

FOR 4th CYCLE OF ACCREDITATION

GOKHALE EDUCATION SOCIETYS N B MEHTA VALWADA SCIENCE COLLEGE BORDI

ACHARYA BHISE VIDYA NAGAR, STN. GHOLVAD, POST, BORDI 401701

https://www.nbmbordicollege.com

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Gokhale Education Society was established with the motto, "????? ?????????????????. It has completed 106 years of rendering academic service to the Society in 3 zones in Maharashtra – Nashik, Palghar and Mumbai. Our College was established in 1994 and completed its silver jubilee in 2019. It is guided by the motto "?????? ??? ???? ??? ???????". The College is situated in the remote adivasi region of Palghar district. It is located in a village called Bordi made sacred by the sacrifice of ninety-three freedom fighters. Revered Kasturba Gandhi stayed in this village for some time. It is quite surprising that the total population of Bordi is around seven thousand people while we have the same number of students who come daily to our campus. Late Shri N. B. Mehta, after whom our College is named, worked as a primary teacher in our Bordi School. He and his children who are alumni of our Society have donated the College building. In keeping with its vision, the College caters to the academic needs of the tribal and marginalized children and especially girl students of the Palghar district by offering those courses that will help them to enhance their global competencies and employability. The College, which began as a single faculty Science College, has gradually developed not only into a multi faculty one by adding Commerce but also has a Research center in Physics, Botany and Zoology. Three of our students, Ms. Bharati Mourya (MSc Organic Chemistry) in 2019, Mr. Bharadwaj Nilesh Sunil (BSc Physics) in 2023 and Ms. Hiral Tailor (BSc Computer Science) in 2024 are proud recipient of GOLD MEDALS from University of Mumbai. College teachers have been granted 9 patents by India, UK, Germany and Australia in last 5 years. Recipient of the Best College (Rural) Award in 2012 our College plays a pivotal role in social and economic transformation of the vicinity. Our College contributes to the education of women in a big way because had our College not been in the locality, the girl students would never venture too far off Colleges for Higher education.

Vision

The College continues to offer quality service in the field of education and upliftment of the tribal and lesser privileged Adivasis of the Palghar belt. In the next ten years, we aspire to add more vocational courses according to the demand of the times. We look forward to increasing ICT- enabled teaching and learning. Some more Science departments will be developed into Research Centres. We shall also venture into developing contacts with various industries to help our students get hands on training in commercial projects, facilitate job seeking and establish linkages. The Commerce faculty will be developed and will offer post graduate and management courses.

Mission

The Gokhale Education Society is committed to the cause of students' empowerment through access to education at all levels and particularly higher education. We aspire to develop world-class citizens through relevant courses under formal and non-formal streams. The Society is further committed to raise the dignity of the teaching profession and to establish a culture of caring and excellence by providing a wide range of professional and vocational courses for the poor and downtrodden as also for the adivasis and the less privileged. We also strive to meet the changing socio-economic needs with human values, social responsibility and to achieve excellence with total quality in all activities of lifelong learning.

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1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- The institution belongs to Gokhale Education Society, which was established in 1918. It has a hundred year-long, strong tradition of academic excellence.
- Pollution free environment, student-friendly, clean, beautiful, scenic campus.
- The only grant-in aid UG Science College in a radius of thirty kilometers.
- Three of our students awarded **GOLD MEDALS** in 2019, 2023 and 2024.
- Four Students are selected in Armed forces as **Agniveers** in this academic year.
- Awarded Best college (Rural) Award by University of Mumbai in 2012. Received *Jagar Janiwancha* Prize from Government of Maharashtra in 2014.
- Growth from a single faculty under graduate Science College to a multi-faculty Science and Commerce College.
- Recognized research laboratory in Physics, Botany and Zoology.
- 3 students awarded PhD degree
- Has received **9 national and international patents** and 66 publications.
- 13 teaching staff and one non-teaching staff member pursuing PhD.
- Have established collaborations with Umbergaon based industries.
- 7 UG, 5 PG and 3 PhD courses available for the students.
- Good results in terms of both quality and quantity. No dearth of students for basic science courses.
- Co-operative, dedicated, well qualified and academically progressing teaching faculty with proven interest in research, some are PhD guides.
- ICT based teaching-learning encouraged.
- Disciplined and humble students. Opportunities made available for students to display their skills, talents in sports and extracurricular activities beyond academics.
- Adequately equipped laboratories, airy, well ventilated and lighted classrooms. College building designed for maximum use of natural light which helps to save on electricity.
- Solar panels installed by our non-teaching staff that generates about 125 units of electricity.
- Measures to deal with recurrent power cuts are taken on the institutional level through solar power.
- Internet connectivity ensured by making use of more than one service provider. Optimum utilization of resources.
- Buildings donated by past students

Institutional Weakness

- The institution is located in the remote tribal belt of Palghar district, hence geographically distanced from Mumbai and other important cities.
- Less exposure to the outside world.
- Our institution can be accessed with the help of trains and buses from Mumbai and Gujarat.
- Since there are limited number of trains and buses, we have to set our timetable in accordance with the railway timetable.
- Students belong to the Adivasi, tribal and underprivileged sections of the society. They lack educational background in the family.
- Very low paying capacity of the students.
- Not a very strong and formally established Alumni Association.

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- Non-grant teaching staff not stable and fully qualified, difficulty in recruiting staff for non-grant courses.
- Space crunch due to increased courses.
- Interrupted power supply and slow internet speed.
- Students rather weak in Communication skills.

Institutional Opportunity

- Since the Umbergaon-GIDC and Tarapur-MIDC industries are close by, linkages with them can be strengthened.
- Our Microbiology and Chemistry departments has started such a project with industries based in Umbergaon.
- Discussions are in progress with industries in Tarapur MIDC.
- Better arrangements for Competitive examination guidance to especially SC and ST students.
- Developing all UG departments to PG and later research centers.
- Adding to existing infrastructure for accommodating new courses.
- Developing a centre for preserving and encouraging tribal culture, arts and artifacts.
- Readiness in implementation NEP-2020 in accordance with the guidelines from the University of Mumbai.

Institutional Challenge

- Overcome hurdles of commuting which can help the institution to offer more courses and extend the college timings.
- Adopting measures for improving English language competency and communication skills of the students.
- Enhancing employability and entrepreneurship abilities among students.
- Arranging visits of eminent personalities, research scholars due to problems in transportation.
- Attracting a greater number of students for non-grant courses
- Approaching donors for assisting deserving and needy students.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

The college has added 3 programs in the last five years – UG program in Bachelor of Accounts and Finance and PhD programs in Botany and Zoology subject. The college has applied from recognition of research laboratory in Chemistry.

Due to demand from the people from nearby villages permission for starting second division under graduate programs in general science (leading to BSc in Chemistry and Physics) and Commerce were obtained from the University of Mumbai.

The total number of students admitted in the college has increased from ~1300 to ~1700 students in last five years with approximately 50% girl students.

One of the faculty member Vice Principal Dr. T. N. Ghorude, is selected as **Chairman** of **Board of Studies** in Physics, this despite being situated in tribal area and number of colleges affiliated to the University being more than 800 is a proud moment for the college. Faculty members serve as paper setters and evaluators at the University. Dr. Kirtikumar Patel has served as member of Board of examinations for Indian National Chemistry Olympiad.

College works as a Head of Cluster Colleges for exam related issues.

The college strictly follows first day first lecture policy by completing the admissions for higher classes in the month of April and May every academic year.

Regular feedbacks are obtained from the various stakeholders and analyzed. Teachers are orally apprised of the findings.

The **Teacher's Diary** is one important means of ensuring that curriculum delivery is done effectively and in a well-planned manner. The regular and careful use of the teacher's diary ensures the effective delivery.

The **IQAC** is another important means of ensuring effective curriculum delivery. The IQAC prepares the Academic Calendar, which helps to plan all the different curricular, co-curricular and extracurricular activities that the College arranges during the academic year.

The students receive relevant inputs regarding cross cutting issues related to Gender, Environment and Sustainability, Human values and Professional ethics through courses such as Foundation Course and Environmental Studies.

Amaranth, A Flower that Never Fades, the College annual magazine, publishes a record of the entire year's activities and achievements.

Teaching-learning and Evaluation

Our College is situated on the Maharashtra-Gujarat border and about half of the enrolled students are from Gujarat. However, since most of them enroll at their higher secondary level technically they appear to be students from Maharashtra.

The college attracts optimum number of students. To overcome the waiting list, we have obtained permission for second division UG courses in Science and Commerce and have started a program, Bachelor of Accounts and Finance. We also request the University for additional student strength every year. The University permits 15-20% of additional enrollment.

We meticulously follow the reservation policy. In the current year we have ~43% students enrolled from reserved category. As the college is situated in tribal area, majority of girl students belonging to ST category take admission.

The college employs adequate number of teachers as reflected from mentor-mentee ratio of ~1:27. Since appointment of grant-in-aid teachers has to be from Government, the management limited role. But management ensures adequate number of teachers through appointment in self-financed courses. The average experience in the college of faculty members is ~9 years with few self-financed teachers have experience of

15-20 years.

Results are declared on time and the average results in last five years is ~80%. Grievances of the students are forwarded promptly to the concerned staff of the University. Regular follow-ups are taken by our office staff members.

During COVID-19, the teachers were encouraged to undergo training for online teaching. Our teachers also conducted training sessions for our staff and teachers from nearby schools. Various teaching platforms such as Teachmint, GoogleMeet, Zoom etc. were used to deliver lectures. Lectures were also uploaded on Google classroom, YouTube, WhatsApp and Telegram to overcome internet network inadequacies faced by the students from interior regions.

POs, PSOs and COs are displayed on college website and on the campus. Attainment of the same is reflected from results of the students. In last five years, many of our students have qualified CA, IIT-JAM and other competitive exams. **Four** of our students have joined Indian Army and Navy as Agniveer. Three students have secured **Gold Medals** from University of Mumbai.

Research, Innovations and Extension

For creating and transferring of knowledge not only among students but also among the society, the institute has taken up a number of initiatives.

Research:

In our staff, we have **twelve PhDs**, **three M. Phils**, **eight recognized guides for PhD**, **nine patents in last five years**. A total research grant of Rs.4.78 lakhs was received during the past five years. Three students have completed Ph.D. degree and one has submitted theses. Faculty members have published 66 research papers in National and International journal. Faculty members have contributed in 18 books and translated books written by some of our teachers are available in the library for reference.

Innovation:

The Physics Department indigenously prepares circuits and many innovative sets of apparatus. Our Chemistry Department collects rainwater and stores it which is used throughout the year as distilled water. Water suction pump is used instead of oil vacuum pumps to reduce pollution. Other Colleges follow our example. The department uses solar distillation plant for de-ionized water donated by nearby industry. Our Botany Department has developed gardens and green spaces in which there are medicinal plants with botanical names displayed. Our Zoology and IT departments have arranged exhibitions for students and the local community. Thin client technology is used.

Extension:

Extension activities sensitize students to social issues and help in achieving total development of students' personality. The NSS & NCC units conducts regular activities related to leadership and personality development. Students participating in these activities develops awareness and motivates other students. Along with academics, students learn the values of social justice, equality, national integration, duties towards society etc.

Infrastructure and Learning Resources

Infrastructure and Learning Resources

The in	stitution	provides	3

Laboratories-19

Classrooms-22

Examination room

IQAC room

Ladies room

Seminar cum Conference hall

Gardens and Green Spaces

Open air stage for cultural activities

Sports, NSS, NCC rooms

College Ground

Staff common room

Storerooms

Library:

Area: 1375 sq. ft.

Separate seating areas for students and staff

Partially automated with SOUL 3.0 and LMS installed

Barcode technology for circulation of books

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Internet facility is available for students and staff
Member of INFLIBNET N-LIST under which 6000+ e-Journals and 30 Lakhs+ e-Books are available
Our collection:
07 Research Journals
11 Science Reporting Magazines
15 General Magazines
708 DVDs
6000+ e-Journals
e-books subscribed under N-LIST
IT facilities:
100 MbPS internet connection
CCTV surveillance
Conference Hall with ICT facility
Internet Facility
Partially automated Library
Computer Labs
Two IT Laboratories function on Thin Client Technology Labs updated periodically
Additional Computers and Thin Client Technology extended
Two Portable Projectors
Digital Notice Board

One Window System in the office

Use of Tally Software

Software for Admissions, Results and Government Scholarships

College to University communication is purely in digital form

DPDS since 2015

Firewall and Anti-Virus software for protecting the system

Internet Sharing Computers formatted with new OS at the end of each Term

Physical, Academic and Support facilities

Time Table for the Use of Laboratories, Class Rooms, Sports facilities

Cleaning and maintenance by support staff

Appointment of a computer expert

Periodic Pest Control

Drinking water, toilet facilities maintained

Student Support and Progression

A large number of students belong to ST category and avail of Government Scholarships.

In order to enhance the students' capabilities, we conduct guidance sessions for five activities. The final year results are good testifying to students' satisfactory progress.

The **Students' Council** is a representative students' body and **comprises** Principal, Staff members and student representatives.

The members of the Students' Council are involved in arranging various cultural and sports activities in the College during the academic year.

Our fees are quite low compared to other Colleges in vicinity. The non-grant courses are a bit expensive for students owing to their low paying capacity. The College helps some of them by assisting them get government scholarships even from other states and by accepting fees in installments. We approach philanthropists to donate fees of deserving students. Students are offered bridge course in Mathematics. An introductory session in handling glassware, instruments, chemical handling and safety is conducted for first year UG students. Students are informed and encouraged to appear for competitive examinations and to undertake research

projects along with the staff members. Workshops on Communication Skills and guest lectures on various topics of current significance are arranged. The College organizes various exhibitions prepared by students.

Student representation and participation has been an integral part of academics as also of the various activities of the College. Six major committees have student representatives.

There is an informal Alumni Association in the College. Though the institution does not have a registered alumni association, gradually, the association has started functioning. Most of the past students belong to very low- income groups and hence it is not possible for them to make financial contributions even if we set up a formal Alumni Association. Some of our Alumni are local businesspersons, artisans and they help the College by providing goods and services at a reduced rate, thereby indirectly giving financial support. The Microbiology department is actively engaged with the alumni.

Two of the College buildings are built with the help of munificent and unconditional donations given by the alumnus of the Bordi centre.

Governance, Leadership and Management

The Vision and Mission Statements are our guiding stars for all our endeavors. Gokhale Education Society under whose aegis we function was established in 1918. Teachers manage it in a **democratic** manner. The Principal is also the member of the Governing body and Senate, which meet periodically. Decisions regarding the plans for development are taken in these meetings.

We have tried to implement changes according to suggestions made by the previous NAAC team.

The Principal, Head of departments, members of various committees manage the College and decisions regarding allocation of responsibilities, distribution of routine work etc. are taken unanimously.

The College is governed with the help of:

Service Rules

CDC: CDC meetings are held three to four times in a year. The Principal presents a report of the working of the College during the term in the meeting.

IQAC: IQAC monitors all the quality parameters for the academic progress of the College.

Academic Calendar:

In the beginning of every academic year, the IQAC in consultation with the Principal and Heads of the Departments prepares an academic calendar that is sent to every department for further execution.

Actual implementation of the calendar is recorded in the teacher's diary and is reflected in the magazine and the annual report.

The **Students' Council** is a representative body formed in a democratic manner. It facilitates the smooth working of the College by acting as a link between students and management.

Magazine Committee and such other committees

Institutional Values and Best Practices

The vision and mission of the College support the improvement, development and education of tribal students. The College facilitates tribal students to build their careers. The college infrastructure, faculty, library and facilities play an important role in their progress. All our College activities focus on the Core Values. Majority of our students are girls. When they were asked whether they felt safe on the College campus they unanimously and vehemently replied that they did. CCTV surveillance, color-coded I-cards, uniforms in some departments help easy identification. The Principal's address at the beginning of the year is useful for laying down code of conduct and rules of discipline. In order to **save rainwater and conserve** it we collect and use it in place of distilled water. It is piped into the well to reinvigorate the water springs of the well.

Green practices such as the following are practiced:

Use of public transport

Reduction in use of plastic

Reduction and Reuse of paper

Tree plantation and planting Holy Basil

Use of thin client, LAN

Institution organizes more than twelve **national festivals** every year. Clippings, pictures, slides about the importance of these days are displayed on the digital notice board throughout the particular day. Institution maintains transparency in all its functions.

Two best practices followed are:

Maintaining Teacher's Diary

Khorepada Village Adoption

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Teacher's performance is evaluated through API-PBAS forms and feedback received from students.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the College			
Name	GOKHALE EDUCATION SOCIETYS N B MEHTA VALWADA SCIENCE COLLEGE BORDI		
Address	Acharya Bhise Vidya Nagar, Stn. Gholvad, Post, Bordi		
City	BORDI		
State	Maharashtra		
Pin	401701		
Website	https://www.nbmbordicollege.com		

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Principal(in- charge)	Pankaj Kalyanji Gogari	02528-254357	8169137240	-	nbmbordioffice@g mail.com
IQAC / CIQA coordinator	Kirtikumar Bhimji Patel	-	9510110128	-	kirtinsk@gmail.co m

Status of the Institution			
Institution Status	Grant-in-aid and Self Financing		

Type of Institution			
By Gender	Co-education		
By Shift	Regular		

Recognized Minority institution		
If it is a recognized minroity institution	No	

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Establishment Details

State	University name	Document
Maharashtra	University of Mumbai	View Document

Details of UGC recognition			
Under Section	Date	View Document	
2f of UGC	15-04-2010	View Document	
12B of UGC	15-04-2010	View Document	

Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)					
Statutory Recognition/Appr oval details Instit ution/Department programme Recognition/Appr oval, Month and year(dd-mm-yyyy) Remarks months					
No contents					

Recognitions			
Is the College recognized by UGC as a College with Potential for Excellence(CPE)?	No		
Is the College recognized for its performance by any other governmental agency?	No		

Location and Area of Campus					
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	
Main campus area	Acharya Bhise Vidya Nagar, Stn. Gholvad, Post, Bordi	Tribal	4.5	2838	

2.2 ACADEMIC INFORMATION

Details of Pro	grammes Offer	red by the Coll	ege (Give Data	for Current A	cademic year)	
Programme Level	Name of Pro gramme/Co urse	Duration in Months	Entry Qualificatio n	Medium of Instruction	Sanctioned Strength	No.of Students Admitted
UG	BCom,Com merce,Accou ntancy and Finance	36	HSC Commerce	English	60	30
UG	BCom,Com merce,	36	HSC Commerce	English	240	200
UG	BSc,Microbi ology,	36	HSC Science	English	50	50
UG	BSc,Biotech nology,	36	HSC Science	English	35	11
UG	BSc,Comput er Science,	36	HSC Science	English	60	33
UG	BSc,Informat ion Technology,	36	HSC Science	English	60	60
UG	BSc,Bsc,	36	HSC Science	English	190	144
PG	MCom,Com merce,Advan ce Accountancy	24	BCom BAF BMS	English	60	47
PG	MSc,Chemist ry,Organic Chemistry	24	BSc in Chemistry	English	30	25
PG	MSc,Physics,	24	BSc in Physics	English	10	6
PG	MSc,Comput er Science,	24	BSc in Computer Science	English	20	0
PG	MSc,Informa tion Technology,	24	BSc in Information Technology	English	30	0
Doctoral (Ph.D)	PhD or DPhil,Botany	36	MSc in Botany	English	10	7

Doctoral (Ph.D)	PhD or DPhil ,Zoology,	36	MSc in Zoology	English	5	0
Doctoral (Ph.D)	PhD or DPhil,Physic s,	36	MSc in Physics	English	8	7

Position Details of Faculty & Staff in the College

	Teaching Faculty											
	Profe	Professor			Assoc	Associate Professor			Assis	stant Pr	ofessor	
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned by the UGC /University State Government	ty			6			17					
Recruited	1	0	0	1	5	1	0	6	5	6	0	11
Yet to Recruit	0				0			6				
Sanctioned by the Management/Soci ety or Other Authorized Bodies	0				0				44			
Recruited	0	0	0	0	0	0	0	0	11	33	0	44
Yet to Recruit	0	0			0			0				

	Non-Teaching Staff								
	Male	Female	Others	Total					
Sanctioned by the UGC /University State Government				18					
Recruited	11	1	0	12					
Yet to Recruit				6					
Sanctioned by the Management/Society or Other Authorized Bodies				18					
Recruited	15	3	0	18					
Yet to Recruit				0					

Technical Staff								
	Male	Female	Others	Total				
Sanctioned by the UGC /University State Government				0				
Recruited	0	0	0	0				
Yet to Recruit				0				
Sanctioned by the Management/Society or Other Authorized Bodies				0				
Recruited	0	0	0	0				
Yet to Recruit				0				

Qualification Details of the Teaching Staff

	Permanent Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	1	0	0	4	1	0	1	4	0	11	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	1	0	0	4	1	0	6	
UG	0	0	0	0	0	0	0	0	0	0	

	Temporary Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	1	0	0	1	
M.Phil.	0	0	0	0	0	0	1	2	0	3	
PG	0	0	0	0	0	0	9	31	0	40	
UG	0	0	0	0	0	0	0	0	0	0	

	Part Time Teachers										
Highest Qualificatio n	Professor		Associate Professor			Assistant Professor					
	Male	Female	Others	Male	Female	Others	Male	Female	Others	Total	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0	
Ph.D.	0	0	0	0	0	0	0	0	0	0	
M.Phil.	0	0	0	0	0	0	0	0	0	0	
PG	0	0	0	0	0	0	0	1	0	1	
UG	0	0	0	0	0	0	0	0	0	0	

Details of Visting/Guest Faculties						
Number of Visiting/Guest Faculty	Male	Female	Others	Total		
engaged with the college?	0	0	0	0		

Provide the Following Details of Students Enrolled in the College During the Current Academic Year

Programme		From the State Where College is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	613	43	0	0	656
	Female	623	44	0	0	667
	Others	0	0	0	0	0
PG	Male	86	7	0	0	93
	Female	91	6	0	0	97
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	11	0	0	0	11
	Female	3	0	0	0	3
	Others	0	0	0	0	0

Provide the Following Details of Students admitted to the College During the last four Academic Years

Category		Year 1	Year 2	Year 3	Year 4
SC	Male	26	25	29	27
	Female	43	35	34	26
	Others	0	0	0	0
ST	Male	134	152	169	186
	Female	63	83	117	122
	Others	0	0	0	0
OBC	Male	114	132	141	159
	Female	149	153	148	175
	Others	0	0	0	0
General	Male	442	488	554	561
	Female	365	376	422	461
	Others	0	0	0	0
Others	Male	0	0	0	0
	Female	0	0	0	0
	Others	0	0	0	0
Total	·	1336	1444	1614	1717

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:

Our institution is affiliated to the University of Mumbai. At present, we follow the syllabuses framed by the Board of Studies, of the University of Mumbai. Our College offers courses in Science and Commerce Subjects. In the Science stream, we have graduate and post graduate courses in Physics, Chemistry, Microbiology, Biotechnology, Botany, Zoology, Information Technology and Computer Science. In the Commerce wing, we offer courses in Accounts and Finance. As part of the preparation for implementing NEP 2020, we are preparing short-term interdisciplinary courses for the two streams such as Certificate Course in Financial Literacy, Computer Literacy, Communication and Soft Skills and Best

	Laboratory Techniques. At present the Botany, Chemistry and Biotechnology departments, share their teaching faculty and conduct interdepartmental activities, which could be a forerunner to interdisciplinary courses. These courses will be introduced in the academic year 2024 -25. We have signed an MoU with the Microbiology Dpt. of Nanded College -NSB College, Nanded for faculty exchange and joint lecture series which will also help in developing intra institutional ties for preparing interdisciplinary courses. Under NEP 2020 as proposed by the University, courses under Open Electives will be offered to the students of other faculty within the College.
2. Academic bank of credits (ABC):	The Mumbai University has initiated the procedure for creation and submission of ABC ids of students. The College has taken this initiative and submitted ABC ids of all the students. As an affirmative action, newly admitted students need to provide ABC id in their admission forms.
3. Skill development:	Our students who participate in various festivals, debates and other initiatives such as Biotech Katta develop good interpersonal skills which are gradually improved over the years. Besides this, our institution is planning to introduce skill-based courses under NEP-2020. The PG students under NEP are having one course of On Job training that gives hands on training of working culture in the Industries. We are planning to develop bridge courses to enhance institution—industry interface and help students to become more employable. The inputs will be given in a blended mode and industrial visits and training will be arranged. An attempt at developing a unified platform to manage learner enrolment and certification will be initiated in 2024-25.
4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):	Our institution is located in the remote tribal belt of the Palghar region. A majority of our students belong to the local tribal community. The local adivasi culture is vibrantly reflected in the Warli painting and Tarpa dance form. The institution plans to initiate programmes, which will revive, reflect and reinforce this local culture. NEP 2020 to be implemented from academic year 2024-25 will include one course of 2 credits on IKS for UG.
5. Focus on Outcome based education (OBE):	In order to focus on the outcomes of learning the

	students and staff are made aware of the desired outcomes of the courses. This is done by displaying the outcomes in the laboratories of respective subjects. The graduate attributes are also displayed so that the stakeholders are constantly aware of the goals they have to achieve. Following this, the evaluation pattern will be changed in accordance with the University directives. At the institution level, periodic tests, seminars, presentations, writing of research articles, practicing research skills, interviews, and oral evaluation will help to keep track of the progress of the students toward attaining the desired goals.
6. Distance education/online education:	In an attempt to develop blended learning, the institution supplements the in-person lectures with videos and recorded lectures relevant to the topics. At present some of the M.Com. lectures, are conducted in an online mode to enable employed students to attend the virtual classes after their duty hours. The Gokhale Education Society conducts the Value Education courses centrally on every important occasion such as 75th Independence Day, Shri Krishna Janmotsav, Ganesh Chaturthi and other culturally significant days. The talks are aired on YouTube and are followed by questions to be answered by the audience.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	Yes, the College has established Electoral Literacy Club.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	One faculty Co-ordinator and two student co- ordinators (one male and one female student) are appointed as member of Electoral Literacy Club.
3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under	Following programs were conducted during the academic year: 1. Voter registration program 2. EVM awareness program 3. National Voters Day celebration by organizing rally in the nearby villages

privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.	
4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.	Guest lecture was arranged on EVM awareness and importance of voting in democracy by Ms. Aparna Somani, Deputy Collector, Palghar District. Students above 18 years participated in the event.
5. Extent of students above 18 years who are yet to be enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.	Nil

Extended Profile

1 Students

1.1

Number of students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1717	1614	1444	1336	1369

File Description	Document
Institutional data in prescribed format	<u>View Document</u>

2 Teachers

2.1

Number of teaching staff / full time teachers during the last five years (Without repeat count):

Response: 89

File Description	Document
Institutional data in prescribed format	View Document

2.2

Number of teaching staff / full time teachers year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
62	59	55	62	62

3 Institution

3.1

Expenditure excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
94.42	64.89	43.64	92.7	116.35

File Description	Docume	nt	
Upload Supporting Document	View Do	<u>ocument</u>	

Self Study Report of GOKHALE EDUCATION SOCIETYS N B MEHTA VALWADA SCIENCE COLLEGE BORDI

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

Response:

The N. B Mehta Science college has adopted the practice of first day first lecture for every academic year. To ensure this, second and third year UG admissions are completed in the month of April and May every year. This ensures availability of extra days for curricular and extra-curricular activities.

Every teacher is asked to write a diary which includes planning of the curriculum and actual execution of curriculum. Diary also includes on regular basis day to day activities along with leave record and library record. Diary is checked by concern head of the department followed by the Principal.

Principal and IQAC prepares academic calendar in consultation with heads of the department. The calender includes Guest lectures, Student's Council activities, celebration of special days and festivals, sports days, blood donation camp, extension activities and examination schedule. This helps teachers to complete syllabus on time. In case one teacher is on leave the class is engaged by another colleague in the department. The record is maintained in teacher's diary.

The work is distributed equally among all colleagues in the department. There are sufficient laboratories, classrooms and seminar hall for effective curriculum delivery. Proper timings of lectures, practicals and tutorials is managed by well set time table prepared by time-table committee.

During COVID-19, the college functioned according to the directions of the University of Mumbai and Government of Maharashtra. All teaching activities were shifted to online mode. Lectures were conducted using various online platforms according to a set time table. Those students who could not attend the lectures due to network issues, recorded lectures were made available by some of the teachers through YouTube, Google classroom, WhatsApp or Telegram.

Record of library books, chemicals, equipments, instruments and stationery are also well maintained in stock register. The Computer Science and IT departments have approximately 80 Computers which are well maintained and annual maintenance is done by external agency. Our office maintains documents properly and students and teachers get the documents whenever they require.

As the college is located in a remote tribal area, it faces regular disruptions in supply of electricity which could result in disturbance to the conduction of science practical. To overcome this, college has installed solar panels with the help of non-teaching staff. The solar power generated is used to run administrative office, Principal's office and Vice-Principal's office, all science laboratories instruments and exam center. This ensures the smooth conduction of all work.

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Theory and practical examination time table is prepared by time table committee and it is displayed on notice board well in advance. Along with this, students are also informed through social media such as WhatsApp and telegram groups.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 0

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

Response: 0

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
0	0	0	0	0

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

1.3 Curriculum Enrichment

1.3.1

Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability in transacting the Curriculum

Response:

The syllabi of various courses include, Professional ethics, Gender, Human values, Environment and Sustainability related issues. Foundation course taught at the first- and second-year Science and Commerce programs include Gender disparity, Human values and Professional ethics. Students get an idea of preamble, parts of constitution, main body and schedule. It also covers value education, equality and rights and duties of Indian citizens. Apart from these human values, Maslow's theory of hierarchy of needs is also taught to the students where basic idea of self-actualized person is given. Students are taught Green Chemistry, Green Computing and Environment related units in various courses. Commerce students have a course at first year on environmental studies. In our college, our non-teaching staff have installed solar energy plant which provide electricity to all the instruments in the laboratory. In addition, it also supplies energy to college office, Principal office, Vice Principal office and examination center of the college. In our IT and CS department thin client technology is used which is beneficial as energy saving measure.

During practical sessions, students are taught to handle various hazardous and non-hazardous chemicals. It also helps them to understand how to prevent pollution.

Students learn discipline and humanity in NSS and NCC activities. During NSS camp they actually learn to help each other and work for the society. Social values are inculcated during these activities which help them to become good and responsible Indian citizen.

To mark the birth anniversary of Donor Late Shri Nagarjibhai Bhagwanjibhai Mehta, College organizes blood donation camp once in a year. This activity not only saves the lives of many people but also inculcates the habit of donation among the students and staff members as a tribute to the esteemed donor.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

1.3.2

Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year)

Response: 21.55

1.3.2.1 Number of students undertaking project work/field work / internships

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Response: 370			
File Description	Document		
Upload supporting document	View Document		
Institutional data in the prescribed format	<u>View Document</u>		

1.4 Feedback System

1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

Response: A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Feedback analysis report submitted to appropriate bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis	<u>View Document</u>
Link of institution's website where comprehensive feedback, its analytics and action taken report are hosted	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 81.84

2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
716	672	536	520	625

2.1.1.2 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
875	805	655	649	766

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 65.59

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

2022-23	2021-22	2020-21	2019-20	2018-19
314	280	223	202	260

2.1.2.2 Number of seats earmarked for reserved category as per GOI/ State Govt rule year wise during the last five years

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2022-23	2021-22	2020-21	2019-20	2018-19
455	419	341	337	398

File Description	Document
Institutional data in the prescribed format	View Document
Copy of communication issued by state govt. or Central Government indicating the reserved categories(SC,ST,OBC,Divyangjan,etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document

2.2 Student Teacher Ratio

2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 27.69

2.3 Teaching-Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

Various departments and NSS unit organize quiz on different topic including current affairs. Department of chemistry in collaboration with RSC organized workshops on various current topics of chemistry such as stereochemistry, spectroscopy, industrial application of chromatography and lab safety. Department of chemistry in collaboration with Indian Association of Radiation Protection (IARP) arranged a workshop for the students on radiation protection and it's importance. Scientists from BARC conducted the workshop. During this workshop students were allowed to handle G. M. counter, protection suit and other gadgets.

Students are sent to various colleges to participate in different events such as inter-college fests and competitions where students are securing podium positions.

The NSS unit take students for Mangrove cleaning. Every year our NCC team visits Khorepada where

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the medical health checkup of students of Ashramshala is done. Dentists from Dahanu visited Khorepada to serve the villages and students along with our NSS team.

Department of Zoology organizes Science Exhibition every year under various titles such as health, nutrition and environment where different issues such as types of pollution and it's impact on human health, change in environment, change in climate like global warming, bioaccumulation were addressed. Other topics were food, nutrition and educational approaches. Here awareness about food and nutritional disorders were addressed. In topic Post pandemic- Covid-19 various changes after pandemic were addressed. Department of Biotechnology arranged a workshop on Molecular Biology, lectures on nutrition & addiction and scientific writing and lecture series on soft skills.

Various events such as Biospark, Micromagic and Comfest where students take lead in organizing the event are conducted.

Department of Commerce organized guest lecture in collaboration with IQAC department on IPR. Students from Commerce, Science, Computer Science and Information Technology were benefitted. A webinar on "Career Options in Commerce" was arranged jointly by N. B. Mehta College of Science and Commerce and Godavari Shamrao Parulekar Arts, Commerce and Science College. Students were benefitted from it.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

2.4 Teacher Profile and Quality

2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

Response: 97.72

2.4.1.1 Number of sanctioned posts year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
69	59	55	62	62

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.4.2

Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

Response: 32.33

2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
21	21	19	19	17

File Description	Document
List of faculties having Ph. D. / D.Sc. / D.Litt./ L.L.D along with particulars of degree awarding university, subject and the year of award per academic year.	View Document
Institution data in the prescribed format	<u>View Document</u>
Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by UGC recognized universities	View Document

2.5 Evaluation Process and Reforms

2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time-bound and efficient

Response:

In University of Mumbai, first year and second year exams are conducted by the College whereas the third year and post graduation exams are conducted by the University. An examination committee is

constituted to conduct the examinations.

The first- and second-year exams are conducted, through semester basis, twice in a year. A meeting of the examination committee is called and time table for exams is prepared. The timetable is displayed on the notice boards atleast 15 days prior to the examination and it is shared with the students through college website and various WhatsApp groups.

The exams are conducted by the Exams Committee and the assessment is done in the stipulated time. Teachers are asked to assess the papers in the College itself. Moderation is done for the subject where more than 100 students appear for the examination as per the guidelines issued by the University. The result is displayed in the stipulated period of time.

The university examinations have two components, the internal and University exams. The internal exams are conducted by various departments of college as per guidelines received from the University. Some teachers conduct multiple internal tests based on the units and the best output is considered.

Topics for seminar are distributed well in advance. The topics are allotted to the students after completion of the syllabus. Concerned teachers set time table for seminar in consultation with the students.

If any student is engaged in some project or training of N.C.C, N.S.S, sports or is on leave on medical grounds, the student has to give intimation to the exam committee. A separate timetable for such students is prepared and additional exams are conducted. This is done with the consent of the Principal. In case of practical exams, students are accommodated in other batches if possible.

If students have any doubt regarding her/his marks in any paper, they are asked to fill form for re-evaluation and the papers are re-evaluated and result of re-evaluation is displayed on the notice board within ten days. This all is done with the help of office staff. Clear time-lines are set for acknowledging, investigating and resolving the grievances.

The Third year and post-graduation examinations are conducted by the University. For grievances related to the University examination, students are asked to report to the college office. The office takes care of it and Principal takes prompt action regarding it by forwarding the grievances to the concerned authorities of the University. The students are also provided with scanned copies of evaluated answer books by the University on student's mail id.

The office staff goes to the University and explains the matter to the concerned University staff and gets the matter resolved at the earliest. In few cases, students are asked to visit the University along with letter of recommendation and explanation of the matter from the college.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

2.6 Student Performance and Learning Outcomes

2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

Response:

The Programme outcomes and Course outcomes are stated and displayed at the entrance of College and each of the department laboratories. Also they are uploaded on the website for perusal of the stake holders.

Programme and course outcomes are outlined in detail in the course syllabi. Programme outcomes are provided to both, the teachers and students at the beginning of the semester or term. Teachers often use platforms like blackboards, Google classroom, google meet, teach mint, YouTube or other online methods to share course materials, including outcomes with the students.

The link for POs, PSOs, and COs uploaded on the College website is as follows -

https://nbmbordicollege.com/Criterias/Criteria2/criteria%202-%202.6.1.pdf

File Description	Document
Provide Link for Additional information	View Document

2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

Response:

The programme Outcomes are continuously evaluated by the college through various assessment methods. This involves assessing students' knowledge, skills and abilities to ensure they have met the specific goals set for each programme or course. Teachers use various assessment method such as exams, quizes, projects, seminars and assignments to measure student's learning outcomes. This helps students to understand their strengths and areas of improvement in relation to the stated outcomes. The attainment of POs, PSOs and COs can be judged in the form of number of students achieving O and A grade in the University examinations and in placement of students. The improvement in the grades of the students demonstrates the fulfillment of course outcomes. Three of our students, Ms. Bharati Mourya (2019) of Chemistry department, Mr. Nilesh Bhardwaj (2023) of Physics department and Ms. Hiral Tailor (2024) of Computer Science and IT department are the recipients of Gold medals at the University of Mumbai for Post Graduate and Graduate levels respectively. This is a proud moment our College is situated in a remote tribal area. Our students have competed with more than 800 institutions in the University and have received the Gold medals. Some of the students are pursuing

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their studies abroad after completing the programmes from the institution. Eighty-one transcripts have been issued by the college during 2018-19 to 2022-23 for this purpose.

Maximum students taking admission in the first year of graduation in our college have scored in the range of 40-55% in class 12 board exams. But, upon graduation majority of them score more than 60% in the University examinations which indicates the fulfillment of POs, PSOs and COs. Further, few students such as Dr. Suraj Warkhande who failed in the first attempt of class 12 and after completing graduation from our college, has completed Ph.D. and is now pursuing Post-doctoral research from Austria and above three students have received Gold medals from the University. All these achievements despite the fact that many of our students belong to the tribal areas of Palghar district and are first generation learners are clear indications of attainment of POs, PSOs and COs.

File Description	Document
Provide Link for Additional information	<u>View Document</u>

2.6.3

Pass percentage of Students during last five years (excluding backlog students)

Response: 83.23

2.6.3.1 Number of final year students who passed the university examination year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
179	448	476	411	293

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
399	509	477	412	374

File Description	Document
Institutional data in the prescribed format	View Document

2.7 Student Satisfaction Survey

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2.7.1

Online student satisfaction survey regarding teaching learning process

Response:

File Description	Document
Upload database of all students on roll as per data template	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1

Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

Response: 4.78

3.1.1.1 Total Grants from Government and non-governmental agencies for research projects / endowments in the institution during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
3.33	0	0	0.85	0.6

File Description	Document	
Upload supporting document	View Document	
Institutional data in the prescribed format	<u>View Document</u>	

3.2 Innovation Ecosystem

3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

For creation and transfer of knowledge, the institute has taken up a number of initiatives. Through these initiatives, knowledge is transferred not only to the students but also disseminated in the society.

The Ph.D. thesis submitted by teachers are available for reading and reference in the library. Books and translated books written by some of our teachers are available in the library for reference.

In Physics department, our own staff members prepare some of the circuits and many innovative sets of apparatus, which are useful for conducting regular experiments and demonstration experiments. One of our students, Mr. Atharva Patil, with the help of staff members conducts regular theory and practical sessions on observation of astronomical events for students and members of the nearby community.

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In Chemistry department, rain water is collected and stored in tanks. This is used throughout the year as distilled water during practical sessions. The department operates water suction pump donated by Eburon Organics Pvt. Ltd. Vapi instead of regular oil suction pump. This saves electricity and avoids pollution due to oil. Nearby institutes follow our example. We have solar distillation plant which provides deionized water throughout the year.

Botany department has created a botanical garden. In the garden number of medicinal plants with their botanical names are planted and labelled.

Zoology and IT departments arrange exhibitions every year for students and local community on different issues like swine flu, COVID-19, different diseases, android networking etc. This helps students and community to gain knowledge and awareness of current issues.

In IT and CS department, thin client technology is used which is beneficial as an energy saving measure. Nearby colleges have borrowed this technology from us.

In College solar energy power generation plant is installed by the non – teaching staff. It provides electricity to all instruments in the laboratories, office, Principal's office, Vice – Principal's office and exam room. Rain water is harvested in college campus by collecting the water in the campus well and regenerating the springs.

Staff members are active in research and have **published 66 research papers** in national and international journals.

The staff members have **9 patents sanctioned** by patent offices from India, Germany, United Kingdom and Australia.

Throughout the year, the college conducts seminars, workshops, hands on training session for students and staff members to get curricular and extra – curricular knowledge.

3.2.2

Number of workshops/seminars/conferences including on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship conducted during the last five years

Response: 15

3.2.2.1 Total number of workshops/seminars/conferences including programs conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
02	08	04	01	0

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File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

3.3 Research Publications and Awards

3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

Response: 0.83

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
16	15	16	18	09

File Description	Document	
Institutional data in the prescribed format	View Document	

3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

Response: 0.2

3.3.2.1 Total number of books and chapters in edited volumes/books published and papers in national/international conference proceedings year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
06	04	04	02	02

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

3.4 Extension Activities

3.4.1

Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

Response:

Gokhale Education Society's N. B. Mehta (Valwada) Science College firmly believes in holistic development-centered quality education. The institution aims at sensitizing students towards social issues and serving the community through its various extension activities by involving students, faculties and various- committees such as NSS, NCC, WDC, Student's Council, etc. This has resulted in creating strong relationships with the local community, schools, neighborhood and non-profit organizations. These experiences have awakened human values in our students.

The college effectively runs NSS and NCC units. Every year NSS organizes a residential seven day's camp in nearby adopted village and several activities are carried out by NSS volunteers. The activities address social issues which include cleanliness, tree plantation, water conservation through construction of Vanrai bund, shram daan, social interaction, eradication of superstitions, drug de-addiction, female foeticide, beti bachao beti padhao, environmental awareness, consumer awareness, digital India, women empowerment, gender equality, personality development, health and hygiene, organic farming, communal harmony, national integrity, AIDS awareness, blood donation camp, awareness about farmer's suicide etc. Bordi astronomy club conducts sky gazing program.

The NCC unit aims at developing qualities of leadership, patriotism, maintaining discipline, character building, spirit of adventure and the idea of self service. The NCC unit of the college organizes various extension activities as tree plantation, road safety awareness, Ekta run for health, Save Fuel Save country programme, Swachhta Abhiyan, National Equality Awareness. NCC unit conducts regular health checkup camps in its adopted village Khorepada in collaboration with nearby doctors and Gholvad PHC. Other than NSS and NCC units, various other departments of the College are also conscious about their responsibilities for shaping students into responsible citizens of the country. Department of Biotechnology organizes Biotech Katta event once a month month for the students to inculcate leadership qualities in them. Biotech and Zoology departments arrange exhibitions every year for other nearby Colleges and school students. All these mentioned activities have positive impact on the students and it developed student community relationship, leadership skill and self-confidence of students. It also helped in cultivating hidden talents of students and created awareness among students.

File Description	Document	
Upload Additional information	View Document	
Provide Link for Additional information	View Document	

3.4.2

Awards and recognitions received for extension activities from government / government recognised bodies

Response:

The College was recognized as Swachhta Action Plan Institution in the year 2020-21 by Mahatma Gandhi National Council for Rural Education, Department of Higher Education, MHRD, Government of India.

This recognition was obtained for successfully forming Swachhta Action Plan Committee and constitution working groups post COVID-19 for sanitation, hygiene, waste management, water management, energy management and greenery along with observation of two environment related days to inculcate faculty, students and community, the practices of Swachhta and Reduction, Reuse and Recycling of Resources.

File Description	Document	
Upload Additional information	<u>View Document</u>	
Provide Link for Additional information	View Document	

3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

Response: 112

3.4.3.1 Number of extension and outreach Programs conducted in collaboration with industry, community, and Non- Government Organizations through NSS/ NCC etc., year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
29	16	21	36	10

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>
Detailed report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.5 Collaboration

3.5.1

Number of functional MoUs/linkages with institutions/industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

Response: 05

File Description	Document
List and Copies of documents indicating the functional MoUs/linkage/collaborations activitywise and year-wise	View Document
Institutional data in the prescribed format	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

Response:

The Institution provides adequate infrastructure and physical facilities for teaching-learning according to the needs of the various courses as and when required. Classrooms-22, Laboratories-19, (Chemistry-4, Physics-2, Botany-1, Zoology-1, Biotechnology-2, Microbiology-2, Computer-6, Electronic-1). Each laboratory is provided with the necessary equipment's and apparatus. In teaching learning process along with chalk and board tools, other ICT tools such as LCD projectors are provided. The charts and models are also used to effectively deliver teaching learning process. The computer laboratories are well-equipped with the necessary software that are updated on regular basis as per the requirement of the courses. Sophisticated equipment such camera attached microscope, simple and in-house circuits are prepared by our staff members for the better understanding of the teaching concepts. The second floor of the building is under construction which will increase the number of classrooms and laboratories.

Principal Office-241 sq.ft. Vice Principal-135 sq.ft. Principal quarter-575 sq.ft.

CLASSES	AREA	LABORATORI	AREA	OTHER	AREA
		ES			
LH1	627 Sq.ft	LAB1 (Chem)	485 Sq.ft.	STAFF ROOM	336 sq.ft
LH2	627 Sq.ft	LAB2 (Chem)	827 Sq.ft.	MATHS DEPT	81 sq.ft
LH3	401 Sq.ft	LAB3 (Chem)	827 Sq.ft.	CONFERENCE	1287 sq.ft
				HALL	
LH4	488 Sq.ft	LAB4 (Chem)	627 Sq.ft.		485 sq.ft
				ROOM-1	
LH5	815 Sq.ft	LAB5 (Physics)	355 Sq.ft.	OFFICE	60 sq.ft
				ROOM-2	
LH6	863 Sq.ft	LAB6 (Physics)	872 Sq.ft.	OFFICE	256 sq.ft
			_	STORE ROOM	
LH7	241 Sq.ft	LAB6 (Biotech)	627 Sq.ft.	EXAM ROOM	245 sq.ft
LH8	630 Sq.ft	LAB7 (Zoology)	813 Sq.ft.	EXAM STORE	205 sq.ft
				ROOM	
LH9	723 Sq.ft	LAB8 (Botany)	820 Sq.ft.	EXAM XEROX	96 sq.ft
				ROOM	

LH10	357 Sq.ft	LAB9 (Micro)	633 Sq.ft.	MAINTENANC E ROOM (COMP)	_
LH11	488 Sq.ft	LAB10(Biotech)	451 Sq.ft.	UPS ROOM	80 sq.ft
LH12	564 Sq.ft	LAB11 (Micro)	249 Sq.ft.	IQAC ROOM	120 sq.ft
LH13	573.4 Sq.ft	LAB12 (Computer)	353 Sq.ft.	LIBRARY	1375 sq.ft
LH14	638 Sq.ft	LAB13 (Computer)	353 Sq.ft.	OPEN SPACE	6000 sq.ft
LH15	394 Sq.ft	LAB14 (Electronics)	353 Sq.ft.	NET CONNECTIVITY ROOM	54 sq.ft
LH16	190 Sq.ft	LAB15 (Computer)	353 Sq.ft.	N.S.S ROOM	201 sq.ft
LH17	588 Sq.ft	LAB16 (Computer)	401 Sq.ft.	N.C.C.ROOM	446 sq.ft
LH18	446 Sq.ft	LAB17 (Computer)	401 Sq.ft.	SPORTS ROOM	220 sq.ft
LH19	453 Sq.ft	LAB18 (Computer)	80 Sq.ft.	GIRLS ROOM	272 sq.ft
LH20	457 Sq.ft	Store Room (Comp)	180 Sq.ft.	STAGE	1062 sq.ft
LH21	456 Sq.ft	Store Room (Comp)	160 Sq.ft.	GROUND	3 acre
LH22	502 Sq.ft	Store Room 1 (Chem)	297 Sq.ft.	Commerce Staff room	201 sq.ft
Boys room	225 Sq.ft.	Store Room 2 (Chem)	144 Sq.ft.		

File Description	Document
Provide Link for Additional information	View Document

4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

Response: 21.61

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
18.92	7.49	7.73	24.2	30.7

File Description	Document
Institutional data in the prescribed format	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

Name of ILMS software	Nature of automation (fully or partially)		Year of Automation
		Version	
SOUL 3.0 Library Management Software	Partially automated	MSSQL and MySQL	2015

College library is partially automated since 2015 with SOUL 2.0. The software was upgraded to SOUL 3.0 Library Management Software in the year 2022-23. The Library is partially automated and version of library management software is MSSQL and MySQL and year library automation in 2015.

College library is member of NLIST (National Library and Information Services Infrastructure for Scholarly Content) through NLIST students and staff members can access e-journals, e-books, databases and e-ShodhShindhu resources

Annual expenditure of purchase of books/e-books

Year	2018-19	2019-20	2020-21	2021-22	2022-23	
INR in Rupees	4,83,333	2,60,398	79,676	1,28,350	3,70,308	

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

Response:

In computer labs, Office, Exam room, Library IT facilities including LAN and Wi-Fi are updated annually with augmentation as per the requirements. Firewall and Social network sites and e-commerce web pages are restricted for browsing for students. PCs are protected with latest versions of antivirus single firewall system installed in and updated regularly. Internet sharing PCs are formatted at the end of each term. The maintenance of all IT related equipments, intercom etc. is outsourced.

Necessary softwares are installed every semester in all laboratories of IT and Computer science department as per the syllabus given by the university. 20 new computers were purchased during the academic year 2020-21 and 30 old computers were donated to the junior College.

The college has subscribed for a total of 100MBPS internet fibre connection which is distributed among the main building with 50MBPS connection and 50 MBPS connection for Computer Science and Information Technology department building.

LAN facility is available in the college campus including computer department, laboratories (Physics, Botany, Chemistry, Library, Zoology, Maths, Commerce, Office and Exam). The thin client facility is available in Library, IT Laboratories, Office, Conference Hall and Wifi facility is available in Computer Labs and Electronic Lab. Thin client is available in laboratories, Computers are available in the Library, 1 in Microbiology, 1 in Botany, 5 in Office.

Mumbai University IT/CS departments promotes open source software. Every lab installation formatting (open source software installation) done at the beginning of every term (Six months) that is in June for 1st term and in November for 1st term.

File Description	Document
Provide Link for Additional information	<u>View Document</u>

4.3.2

Student – Computer ratio (Data for the latest completed academic year)

Response: 18.27

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4.3.2.1 Number of computers available for students usage during the latest completed academic year:

Response: 94

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

Response: 78.41

4.4.1.1 Expenditure incurred on maintenance of infrastructure (physical facilities and academic support facilities) excluding salary component year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
75.52	57.41	35.93	68.52	85.65

File Description	Document	
Institutional data in the prescribed format	View Document	

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 31.74

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
674	495	412	332	461

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: B. 3 of the above

File Description	Document
Report with photographs on Programmes /activities conducted to enhance soft skills, Language and communication skills, and Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)	View Document
Institutional data in the prescribed format	View Document

5.1.3

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Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 3.02

5.1.3.1 Number of students benefitted by guidance for competitive examinations and career counselling offered by the institution year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
24	126	10	22	44

File Description	Document
Institutional data in the prescribed format	<u>View Document</u>

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1. Implementation of guidelines of statutory/regulatory bodies
- 2. Organisation wide awareness and undertakings on policies with zero tolerance
- 3. Mechanisms for submission of online/offline students' grievances
- 4. Timely redressal of the grievances through appropriate committees

Response: A. All of the above

File Description	Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 2.43

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
10	2	9	22	14

5.2.1.2 Number of outgoing students year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
545	506	474	424	400

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order(the above list should be available on institutional website)	View Document
List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education.(the above list should be available on institutional website)	View Document
Institutional data in the prescribed format	View Document

5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

Response: 1.79

5.2.2.1 Number of students qualifying in state/ national/ international level examinations year wise during last five years (eg: IIT/JAM/NET/SLET/GATE/GMAT/GPAT/CLAT/CAT/ GRE/TOEFL/

IELTS/Civil Services/State government examinations etc.)

2022-23	2021-22	2020-21	2019-20	2018-19
15	24	01	0	01

File Description	Document
Institutional data in the prescribed format	View Document

5.3 Student Participation and Activities

5.3.1

Number of awards/medals for outstanding performance in sports/ cultural activities at University / state/ national / international level (award for a team event should be counted as one) during the last five years

Response: 27

5.3.1.1 Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one) year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
13	2	3	9	0

File Description	Document	
Institutional data in the prescribed format	<u>View Document</u>	

5.3.2

Average number of sports and cultural programs in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 14.2

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
28	2	3	21	17

File Description	Document
Institutional data in the prescribed format	View Document

5.4 Alumni Engagement

5.4.1

There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

The institution does not have a registered alumni association. However, at individual departmental level alumni meets and events are organized on regular basis.

The department of Microbiology organizes alumni meet "Micro Magic" on a regular basis. The event creates an opportunity for alumni to engage with the current students, department faculty members and also among themselves. Through these meets, department and the college present their future plans for development of the college and request contributions from the alumni. Our alumni contribute immensely in recruitment of our passing out batches by giving information of the vacancies created in their companies. During COVID, due to restrictions, alumni meet was conducted through online mode on 15th Aug. 2020. The program was inaugurated by lighting the lamp at the hands of Chief guest Principal Dr. Mrs. Anjali Kulkarni. In-charge of the Department, Prof. Vikas Joshi gave a brief introduction about Micro Magic 2020 to the audience. He said that the field of Microbiology has a vast scope as microbes are present everywhere. But there are difficulties in pursuing research because of lack of grants from funding agencies. Further he encouraged students to pursue career in the field of Microbiology, keeping in mind the difficulties that have to be overcome. The alumni were also asked to explain about the employment opportunities. Some alumni are currently employed in various companies. Some of them are pursuing further studies in reputed colleges of Mumbai University. Some memories were shared by alumni and continued with games and picture presentation. There was fruitful interaction between alumni and current students. In all 100 alumni participated in Micro Magic 2020. Vote of thanks was given by Miss Zeenat Shaikh.

Due to COVID restrictions by the government of Maharashtra, the alumni meets could not be arranged on campus during 2020-21 and 2021-22. The activities were also restricted due to COVID restrictions.

Alumni meet of Chemistry department for batch of 1997-98 was held on 13th Feb 2022 and on 29th Jan 2023. Total 27 alumni were present for the meeting. Alumni were given a brief introduction about the progress of the department since 1997-98. A tour of the department by Head gave an idea of new instruments, solar distillation plant for de-ionized water, water suction pump established in the department with the generous donations of the company. The alumni are in regular touch with the college through social media such as WhatsApp groups. The job opportunities are shared with and by the alumni in the groups for the benefit of current and past batches.

File Description	Document
Upload Additional information	View Document

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

Vision Statement:

The college continues to offer quality service in the field of education and upliftment of the tribal and lesser-privileged adivasis of the Palghar region. In the next ten years, we aspire to add vocational courses according to the demand of the times. We look forward to increasing ICT- enabled teaching and learning. Some Science departments will be developed into Research Centres. We shall also venture into developing contacts with various industries to help our students get hands- on training in commercial projects, facilitate job seeking and establish linkages. The Commerce faculty will be developed and will offer management and other courses with a view to enhance employability courses.

Mission Statement:

The Gokhale Education Society is committed to the cause of students' empowerment through access to education at all levels and particularly higher education. We aspire to develop world class citizenship through relevant courses under formal and non-formal streams. The Society is further committed to raise the dignity of the teaching profession and to establish a culture of caring and excellence by providing a wide range of professional and vocational courses for the poor and downtrodden as also for the adivasis and the less privileged . We also strive to meet the changing socio economic needs with human values, social responsibility and to achieve excellence with total quality in all activities of lifelong learning.

The Principal initiates discussions and consultation with members of the staff and the Heads of the Departments through various committees on proposals concerning the Institution's future infrastructure and academic development and ensures that such proposals are presented to the management in the meeting of College development committee.

This helps to achieve the vision and according to the mission of the institution top management the Principal distributes work among the staff members through various committees.

The Heads of the Departments and other faculty members heading various committees co-ordinate to execute the plans and policies. The faculty members are actively involved in implementing quality improvement plans and programs.

The College is preparing itself for implementation of NEP for under graduate courses from academic

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year 2024-25 in accordance with the guidelines recieved from the University.

File Description		Document	
	Provide Link for Additional information	View Document	

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Res	non	se:
1100	$\mathbf{v}_{\mathbf{v}_{\mathbf{I}\mathbf{I}}}$	

- As per constitution of G.E. Society, Head of all the Institutions are the members of the Senate.
- Life members from among the staff are nominated by G. E. Society. The Principal is usually a life member, some faculty members and some retired members are nominated for life membership. Some of them are members of the Governing Body.
- Members of Senate and Life members meet twice in a year to discuss proposal concerning the Institution's future development plans. As per the observations, remarks, guidelines suggested; college works accordingly.
- College Development Committee (CDC) is constituted in College as per the norms. CDC involves members from Education, Industries, Research, Social, IQAC co-ordinator, Principal, Chairman of G.E. Society. One HOD nominated by Principal, three teachers are elected (one lady) from full time staff, one non-teaching staff.
- CDC frequently communicates with HR Director regarding planning and its implementation.
- Secretary /DG, President and Vice President of the institution monitors all the processes through Governing Body meetings and Life Members meetings to give directives for their proper implementation.
- Link to Organogram of the Institution webpage: https://nbmbordicollege.com/Criterias/Criteria6/.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

6.2.2

Institution implements e-governance in its operations

- 1. Administration
- 2. Finance and Accounts
- 3. Student Admission and Support
- 4. Examination

Response: B. 3 of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional expenditure statements for the budget heads of e-governance implementation ERP Document	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

Teachers: Performance Appraisal System for teaching is based on Academic Performance Indicators (API) stipulated by UGC and University of Mumbai. Every teacher has to fill up API forms at the end of each academic year and evaluation is done as per the norms by Head of the department, IQAC and Principal. The same proposals are subjected for promotions under Career advancement schemes (CAS) whenever teachers fulfill the minimum requisite API. This is a performance based appraisal system (PBAS) adopted by institution.

Non-Teaching: Support staffs are encouraged to pursue further education and develop themselves by improving educational status. College felicitates such staff in annual prize distribution function to encourage them and other staff. College sends support staff for workshops related to work assigned to them. Appraisal of these staff done on the basis of their performances in their regular assigned work. These appraisals are considered seriously while sending their proposals for the promotions.

The institution has effective welfare measures for teaching and non-teaching staff

Teachers:

- 1.PF / DCPS/ NPS schemes for Grant in aid staff as per the provisions
- 2. EPF scheme is made available for non-grant staff by the institution.
- 3. Facility of medical re-imbursements for Grant in aid staff is given by the government. Applications are sent by the college to competent authority.

Non-Teaching staff:

- 1. College gives advance payments to the teaching and non-teaching staff during emergency.
- 2. College provides uniform and washing allowance to the non-teaching staff.
- 3. College offers Diwali Bonus to non-teaching staff.

Students:

- 1. College gives permission to pay fees in installments.
- 2. College has a policy to give concession in the fees to the needy students.
- 3. In some of the cases college has partially waived the fees of students.
- 4. College tries to arrange donors for needy students.

Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

Year	2018-19	2019-20	2020-21	2021-22	2022-23
Number	31	22	1	15	12

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 27

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19	
12	15	1	22	31	

File Description	Document
Institutional data in the prescribed format	View Document

6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

Response: 16.67

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), *Management Development Programmes (MDPs)* professional development /administrative training programs during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
6	9	14	16	5

6.3.3.2 Number of non-teaching staff year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
0	0	0	0	0

File Description	Document
Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise.	View Document
Institutional data in the prescribed format	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

Response:

College has effective and functionalized purchase committee. Quotations are requested from the various vendors. Inter-departmental sharing of chemicals, instruments and apparatus is encouraged.

The architecture of the College building is East-West facing to facilitate the maximum sunlight and ventilation in the classrooms and laboratories.

The Science laboratories are sharing gas facilities through common gas pipeline that saves pipeline cost and gas.

Chemistry department uses water suction pump for three laboratories simultaneously and reduces the wastage of oil from oil vacuum pumps.

Time table of the College is prepared to utilize maximum infrastructure and resources. One classroom on ground floor is reserved for differently abled student whenever the need arises. All the laboratories are situated on the ground floor to facilitate differently abled students.

Solar electricity power project are installed to fulfill growing electricity demand of College office and departments. Capacity of solar plant is 3000VA. It generates 125 units and College plans to increase more solar units for all the laboratories. In the year 2022-23 college purchased new power Generator of 60kva.

Rather than completely discarding old computers, some good quality parts were reused in the computers to minimize e-waste.

Total Grants received from non-government bodies, individuals, Philanthropers year wise during the last

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five years (INR in Lakhs)

Year	2018-19	2019-20	2020-21	2021-22	2022-23	
INR in Lakhs	0.53364	0.51377	0.70336	0.56501	0.88000	

Institution follows the rules and regulations specified by regulatory bodies such as Regional Joint Director of Higher Education and Government of Maharashtra.

Institution conducts internal and external financial audits regularly.

Internal audit is conducted by G.E. Society's Chartered Accountant annually.

Joint Director of Higher Education, Accounts Officer and Auditor General conducts external audit and assessment periodically.

File Description	Document
Upload Additional information	View Document

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

Response:

The institution reviews its teaching learning process through discussions with all the stakeholders. IQAC prepares strategic plans on the basis of feedbacks received from students and teachers.

The institution taken major incremental improvements after third accreditation cycle from their remarks and observations and the initiatives implemented as follows.

- Number of ICT equipped rooms are 11.
- Granted extra division by University from 2021-22 for F.Y.B.Sc to fulfill need of the students. People in nearby area are requesting for extra division to seek admission for their children. College has done efforts to get sanctioned extra division for the students.
- College applied and received sanction for new course in Commerce faculty i.e. BAF (Bachelor in Accounts and Finance) from July 2022.
- Three research centers are recognized by University of Mumbai in the subject Physics, Botany and Zoology. College has applied for recognition in the subject Chemistry.
- 8 teachers of college are PhD guides recognized by Mumbai University.
- Three Students have completed Ph.D., one student has submitted Ph.D. thesis and 11 students are pursuing Ph.D. degree in different subjects.
- College organized two International conferences on Life Sciences and Chemical Sciences. Teachers and Students of College also encouraged to participate in the same. Registration Fee of College Teachers was waived by college.
- Department of Chemistry organizes workshops for the teachers and UG/PG students every year in the collaboration with Royal Society of Chemistry West India Section.
- College also organized webinars, workshops, seminars for the benefit of students and teachers.

Two significant initiatives takn up by the IQAC are-

Teaching and Learning during COVID-19 Pandemic

During COVID-19, teaching shifted to online mode. Teachers were encouraged to participate in various training programs to get acquainted with online teaching. Some of our faculty members trained teachers of nearby schools.

All lectures were delivered through online mode as per the guidelines received from the University and the Government of Maharashtra.

Online lectures were delivered through the various application Google meet, Zoom meeting, Teachmint, YouTube despite the geographical location and network restrictions. Google classrooms were formed for each class to upload information about academic activities. Whatsapp and Telegram groups were formed to share information. Recorded lectures were uploaded on YouTube due to limitations of internet network. Doubts and difficulties were solved through online meetings conducted on Google meet, Zoom meeting etc. Assignments and Unit tests were frequently conducted online.

Research Publications

IQAC organizes workshops and conferences to encourage teachers to take research work and to familiarize the students with modern techniques and industrial requirements.

IQAC with Chemistry department is organizing workshops in collaboration with RSC and IARP on

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various topics and hands on training workshop.

Since 2018-19, 4 faculty members have completed PhD degree and 8 more are enrolled for PhD program including one non-teaching staff pursuing PhD degree in Chemistry.

Teachers has published 66 research papers, 18 books and are also proud recipients of 9 National and International patents.

6.5.2

Quality assurance initiatives of the institution include:

- 1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

Response: B. Any 3 of the above

File Description	Document
Quality audit reports/certificate as applicable and valid for the assessment period.	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Link to Minute of IQAC meetings, hosted on HEI website	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

- Gender equity means fairness, righteousness in distribution of benefits and responsibilities equally in both the genders. During the last five years, we at NBM conduct regular gender equity promotion programs to provide equal opportunities to our students.
- The gender equity promotion is through curricular and co-curricular activities. In curricular activities students are made aware about the gender equity through lectures in subject like Foundation Course, where topics like Women's Rights, Human Rights, Child Rights and Gender justice are taught. In co-curricular activities girls and boys together participate in NCC and NSS and become aware about their responsibilities and duties.
- We have enrollment of around 50% girl students and at present we have nearly 57% of women staff.
- For the safety and security of students and staff, we provide safe, secure and friendly working atmosphere at NBM irrespective of gender, caste, colour, language, religion, social origin, property or any other status
- Surveillance network with 24 x 7 monitoring with CCTV cameras which are mounted inside the College, particularly for safety of all students.
- We strictly implement Anti-Ragging and Anti-harassment guidelines in the campus.
- Principal delivers a lecture at the beginning of academic year as counseling cum orientation session for students.
- Common room is allocated for girl students.
- Every year our college conducts annual sports and cultural events. During these events both girls and boys participate together which promotes gender sensitization and equality among students.
- During last five years, our college had organized various activities towards gender sensitization through Women Development Cell. The details are as follows:
- On 8th March 2019 we celebrated International Women's Day with a talk on "Women Aarogya" by Dr. Yogini Karmarkar. 63 girl students participated and were benefitted.
- A Self-defense program was conducted on 3rd October 2019 in which 60 girl students participated.
- A guest lecture was arranged on 8th March 2021, on the topic "Women's Right Knowledge is the Key" delivered by Dr. Mrs. Medha Saykhedkar through which girl students were motivated about acquiring knowledge.
- A One Day Webinar on "PCOD" on 7th Oct. 2021. Dr. Niyati C Chitaliya, Mumbai was the resource person. Total of 96 girl students along with staff members participated.
- On 24th January 2022, a Quiz on National Girl Child Day was conducted in which 272 students

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- participated.
- 08th March 2022, a 'Skit on Women Empowerment' was presented in which 22 students participated. Messages like "Stop Acid Attack, Save Girl Child, and Say no to Dowry" were promoted through this skit.
- 08th March 2022, a Talk on 'Role of Women Teachers in Pandemic' was arranged in which 161 students were benefited. A tribute was paid to Late Shrim. Lata Mangeshkar and Late Shrim. Sidhutai Sapkal.
- 08th March 2023, a guest lecture was organized on Women Empowerment. Smt. Madhumitha, IFS, Deputy Forest Officer, Dahanu was a guest speaker and about 150 girl students were benefitted.

File Description	Document
Upload Additional information	<u>View Document</u>
Provide Link for Additional information	View Document

7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- 3. Water conservation
- 4. Green campus initiatives
- 5. Disabled-friendly, barrier free environment

Response: A. 4 or All of the above

File Description	Document
Geo-tagged photographs/videos of the facilities.	<u>View Document</u>
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

Response: B. Any 3 of the above

File Description	Document
Report on Environmental Promotional activities conducted beyond the campus with geo tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency	View Document
Green audit/environmental audit report from recognized bodies	View Document
Certificates of the awards received from recognized agency (if any).	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

Response:

- Every year in the month of December our college organizes **Annual Social Gathering** where group dance, drama, singing and skits on various social issues are presented by students. The anchoring and other stage arrangements are made by students themselves. **These activities make students social, communicative and free from stage fright.**
- We conduct **Sports activities** which include outdoor games like cricket, running, disc throw, javelin throw, indoor games like carom, chess Students actively participate in these games which inculcates sportsmanship among students.
- NSS and NCC camps are organized every year where students stay together and work together for a social cause. This promotes social responsibilities, unity in diversity and self-reliance among students.
- Our College library is well equipped with books in various subjects, issues and languages like Marathi, Hindi, Gujarati and English which inculcate knowledge about socio-economic and cultural variation around the world. In the syllabus of foundation course, students are taught about gender equality, socio-cultural harmony and the importance of society free from regional, cast, race and religious barriers. Our college celebrates Marathi Divas by arranging book fair in Library.
- Over the years, we depute our students as volunteers to actively participate in various programs conducted by nearby areas, colleges and university such as Chikoo Festival, Dahanu Festival, Avhaan State Level Training Camp on Disaster Management, Leadership Trainings and Smriti Gandh program by University of Mumbai.

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- During last five years to develop patriotism and tolerance among the students our college celebrated the birth anniversaries of National heroes such as Shivaji Swaraj Day, Gandhi Jayanti, and Ambedkar Jayanti alongwith National Unity Day, Republic Day, Independence Day, Constitution Day, Voter's awareness, and self-defense training for females.
- On occasion of 75 years of Independence, our college also celebrated Azadi Ka Amrut Mohotsav through various activities as suggested by government of India such as: Har Ghar Tiranga, a meet with Indian Freedom Fighter, Rangoli, Singing, Drama and Poetry competitions, and a short documentary on India's Freedom Struggle was shown and finally flag hoisting & Rally was taken in Bordi village.
- The most important program we conduct every year is the blood donation camp where students and staff actively participate as a social responsibility.
- College organized various co-curricular activities like Tree plantation, campus, railway station and beach cleaning. We conduct quizzes, poster and slogan making competitions for the same through which students became aware of environment and surrounding.
- College Annual Magazine "Amaranth" selects theme of the magazine based on current topics that sensitizes students about values, rights and responsibilities.
- We celebrate International Women's Day, National Girl Child Day, International Yoga Day, health checkup camps and self-defense training for females for special vigilance and health awareness among girl students.
- We make students to participate in various Quizzes, Poster Competitions and webinars on topics like plastic ban, health awareness and UPSC guidance.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented by the Institution as per NAAC format provided in the Manual

Response:

1. Maintaining Teacher's Diary:

Objectives:

- 1) To enhance Teachers' accountability towards institution and self.
- 2) To develop a tool for documentation at the micro level for individual teachers

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- 3) To help record all such activities which teachers perform as duties as well as beyond their stipulated workload.
- 4) The diary provides the Head of the Department as well as the Principal a detail picture of the teacher's classroom activity.
- 5) The teacher is expected to mention teaching plan, curricular and co-curricular activities throughout the years.
- 6) Diary was revised, during pandemic to maintain teachers daily work record, a new column (link to online classroom) was added and few pages were also added for mentor-mentee interaction.

The Context: The College maintains various records such as daily attendance of students, musters for teachers, individual timetables at the departmental level as well as the College level. The teacher is expected to mention teaching plan, curricular and co-curricular activities throughout the years. Also suggestions, complaints, and grievances necessary to be brought to the notice of the authorities or can be noted in the remarks column. Since these are separate records, there was no mechanism to get all the details of an individual teacher's contribution at one place.

The Practice: At the beginning of every year, the individual teacher gets a diary from the college office. The diary is divided into five parts:

- 1) Annual/Term wise teaching plan and the individual timetable
- 2) Actual practical, lectures conducted including date, time, class, link to online classroom, number of students attending the class, portion taught and extra-curricular activities and signature.
- 3) Separate pages for mentor-mentee are provided.
- 4) Library record pages are provided to maintain the complete record of books borrowed.
- 5) Pages are provided to maintain individuals leave record like type of leave.

The Principal issues a notice after every term end at stipulated period for submission of diary duly completed and signed by the Head/In charge of the department. The Principal checks and puts remarks if necessary.

Evidence of Success:

The Diary helps Staff members to maintain a true record of the actual work done such as curricular and co-curricular, meetings attended. It helps in communicating problems or other significant issues to the Principal. It helps to maintain a record of student counselling, library visits, inter departmental activities.

HoD /IC can keep track of the work done by the departmental colleagues; it helps to monitor planning of work, teaching assignments and syllabus completion.

Diary helps Principal to maintain a free and fair communication both ways between the staff, head, and take an overview of the work accomplished.

Problems Encountered and Resources Required:

The most important problem was trying to convince the teachers of the relevance and significance of maintaining a diary.

The resources required for this Best Practice viz. maintaining a Teacher's Diary is a printed diary.

Best Practices:(2)

2. Khorepada Health Checkup Camp

Objectives

- 1) To develop in students, especially NCC cadets the sense of social responsibility and strong ties with the local community
- 2) To act as facilitators of medical care and develop health related awareness among the tribal villagers
- 3) To help in developing connections between the local health services and villagers.
- 4) Enabling other people and institutions who are interested in helping the community, participate in this activity
- 5) Helping primary school teachers deal with issues related to health and hygiene of their students.

The Context: The College is situated in the remote, tribal belt of the Palghar district. For tribal student's education is the only means of improving their quality of life. It is necessary to impress upon the local community the importance of education and health. The health and hygiene concerns had to be addressed. Therefore, we decided to organize annual health checkup camp in this area. During pandemic it was not possible to organize this health check-up camp due to Government guidelines.

The Practice:

In 2011-12, our College choose Khorepada village situated about 11 km from our College. The population was 257 people. The student strength of local school was 114 students in 2018-19. It was difficult to access this region in monsoon. After consulting the primary school teachers, panchayat members and government health authorities, we decided to initiate a free health checkup camp for benefit of the villagers. A team of doctors from PHC Gholvad participates in the camp. Village market day is chosen so that villagers do not have to sacrifice their daily wages for attending camp. A small canopy was erected at venue which attracts villagers. Team of doctors conducts a general health checkup. In case

of complications, they referred to district hospitals for free treatment. Our NCC cadets assist them in checking the patients, maintaining discipline, helping patients explain their problems and explaining medicines prescribed by the doctors.

The College distributed biscuit packets, fruits etc. to the primary school students. This practice, which began in 2011-12, has continued for the past 13 years. However, in March 2020 due to the onset of the pandemic COVID 19, we were not able to arrange the camp.

Evidence of Success:

NCC cadets and Khorepada people are eager to participate in this Camp. It provides them the satisfaction of helping the local community to solve their health-related problems. In 2018-19 we had taken medical health check-up camp on 20/04/2019. In March 2020, our NCC cadets undertook to contribute to **raising** awareness among the public regarding the pandemic. They completed training for COVID-19.

Problems encountered and resources required:

The major problem was that even if we would like to, we are not able to conduct the health camp more frequently. The availability of the team of doctors and other medical staff was a problem because they were very busy in their hospitals. The activity required a lot of planning, liaison among medical team, village authorities. In spite of difficulties our college was successful in arranging and managing the health check-up camp during these years.

File Description	Document
Best practices as hosted on the Institutional website	View Document

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

- Our college was established in 1994 in the remote Adivasi belt of the Thane region now changed to Palghar district. The vision and mission support the academic and socio-economic development of the tribal students situated in this remote of Palghar district. The tribal students who belong to the economically and socially marginable Adivasi communities would have had no access to higher education if our College had not been established. The College has been especially instrumental in helping the girls of this region to pursue higher studies.
- Our teachers help the students to improve their personality, especially SC and ST students so that

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- they are prepared to face global competitions.
- College is taking efforts in all its aspects, such as increased number of programs and courses, well developed infrastructures, faculty guidance, library facilities, sports and extra-curricular activities which plays a very significant role in the improvement of student's capabilities.
- At FY level many of the students hesitate even to talk in local language to the faculty members regarding their difficulties. However, we identify such students and help them to solve their problems at the departmental level or at the individual level.
- Our college is providing benefits to students such as book-bank schemes, government and private
 hostel facilities outside the campus. We provide scholarships and concessions in fees to needy
 students.
- During last 5 years, our college has started UG course in Bachelor of Accountancy and Finance and second divisions in science and commerce courses from the University of Mumbai.
- Our college is running post-graduation courses i.e. MSc in Physics, Chemistry, IT, CS and Commerce successfully which is the only facility in nearby area. We have gold medalist student from dept. of Chemistry and Physics. We are happy to see them complete their graduation and post-graduation and secure placements.
- With our constant encouragement and support, during last five years many of our students qualified challenging exams like NET, SET, CA and IIT JAM exams.
- Our college contributes in a large measure to the empowerment of girls through imparting higher education and enhancing their employability skills. Our students Sakshi Save and Bharti Mourya awarded INSPIRE (Innovative in science Pursuit for Inspired Research) scholarship.
- According to our revised vision statement, we have made a beginning towards fulfilling our vision of developing some of the Science departments into Research Centres. In an effort to encourage research, our Physics, Botany and Zoology laboratories are recognized PhD research centers by the University of Mumbai. The department of chemistry has applied for Research Centre in PhD. We have 8 PhD guides among us and 14 registered students. 1 student has submitted thesis and 3 students have been awarded PhD degree.
- We have well placed alumni in the nearby industries as well as some of them are pursuing research under fellowship. Our past tribal students are pursuing further studies or gainfully employed at various important positions and capacities is evidence of their enrichment through education. Our students gradually develop into confident and responsible citizens of India. One of our students is placed as 'Food and Drug Administrator Commissioner'. Our 04 students are selected as "Agniveer" and one student is posted as Cell Tax Officer which are proud moments for us.
- We have 66 publications with 09 patents in last five years issued by IPO, Australian patent, UK and German patent offices. Our three research students have completed their PhD. We have 11 staff members from various departments who are pursuing their PhD degree out of which one is non-teaching staff. We are constantly supporting our non-teaching staff for their academic up gradation. Four staff members have completed their PhD from various Universities.
- A special program called as "Biotech Katta" is arranged in every month by Biotechnology department. It is solely run by students where they express themselves creatively through various mediums like poetry, storytelling, music, and painting. It fosters a culture of free expression allowing students to share their thoughts and opinions without fear of judgment. Katta helps the students for public speaking and boost their confidence for better communication. It provides a platform to showcase the inner skills of students and exchange meaningful discussions on various topics.

File Description	Document
Appropriate web in the Institutional website	<u>View Document</u>

5. CONCLUSION

Additional Information:

Our College is situated in the remote Adivasi belt of the Palghar district. We face numerous challenges due to our location. The electricity supply is erratic and internet connectivity is quite slow. The means of transport like railways and buses is limited. The location of the College is an important deciding factor when it comes to preparing the timetable, deciding the availability of staff and scope for expanding College programs. Yet it is important to continue our efforts of imparting quality education to the local students, especially girls, because they do not have any other alternative except our College. We would like to highlight the following three points.

- 1. The College is serving as a Cluster Head in the exam related issues for the University.
- 2. Three Students have scored highest marks in respective University Examinations and were awarded GOLD Medals.
- 3. During COVID-19, many trains were cancelled but with the initiative of IQAC and mediation of ZRUCC, the Western Railways gave special stoppage for train number 22929 from 23rd March to 30th April 2022 at Gholwad Station. After that regular train with train number 19417 was initiated from June 2022. During the cancellation of train services, students had to pay approximately Rs. 200 per day for commuting which is considerably large amount in view of the financial status of the tribal families. This gave huge relief to the students as commute charges reduced considerably. Also, with the help of ZRUCC, Western Railways is now giving free passes to girl students upto graduation. Previously it was 50% concession provided to them same as for the boys.

Concluding Remarks:

Our students who come from weak economic background and socially

marginalized sections of society experience the truth of this statement at N.B. Mehta. Education is the only key to their economic progress and social upliftment. Students can choose from a range of subjects, which help them gain employment. There are numerous industries around Bordi. They require able workforce .They look upon our College as a source of getting it.

Our initially shy students soon develop confidence and self-awareness. They are well- behaved, sufficiently focused and we have almost no problems related to students' discipline. They are talented but owing to the remoteness of the place, they are unable to participate in state level or national level competitions. We have not been able to institute the Alumni Association formally because past-students are preoccupied earning a living. We are sincerely engaged in upgrading ourselves quality wise that is reflected in the subsequent NAAC reports.

The rich heritage of the College, infrastructure, range of programs and subjects taught, amenities provided, scholarships, pay by installment concession, excellent results, a peaceful environment of academics and discipline, highly qualified and caring teaching staff, numerous activities for self-development are the major reasons for students' preference to our College.

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