transport exp
140,00		140,00 By Transport exp
Evaluation Fees   8250.00   8740.00 By Gas exp   5.231	port exp	9740 001Ry Gas eyn
No. Comparison		
current Verification         4400.00 By Library Books           By Revalution Fee         7690           By Photocopy fee         9           D.S         4354.00 By Avishkar Research Project		
By Photocopy fee           D.S         4354.00 By Avishkar Research Project	ry Books	
D.S 4354,00 By Avishkar Research Project		
		By Revalution Fee 7690.00
BARTO SARAN		By Revalution Fee 7690.00 By Photocopy fee
2000000		By Revalution Fee   7690.00
10 October 15250.00 - Travelling Allowance 3400.00	velling Allowance 3400.00	By Revalution Fee   7690.00
tion Money 3150,00 16400,00 Lodeging 4620,00 47020.	eging 4620.00 47020.00	By Revalution Fee   7690.00
nission form fee \$30,00 By College Development exp		By Revalution Fee   7690.00
m Fees 1230.00 By L.I.C. Visit Exp		By Revalution Fee   7690.00
trance Of Examinations 73800.00 By Tea & Refreshment Exp 1104.	Visit Exp. 43第.00	By Revalution Fee   7690.00
	Visit Exp. Refreshment Exp 1104.00	By Revalution Fee   7690.00
Fee 600.00 86780.00 Entrance Of Examinations 73800.00	43#,00	By Revalution Fee   7690.00
Marksheet Fees 6150.00	43,900	By Revalution Fee   7690.00
Iniversity Examin Remin   Convocation Fees   500.00	Visit Exp	By Revalution Fee   7690.00
fisc. Receipts Exam Form 1070.00 86520.	43,900	By Revalution Fee   7690.00
ih Sub By Genrator Maint Exp. 2000.1	43,900	By Revalution Fee   7690.00
	Visit Exp	By Revalution Fee   7690.00
Ranadi BY T.A.bill Exp . 4506.0	Visit Exp	By Revalution Fee   7690.00
/01/ Val	Visit Exp	By Revalution Fee
	43,900	By Revalution Fee   7690.00
12 1200	Visit Exp	By Revalution Fee   7690.00
	43,900	By Revalution Fee   7690.00
	Visit Exp	By Revalution Fee   7690.00
	Visit Exp	By Revalution Fee   7690.00
	Visit Exp	By Revalution Fee   7690.00
6000.00 By Postage	xp _ 5231.00	
00 Fees   8250.00   8740.00 By Gas exp   5231	port exp.	\$231 AAI
Transport exp   140,00   By Transport exp   2331		
Fee	v Subcribtion 5725.00	By Library Subcribtion   5725.00     140.00   By Transport exp.
fees         330,00         By University Exam Pract. Exp         15579           e         By Library Suberbilen         5725           fees         140,00         By Transport exp         5725           vanior Fees         8250,00         8740,00 By Gas exp         5231           copy Fees         By Gas Deposit         17700           es         6000,00 By Postage         850           ent Verification         4400,00 By Library Books         8           By Revalution Fee         7690           By Photocopy fee         4354,00 By Avishkar Research Project		By Library Subscription         5725:00           140:00         By Transport exp
Tees   330,00   By University Exam Pract. Exp   15579	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
affed         20.00         By Group Insurance         480           5, fees         330.00         By University Exam Pract. Exp         15579           6ee         By Library Subcribition         5725           1 fees         140.00         By Transport exp           1 fees         8250.00         8740.00 By Grac exp         5231           1 peoply fees         6000.00 By Grac exp         5231           6es         6000.00 By Postage         850           6es         6000.00 By Library Books         850           8y Revalution Fee         7690           By Photocopy fee         8           6         4354.00 By Avishkar Research Project	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
dfted         20.00         By Group Insurance         480           S febrs         330.00         By University Exam Pract. Exp         15579           6ee         By Library Subcribition         5725           16es         140.00         By Transport exp           120 Junation Fees         8250.00         8740.00 By Gas exp         5231           10copy fees         8250.00         By Gas Deposit         1700           6es         6000.00 By Postage         850           6es         4400.00 By Library Books         850           By Photocopy fee         9           By Photocopy fee         9           4354.00 By Avishkar Research Project         9	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
150   150	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
By Croup Insurance   480	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
April	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
By Balance C/F   By Balance C/F	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
By Balance C/F	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
By Balance C/F	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
Record   R	sice C/F p Insurance \$20,00 prisity Exam Pract. Exp 15579,00	By Balance C/F   480.00   39 Group Insurance   480.00   330.00   By University Exam Pract. Exp   15579.00   39 Library, Subcribition   5725.00   140.00   By Transport exp
By Balance C/F	100 et /F	By Balance C/F   20,00   By Group Insurance   4\$0,00   330,00   By University Exam Pract. Exp   15579,00   39 Library Subcribition   5725.00   140,00   By Transport exp
April	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
April	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
By Group Insurance   480	p Insurance \$\frac{1}{2}0.00 \\ earsity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
Fees   330,00   By University Exam Pract. Exp   15579	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Tess   330,00   By University Exam Pract. Exp   15579		By Library Subscription         5725:00           140:00         By Transport exp
By Library Subscribition   5725	v Subcription 5725.00	By Library Subcribtion   5725.00     140.00   By Transport exp.
1	ry Subcription 5725.001	140,00 By Transport exp.
Fees         140.00         By Transport exp           Jackino Fees         8 250.00         8 740.00 By Gas exp         5231           copy Fees         By Gas Deposit         1700           es         6000.00 By Postage         850           sent Verification         4400.00 By Library Books         9           By Revalution Fee         7690           By Photocopy fee         4354,00 By Avrishkar Research Project		140,00 By Transport exp.
16cs		140,00 By Transport exp.
1	ry Subcription 5725.001	140,00 By Transport exp.
Sy	v Subgription 5725 001	140,00 By Transport exp.
By Library Suberibition   5725	v Subcription 5725.00	By Library Subcribtion   5725.00     140.00   By Transport exp.
By Library Suberibition   5725		By Library Subscription         5725:00           140:00         By Transport exp
Symbol   S		330,00   By University Exam Pract. Exp   15579,00
Sizes   330,00   By University Exam Pract. Exp   15579	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
affed         20.00         By Group Insurance         480           5, fees         330.00         By University Exam Pract. Exp         15579           6ee         By Library Subcribition         5725           1 fees         140.00         By Transport exp           1 fees         8250.00         8740.00 By Grac exp         5231           1 peoply fees         6000.00 By Grac exp         5231           6es         6000.00 By Postage         850           6es         6000.00 By Library Books         850           8y Revalution Fee         7690           By Photocopy fee         8           6         4354.00 By Avishkar Research Project	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
affed         20.00         By Group Insurance         486           5, Fees         330,00         By University Exam Pract. Exp         15579           Fee         By Library Suberibilion         5725           n Fees         140,00         By Transport exp           business Fees         8250,00         8740,00 By Crise Exp         5231           pccpy, fees         6000,00 By Postage         850           ges         6000,00 By Library Books         6000,00 By Library Books           Revalution Fee         7690           By Photocopy fee         8           S         4354,00 By Avishkar Research Project	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
April	p Insurance \$\frac{1}{2}0.00\$ ersity Exam Pract. Exp   15579.00	20,00   By Group Insurance   40,00   330,00   By University Exam Pract. Exp   15379,00   15379,00   By Library Suberibtion   5725,00   140,00   By Transport exp
uffed         20.00         By Group Insurance         480           S (Fess         330.00         By University Exame Pract. Exp         15579           Fee         By Library Suberibilion         5725           a (Fess)         140.00         By Transport exp           butarion Fees         8250.00         8740.00 By Grac exp         - 5231           by Gas Deposit         1700           ges         6000.00 By Postage         850           ges         4400.00 By Library Books         - 850           By Revalution Fee         7690           By Photocopy fee         - 800           S         4354.00 By Avishkar Research Project	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Second   S	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579,00
Fees   330,00   By University Exam Pract. Exp   15579	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Fees   330,00   By University Exam Pract. Exp   15579	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Second   S	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Fees   330,00   By University Exam Pract. Exp   15579	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
Second   S	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
dfted         20.00         By Group Insurance         480           S febrs         330.00         By University Exam Pract. Exp         15579           6ee         By Library Subcribition         5725           16es         140.00         By Transport exp           120 Junation Fees         8250.00         8740.00 By Gas exp         5231           10copy fees         8250.00         By Gas Deposit         1700           6es         6000.00 By Postage         850           6es         4400.00 By Library Books         850           By Photocopy fee         9           By Photocopy fee         9           4354.00 By Avishkar Research Project         9	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
16ed   20.00   By Group Insurance   480	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
affed         20.00         By Group Insurance         480           S, Fees         330.00         By University Exam Pract. Exp         15579           Five         By Library Suberibilion         5725           In fees         140.00         By Transport exp           Industrion Fees         8250.00         8740.00 By Crise Exp         5231           Incopy fees         6000.00 By Great By Gre	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
fied         20.00         By Group Insurance         480           6 (Ees         330,00         By University Exam Pract. Exp         15579           6 (Ees         330,00         By University Exam Pract. Exp         15579           6 (Ees         140,00         By Transport exp         15579           6 (Ees         140,00         By Transport exp         5231           6 (Ees)         8250,00         8740,00         By Gas Exp         5231           6 (Ees)         600,00.00         By Postage         850           (Ees)         600,00.00         By Postage         850           8 (Exp)         440,00         By Library Books         7690           8 (By Revalution Fee)         7690         7690           8 (By Photocopy Fee)         4354,00         By Avishkar Research Project	ersity Exam Pract. Exp 15579.00	330,00   By University Exam Pract. Exp   15579.00
By Library Suberibition   5725		By Library Subscription         5725:00           140:00         By Transport exp
fees         140.00         By Transport exp.         5231           Juntation Fees         8230.00         8740.00 By Gas exp         5231           Keep Fees         8000.00         By Gas Denosit         1700           Kee         6000.00         By Postage         850           Went Verification         4400.00         By Library Books         7690           By Revalution Fee         7690         7690           By Photocopy fee         4354.00         By Avishkar Research Project		
fees         140,00         By Transport explication           Judament Fees         8250,00         8740,00 By Gas exp		
Section   Sect		
S231		
Section   Sect		
Section   Sect		
Marion Fees   8250.00   8740.00 By Gas exp   5231		9250 00 9740 00 Ry Gas eyn
Butarion Fees   \$250.00   \$740.00 By Clas exp   5231		9750 001 9740 001Ry Gas eyn
Various   September   Septem		\$231 AAI
By Gas Deposit   1700		A TALL DELL'AND THE PART OF TH
By Gas Deposit   1700		ACT OF THE PART OF
Digition Fees   \$250.00   \$740.00 By Gas exp   5231		9740 001 9740 001 By Get evn
Section   Sect	port exp.	
S   4354.00   By Assexp   5231		
Markon Fees   8250,00   8740,00   By Gas exp   5231		
S231	port exp	
By Gas Deposit   1700		
6000.00 By Postage   850		
Mem Verification		
### 6000.00 By Postage \$50		
Memory Verification		
Memory Verification		
Memail Verification		
1		
	ge RS0.00	6000 00 By Postage 850 00
###   ####   ####   ####   ####   ####   ####   ####   ####   ####   #####   ####   ####   #####   #####   #####   ######		
Ry Revalution Fee   7690.	The Cale	1400 00 P. J. W. D. J.
By Revalution Fee   7690.   By Photocopy fee	ry Books	4400 00 By Library Books
By Photocopy fee S 4354.00 By Avishkar Research Project		
By Photocopy fee 4354,00 By Avishkar Research Project	aution Fee 7690.001	
4354.00 By Avishkar Research Project:		
4354.00 By Avishkar Research Project	copy fee	By Revalution Fee 7690.00
4354.00 By Avishkar Research Project		By Revalution Fee 7690.00
Jan and November 1997		By Revalution Fee 7690.00
1.00 mm (N.7) (N.7	Kar research Project	By Revalution Fee 7690.00 By Photocopy fee
1075 00 By Furniture Exp		By Revalution Fee 7690.00 By Photocopy fee
	mre Exp	By Revalution Fee   7690.00

Receipt side To Babance C/F	1499549.00 payment side  By Balance C/F  By E.P.F. Consulting Charges		1088204.00	
To Salary, deduction	By M.Sc. New Laboratory Conf. Exp. 40758.00		6600.00 380041.00	
To Advance received To Advance Salary Received	By University Share Paid - 37700.00 15% Gymkhana Share L-Suvidha Share F-Charges Share	3	= 2400.00 2000.00	
NF A kas H. Narwade To University Practical Exam.	23000.00   D. N.P. Share   Sports & Cultural Activity Share   6872.00   V.C.Fund Share		400.00 400.00 1200.00 800.00	
Advance to Comp.Sci. & IT	N.S.S. Share 1600.00 Advance to Comp.Sci. & I.T. By Clossing balance		400.00 800.00	
To Grand Total	Cash in hand Cash at bank A/c. 31208391513 cush nt bank A/c. 34569823855 1609479,00 By GrandTotal	2417.00 106480.00 17337.00	\$ 126234,00 1609470.00	
	ganadive 4		1609479.00	
Ancipal Minipal	TO/BIG W			
PRINCIPAL K.E.S. A. P./Science Coll Nagothane, Dist. Raigae (N	1.5.) Accountants		D#	
	Chartened accountants			
	M. No. 052953		*	
	χ.		2	
	×		2	
		5		
		V Her	*	
		*1		

# ANNEXURE - VII MASTER PLAN OF THE INSTITUTION

