



## Yearly Status Report - 2019-2020

### Part A

#### Data of the Institution

1. Name of the Institution	B N BANDODKAR COLLEGE OF SCIENCE, THANE
Name of the head of the Institution	Dr. MOSES J KOLET
Designation	Principal (in-charge)
Does the Institution function from own campus	Yes
Phone no/Alternate Phone no.	02225336507
Mobile no.	9004690471
Registered Email	prinbnb@vpmthane.org
Alternate Email	iqacbnb@vpmthane.org
Address	Jnandweepa Chendani Bunder Road
City/Town	Thane
State/UT	Maharashtra
Pincode	400601

#### 2. Institutional Status

Affiliated / Constituent	<b>Affiliated</b>
Type of Institution	<b>Co-education</b>
Location	<b>Rural</b>
Financial Status	<b>state</b>
Name of the IQAC co-ordinator/Director	<b>Dr Anita S Goswami Giri</b>
Phone no/Alternate Phone no.	<b>919967899417</b>
Mobile no.	<b>8850044240</b>
Registered Email	<b>iqacbnb@vpmthane.org</b>
Alternate Email	<b>asgoswamigiri@vpmthane.org</b>

### 3. Website Address

Web-link of the AQAR: (Previous Academic Year)	<a href="https://www.vpmthane.org/BNB/AQAR.aspx">https://www.vpmthane.org/BNB/AQAR.aspx</a>
<b>4. Whether Academic Calendar prepared during the year</b>	<b>Yes</b>
if yes, whether it is uploaded in the institutional website: Weblink :	<a href="https://www.vpmthane.org/BNB/calendar%20all.aspx">https://www.vpmthane.org/BNB/calendar%20all.aspx</a>

### 5. Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity	
				Period From	Period To
<b>1</b>	<b>B++</b>	<b>81.25</b>	<b>2003</b>	<b>16-Sep-2003</b>	<b>15-Sep-2008</b>
<b>2</b>	<b>A</b>	<b>3.04</b>	<b>2010</b>	<b>28-Mar-2010</b>	<b>15-Mar-2015</b>
<b>3</b>	<b>A</b>	<b>3.21</b>	<b>2015</b>	<b>15-Nov-2015</b>	<b>14-Nov-2020</b>

<b>6. Date of Establishment of IQAC</b>	<b>14-Jan-2014</b>
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### 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture		
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries

Webinar on Mind set of students during lockdown period	28-Apr-2020 2	47
Awareness program on COVID 19	24-Apr-2020 16	1147
Constant encouragement for research through following activity - Science day, preparatory workshops, Journal and Movie club	28-Feb-2020 8	2100
Mock visit to train the faculty for handling actual Autonomy visit	04-Dec-2019 8	112
Timely submission of AQAR-2018-19	17-Oct-2019 8	12
Application to NIRF and received Certificate of participation	15-Sep-2019 60	9
Two day workshop for teachers on	30-Aug-2019 16	79
Regular internal Academic and Administrative Audit done in relation to documentation by IQAC	22-Aug-2019 12	12
Green Audit by Thane Municipal Corporation (TMC)	18-Aug-2019 2	46
Brain storming session for IQAC members regarding new AQAR guideline	02-Aug-2019 8	13
<a href="#">View File</a>		

**8. Provide the list of funds by Central/ State Government- UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.**

Institution/Department/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
B N Bhandodkar College of Science, Thane	FIST	DST	2013 1825	3950000
B N Bhandodkar College of Science, Thane	STAR	DST	2015 1095	2900000
B N Bhandodkar College of Science, Thane	CPE	UGC	2017 1825	1020000
<a href="#">View File</a>				

<b>9. Whether composition of IQAC as per latest NAAC guidelines:</b>	Yes
Upload latest notification of formation of IQAC	<a href="#">View File</a>
<b>10. Number of IQAC meetings held during the year :</b>	15
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	No
Upload the minutes of meeting and action taken report	No Files Uploaded !!!
<b>11. Whether IQAC received funding from any of the funding agency to support its activities during the year?</b>	No
<b>12. Significant contributions made by IQAC during the current year(maximum five bullets)</b>	
1. Swachhatam Mahavidyalay awarded by Thane Municipal corporation, 29th July 2019 2. Application to NIRF and received Certificate of participation in the month of November 2019 3. Autonomy expert committee visit successfully faced on 10th and 11th December 2019 4. Academic Audit by the University of Mumbai on 04/02/2020 5. Encouraged and guided staff and students in the process of applying for MOOC courses.	
<a href="#">View File</a>	
<b>13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year</b>	
Plan of Action	Achivements/Outcomes
Less paper initiative	In continuation with various exam reforms , all communication regarding notices, circulars , conferance brochures, soft copies of certificates, meeting agendas and conduction of meetings and various activity done by mail as well as by using social media
<a href="#">View File</a>	
<b>14. Whether AQAR was placed before statutory body ?</b>	Yes
Name of Statutory Body	Meeting Date
College Development Committee	04-Nov-2020

<b>15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning ?</b>	Yes
Date of Visit	10-Dec-2019
<b>16. Whether institutional data submitted to AISHE:</b>	Yes
Year of Submission	2020
Date of Submission	06-Feb-2020
<b>17. Does the Institution have Management Information System ?</b>	Yes
If yes, give a brief description and a list of modules currently operational (maximum 500 words)	<p>The BNBCS is having the Management Information System for smooth functioning and disseminating information to the stakeholders by updating the website regularly. Several authorities such as the Government and University of Mumbai call for information on student profiles which can be easily retrieved from the said MIS. All teaching staff members segmented study material using Google drive, social media and mail to contribute to the documentation of various modules and save paper. Staff salary notification and generation of salary slips is done online. The college is having the following modules</p> <ul style="list-style-type: none"> <li>• IT software Smooth functioning of internal examinations, Examination schedules - examination fees hall ticket generation results issue of marks lists, College Fee collection fee waiver Govt. reimbursement Management of fee concessions, smart card attendance and allied work</li> <li>• SR software, FFA Pay role for teaching and nonteaching staff accounting</li> <li>• Online facilities for Different Degree Programs Admission Management On line fee collection from students Feedback related infrastructural facilities academics, extracurricular and cocurricular activities from stakeholder</li> <li>• Courses within Programs performances of students and staff by using modules</li> <li>• Calendar Management adherence to fulfil the same</li> <li>• Fully automated Library with OPAC system</li> <li>•</li> </ul>

Library resources management by Koha open source software and Dspace software for content management and the digital repository is developed for content management • Social background of the students – Govt. scholarships receipts – disbursements • Installation of Digital RFID Attendance system in college for better management of students' attendance in lectures and practicals.

## Part B

### CRITERION I – CURRICULAR ASPECTS

#### 1.1 – Curriculum Planning and Implementation

1.1.1 – Institution has the mechanism for well planned curriculum delivery and documentation. Explain in 500 words

• B.N. Bandodkar College of Science (BNBCS) is affiliated to University of Mumbai, hence follows the syllabi designed and developed by the syllabus framing committee, University of Mumbai for UG, PG course and for Ph.D. courses. The subjective BOS members include representatives from Professors, Associate Professors, and Asst. Professors, bonafide students, alumni, NGOs and industrial expertise. Final design of the curriculum is carried out and approved in Academic Council at University level. BOS members conducted workshops for college teachers. The revision of each individual syllabus is revised every two (PG level) /three (UG level) year's cycles. All programs are designed on choice-based credit and grading systems and evaluated on a semester basis. Each semester is comprised of 90 teaching days. • Heads of the Departments conduct meetings on the last working day of previous term and first opening day of new term for the further planning of the academic year and distribution of syllabus paper wise and unit wise as per specialization after discussion with teachers. All the teachers prepare their teaching plans and execute them in semesters. Teaching plans includes ICT techniques, Origami, Model making, discussions, seminars. IQAC provided teachers dairy teaching planner sheet to all teachers and teachers fill the form accordingly and complete the syllabus well on time before the commence of the semester examination. College administration also provides a well-defined Schedule. Academic calendar and examination time table scheduled by university for both UG and PG courses. Along with the traditional teaching methodology, ICT, computation and its application in studies, use of internet in studies and conducting various events, soft skills, interdisciplinary courses, and hands-on training are practised. Introduction of field projects in other subjects and research project for students seeking extra 02 credits apart from regular credits would provide an additional qualification to them. Field visits and excursions enhance the practical experience of the subjects. A continuous perusal of shortfalls in the accomplishment of curricula to ensure the maximum outcome is achieved through planning under the supervision of IQAC, college development committee, evaluation system, feed-back system and managerial involvement. The academic enhancement is attained through the frequent organization of workshops, orientation programs, colloquium, guest or popular lectures, counselors, career guidance, seminars, industrial visits, excursions and so on. Students are encouraged to participate in scientific, patriotic and social activities through University level 'Avishkar', NCC, NSS, WDC, DLLE and Student's Welfare festival. • Certificate courses are designed by senior teachers of the Departments according to the demands of the society, which

enhances the academic, professional and entrepreneur skills. The certificate courses are approved in College Development Committee (CDC). In addition the students have availed choices of value-added, certificate and diploma courses. The design foresees to inculcate utmost scientific knowledge in the pupils, leading to understanding and its sympathetic application for the benefit of the society. • Each activity was well documented by respective Heads & Incharges and committee coordinators and provided to IQAC. The soft copy is documented by IQAC.

#### 1.1.2 – Certificate/ Diploma Courses introduced during the academic year

Certificate	Diploma Courses	Dates of Introduction	Duration	Focus on employ ability/entrepreneurship	Skill Development
Research Scholar Programme	NA	05/07/2019	2	Research methodology, data analyses and interpretation, publications, research ethics.	Analytical Skill and Research aptitude
Certificate course in Calligraphy (Basic)	NA	15/07/2019	2	Building entrepreneur skills for business in flex boards or name plates on cars and shops.	To develop various art of writing
Certificate Course in Instrumentation And Preparation of Standard Solutions	NA	27/07/2019	2	Basics in handling skills and solution preparation. Standardisation and calibration of instruments and preparation of standard solutions	To develop knowledge how to use cold centrifuge
Techniques in Molecular Biology (level-II) III	NA	20/11/2019	8	Culture media, Control measure	Molecular Biology Techniques
Techniques in Molecular Biology (level-I, Batch -III) III	NA	02/12/2019	8	Handling of the instruments, Aseptic techniques	Molecular biology Techniques

Food Adulteration and Quality Management	NA	15/01/2020	2	Hands on training abd recognized a understandin dulterations g tests to detect adulteration and regulation in the samples in food
Basics of R Software	NA	03/02/2020	2	Learn Fundamentals commands and of R Applications programming in Various and basic statistical level analysis analysis using data.

## 1.2 – Academic Flexibility

### 1.2.1 – New programmes/courses introduced during the academic year

Programme/Course	Programme Specialization	Dates of Introduction
Nill	NIL	Nill
<a href="#">View File</a>		

### 1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective course system implemented at the affiliated Colleges (if applicable) during the academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
Nill	NIL	Nill

### 1.2.3 – Students enrolled in Certificate/ Diploma Courses introduced during the year

	Certificate	Diploma Course
Number of Students	183	Nil

## 1.3 – Curriculum Enrichment

### 1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled
Hands on training - Colorimeter- Department of Botany	18/06/2019	57
Demonstration of bio compost and vermi-compost -M.Sc. EVS	10/09/2019	20
<a href="#">View File</a>		

### 1.3.2 – Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BSc	Shangrila Food Products Ltd. By Department Of Biochemistry	4



BSc	Milk Reception, Processing & Packaging - Kolhapur Zilla Sahakari Dudh Utpadak Sangh Ltd. By Department Of Biochemistry	5
<a href="#">View File</a>		

#### 1.4 – Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	No
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution?  
(maximum 500 words)

Feedback Obtained
<p>i. A multilevel data management system has been implemented at BNBCS in order to collect data about Organizational performance and key operations. The data collected from committees and departments is reviewed, processed and comprehensively assessed by IQAC. ii. The internal audits are conducted annually. Considering internal audit remarks the various indices from the feedback of all the stakeholders, most effective measures, progress on strategic objectives and the action plan are designed. iii. Students are primary stakeholder of any education institute. BNBCS is the single faculty science college thus stakeholders are concerned with science stream. Teachers are continuously in contact with stakeholders during lectures and practical's. Overall college feedback in relation to administration, teaching and learning, infrastructure facility, co-curricular and extra-curricular, college environment and other issues are received from stakeholders. Feedback data about curriculum collected from stakeholders (current Students, Teacher, Parents, Alumni, Society and/or Employers) on a 5 point scale. iv. Parents mentor meeting and through suggestion box, complaint register, website, social media, e-mail, direct communication etc. are taken into consideration to improve further and take appropriate quality measures. Questions related to teachers' abilities about command on subject, language, punctuality, explanation skills etc. are assessed. The data is collected, compiled and analyzed. v. Faculty members are asked to fill up self appraisal forms, where they can give their opinion for improvements. The performance of individual teacher is evaluated through self appraisal report and API forms. Teachers submit the self-appraisal reports with remarks from the head of the department. The assessment reports of non-teaching staff are collected from the heads. Also performance of faculty is evaluated by respective heads and by Principal. While Principal's performance is monitored by management. vi. Feedbacks received in the year 2018-19 from internal, mid-term audit as well as IMC Ramkrishna Bajaj National Quality Award (RBNQA) and ISO are also considered for the improvements. SWOT analysis is an important component of the planning process. While preparing yearly report each department does SWOT analysis to plan for future. Before the measures are finalized, senior teachers and the peers do a final review in to meet the core competencies and the strategic challenges thus ensuring needs of stakeholders are mitigated. This feedback data thus collected is useful for the overall development of the Institution.</p>

## CRITERION II – TEACHING- LEARNING AND EVALUATION

### 2.1 – Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
BSc	General Science	480	1491	339
BSc	Biotechnology	65	431	58
BSc	Biochemistry	35	154	27
BSc	Microbiology	30	278	27
BSc	Computer Science	60	682	54
BSc	Information Technology	120	1672	116
BSc	Human Science	60	152	28
BSc	Interdisciplinary Science	60	72	9
MSc	Chemistry	10	74	10
MSc	Information Technology	20	103	19

[View File](#)

### 2.2 – Catering to Student Diversity

#### 2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	Number of fulltime teachers available in the institution teaching only PG courses	Number of teachers teaching both UG and PG courses
2019	1836	157	62	3	25

### 2.3 – Teaching - Learning Process

#### 2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), E-learning resources etc. (current year data)

Number of Teachers on Roll	Number of teachers using ICT (LMS, e-Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Number of smart classrooms	E-resources and techniques used
90	90	9	19	2	21

[View File of ICT Tools and resources](#)

[View File of E-resources and techniques used](#)

#### 2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

The academic year started with Principal's address as a tradition, highlighting importance of college culture, students' role, work ethics, moral values, and so on. VPM's oath was pledged by all the students as part of the inaugural process. There are various groups, activities and clubs like NSS, NCC, Nature Club, Mentor committee, Gandhi vichar manch, Jagar Janivancha, DLLE, Cultural Association, Sports Committee, etc. in

BNBCS college meant for inculcating the progressive and developmental attitude among the students. These committees support 360° mode of working in the students and also bring out all round personality development. Sessions conducted inside the classrooms not only offer academic contents but also bring about a conscious awareness regarding equality, social awareness, feeling of nationalism, tolerance, empathy, cooperative approach. The concept of Din-Vishesh informs them about specific importance of a particular day and the memorable events on that day. The main objectives of the system are to monitor student's regularity and discipline, to enable the parents to know about the performance and regularity of their wards, improvement of teacher student relationship. It helps student for solving their problems and provide confidence to improve their quality of life. It also helps students to choose right career path for job, higher studies etc. The mentor cell is established with an intention of helping students in reaching their goals. This group assigns teachers to guide students in achieving their targets, in collaborative behaviors for approaching an issue and following ethical values in the society. Not more than 20 students are mentored by one teacher. In short, mentor teachers become their guardians and help them progress better. Students open up with the mentor teachers and share their difficulties. In specific cases professional help can be sought. Mentor-student meetings are scheduled to facilitate the interaction. The mentors meet the students as and when required. Mentors also keep the regular attendance records of the students. The parents are called to meet the mentors and corrective and preventive measures are implemented for further improvements in attendance. Mentors encourage the students to participate in various cocurricular and extra-curricular activities held in college. Every mentor gives a detailed report of the mentoring to the coordinator of the mentor committee. Each mentor maintains the entire student information, progress of the mentor program reported to Heads of Departments and Principal and it is examined when necessary. This is the continuous process till the end of academic career of the student in the college. The mentor system aims at addressing conflicts in attitudes, habits and knowledge of the students towards learning practices. In course of direct communication between mentor and the student there was a good improvement in the teacher-student relationship. Adopting Mentor system helped in inculcating discipline, punctuality and motivation among the students which is the main objective in career building of a student. Students also get the Psychological support at the time of need. The broader target of this entire program is to make students best suited for being successful and responsible citizens.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
1993	90	1 : 22

## 2.4 – Teacher Profile and Quality

### 2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
47	24	23	23	19

### 2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year )

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2019	Dr. Anita Goswami Giri	Associate Professor	Motivational Leadership and Bringing Innovations in Teaching and Learning by 2nd International Award Ceremony and Global Science Summit 2019, Dubai, UAE on 5th Nov. 2019
2019	Dr. Jayashree Pawar	Assistant Professor	One project submitted and got

			selected among the applications invited at LTMT Workshop on Epigenetics for practical execution by Dr. Gupta 's Laboratory, ACTREC, Navi Mumbai.
2019	Dr. M. Saha	Associate Professor	Received Shri R.P.Athalye Gunijan Purskar 2019 on 1st August 2019 by Vidya Prasarak Mandal, Thane
2019	Mr. Bipin S. Dhumale	Lecturer	Granted the commission number as a Lieutenant, NCC/ 09110359, Mministry of Defence, DGNCC, New Delhi.
2019	Dr. Anita Goswami Giri	Associate Professor	Best Teacher Award from amongst the teachers of Affiliated Colleges for academic year 2018-19 (University of Mumbai)
2019	Mr. Bipin S. Dhumale	Lecturer	Completed the Refresher course of Officers Training Academy, NAGPUR, for the next rank as a captain, (October 2019)
2019	Dr. M Saha	Associate Professor	Chaired a Technical session in national conference NCMA 2020
2019	Dr. D. R. Ambawadekar	Associate Professor	Chaired a Technical session in national conference NCMA 2020
2019	Dr. S. D. Rathod	Associate Professor	Chaired a Technical session in national conference NCMA 2020
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## 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year-end examination	Date of declaration of results of semester-end/ year- end examination
BSc	1S00256	6	08/10/2020	06/11/2020
BSc	1S00166	6	09/10/2020	03/11/2020
BSc	1S00156	6	09/10/2020	06/11/2020
BSc	1S00176	6	09/10/2020	28/10/2020
MSc	1S01123	3	14/01/2020	20/03/2020
MSc	1S01121	1	27/12/2019	07/03/2020
BSc	1S00146	6	09/10/2020	01/11/2020
BSc	1S00145	5	31/10/2019	02/12/2019
BSc	SYBSc	3	11/10/2019	16/12/2019
BSc	FYBSc	1	26/11/2019	14/01/2020
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2.5.2 – Reforms initiated on Continuous Internal Evaluation(CIE) system at the institutional level (250 words)

BNBCS being affiliated to the University of Mumbai the syllabus and examination-evaluation norms are followed as per directives given by University for undergraduate, postgraduate and Ph.D. Students are made aware of the evaluation process during the inaugural lecture by the Principal. University has Choice Based Credit System (CBCS) in all undergraduate and post graduate courses. In semester wise examination-evaluation pattern for post-graduation external to internal component is in the ratio of 60:40 and for isolated courses such as Biotechnology, Computer Science, Human Science, Interdisciplinary Science and Information Technology external to internal component is in the ratio of 75:25 for F Y B Sc and S YBSc. Overall performance is observed through attendance, class test, seminar, group discussion, assignments, quizzes, tutorials, projects, viva-voce during laboratory sessions and personal interaction etc. The continuous internal evaluation (CIE) allows the teachers to assess the students for tracking their progress and to identify slow and advanced learners. A well-equipped examination room with surveillance 24X7, orientation of newly recruited staffs and first year students regarding examination rules and regulations are keys of CIE. Remedial classes and extra laboratory experiments are conducted for the slow learners, absentees on medical background and the students who participate in extracurricular and Co-curricular activities representing the college at various levels. The meritorious students are exposed to project-based learning, participation in conferences workshops and seminars, academic fests. For Ph.D students, research work is reviewed after every six months and pre-synopsis and pre-PhD viva is conducted by the respective department and committee before final viva.

2.5.3 – Academic calendar prepared and adhered for conduct of Examination and other related matters (250 words)

BNBCS plans the Academic Calendar of the Curricular, Co-curricular and Extracurricular activities and uploads it on the college website in the month of April for the next academic year. Heads of the departments hold the responsibility to conduct the academic activities and coordinators of various committees hold the responsibility to conduct Co-curricular and extra-curricular activities as per the calendar. The time table of the external

examinations is declared by the university for the T.Y.BSc and MSc. The college conducts these examinations in the framework provided by the university. The examination time table is displayed on the student notice board. Heads of the departments and examination committee jointly prepare the time table for F.Y.BSc and SY.BSc for regular and re -Examinations. Every teacher has been assigned the subjects to be taught during the academic year. The teacher prepares the teaching plan and evaluation schedule of assigned subject. The type and schedule of internal evaluation for isolated subjects is planned in consultation with Heads of the departments and Examination committee. All Heads compile the teaching plans submitted by the teachers and ensures that there is no overlapping of the activities in general and the Continuous Internal Evaluation in particular at both the internal as well as the University level. IQAC obtains the action taken report against the activities planned as per the calendar from every department and the various committees. Thus, IQAC verifies the adherence of the calendar with that of the actually activities conducted by the college at various levels.

## 2.6 – Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

<https://www.vpmthane.org/BNB/Course%20outcome.aspx>

2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
1S00146	BSc	General Science	320	303	94.69
1S00166	BSc	Biotechnol ogy	50	45	90
1S00156	BSc	Computer Science	52	52	100
1S00176	BSc	Human Science	20	20	100

[View File](#)

## 2.7 – Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

<https://www.vpmthane.org/BNB/feedback%20analysis.aspx>

## CRITERION III – RESEARCH, INNOVATIONS AND EXTENSION

### 3.1 – Resource Mobilization for Research

3.1.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Minor Projects	365	University of Mumbai	0.2	0
Minor Projects	365	University of Mumbai	0.25	0

Minor Projects	365	University of Mumbai	0.5	0
Minor Projects	365	University of Mumbai	0.35	0
Major Projects	365	Mangrove Foundation	4	1.44
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### 3.2 – Innovation Ecosystem

3.2.1 – Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative practices during the year

Title of workshop/seminar	Name of the Dept.	Date
Opportunities in TCSiON.	Employment Cell Grab IT	19/07/2019
First pre-conference workshop on Biomaterials and its Application for National conference on Materials and their Applications	Department of Physics in Collaboration with Institute of Science, Mumbai	19/07/2019
Lecture on Turtle man - Zoomagica	Department of Zoology	29/07/2019
Lecture on "All India Tiger Monitoring Programme" by Mr. Nikit Surve	Department of Environmental Science	31/07/2019
Development and significance of periodic table by Prof. S. Agarkar	Department of Chemistry	14/08/2019
A lecture on "Solid Waste Management by Mr. Bhatu Sawant in collaboration with NSS.	Department of Environmental Science	19/08/2019
A lecture on "Plastic waste and its management" by Dr. Sanjay Joshi	Department of Environmental Science	28/08/2019
A talk on "Biodiversity Act its implementation for conservation" by Ms. Gayatri Oak on occasion of "World Shark Day".	Department of Environmental Science	30/08/2019
Guest Lecture On Applications Of Mathematics And Statistics In Natural Science by Mr. Amiya Bhowmick	Department of Statistics	11/09/2019
A lecture "How to write literature review." By Mr. Vicky Patil	Department of Environmental Science	17/09/2019
A lecture on "Prepare yourself for Corporates"	Employment Cell Grab IT	19/09/2019



A talk on "Flagship species conservation: Imperative or Expensive game" by Dr. K. Ramesh	Department of Environmental Science	28/09/2019
Career guidance session for competitive exam preparation' by Dr Abhishek Mule.	Department of Biotechnology and Microbiology	09/10/2019
A lecture on "Conservation of Mangrove Biodiversity" by Mr. Hemnat Karkhanis	Department of Environmental Science	11/10/2019
Workshop on 'Polymerase Chain Reaction' for SYBSc TYBSc Biotechnology and Microbiology students	Department of Biotechnology and Microbiology	20/11/2019
Workshop on FTIR	Department of Biochemistry	21/11/2019
Demonstration of Biocompost and vermicompost for M.Sc. Students	Department of Environmental Science	22/11/2019
Second Preparatory Workshop on National Conference on Material and their Applications	Department of Physics in Collaboration with Institute of Science, Mumbai	29/11/2019
A lecture on Campus to Corporate	Employment Cell Grab IT	07/12/2019
National Conference on Material and their Applications	Department of Physics in Collaboration with Institute of Science, Mumbai	09/01/2020
A session on Prepare yourself for MPSC / UPSC Examination by Chanakya Mandal	Employment Cell Grab IT	08/02/2020
preparatory sessions covering HIV, HIV vaccines, CRISPR-CAS9 and anti CRISPR	Department of Biotechnology and Microbiology	11/02/2020
Guest Lectures and Career Guidance Session	Department of Biotechnology and Microbiology	13/02/2020
Oral presentation of research article/paper	Department of Chemistry	17/02/2020
National Science Day' . Chief Guest: Scientist Astronaut Candidate Pranit Patil from Possum Project, NASA, United States	Research committee and Science Square Committee	28/02/2020



Webinar on Mendeley : A Reference management tool	Research committee and Science Square Committee and Department of Library	14/05/2020
Webinar on Google Scholar	Research committee and Science Square Committee and Department of Library	23/05/2020
Lecture series Acquire the required	Department of Biochemistry	28/05/2020
Webinar on An Introduction to ORCID	Research Committee and Department of Library	01/06/2020
Webinar on The Patenting Process	Research Committee and Department of Library	06/06/2020
Webinar on Understanding Journal Indexing and Citation Database	Research Committee and Department of Library	13/06/2020
Webinar on National Digital Library of India (NDLI) : A useful Source of Information	Research Committee and Department of Library	20/06/2020
Webinar on Resilience and mental well being	Department of Botany	21/06/2020

### 3.2.2 – Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Third prize at State level MicroOlympiad	Ms. Sanyukta Bholey, Saurabh Gupta and Swapna Deopurkar	MicroOlympiad	15/02/2020	Third prize at State level MicroOlympiad
Awarded project in LTMT Workshop on Epigenetics for practical execution	Dr. Jayashree Pawar	Dr. Gupta 's Laboratory, ACTREC, Navi Mumbai	13/01/2019	Awarded project in LTMT Workshop on Epigenetics for practical execution
1st Prize for Poster presentation	Dr. Anita. S. Goswami-Giri	International conference on Emerging Trends in Delivery of Traditional Medicine - II organized by Poona College of Pharmacy, Bharati Vidyapeeth, Pune	30/11/2019	1st Prize for Poster presentation
Chief Ministers Scholarship for PhD	Sulbha Kadam	Chhatrapati Shahu Maharaj Research Training and Human Development	09/11/2019	Chief Ministers Scholarship for PhD

		Institute, (SARTHI), Pune		
D.D. Kosambi young scientist award	Rutik Ghagre Amisha Patil	CUBE, HBCES	30/10/2019	D.D. Kosambi young scientist award
Patent - Herbicide compounds, Methods of preparation and compositions containing the compounds (Patent: Indian patent 1 611/MUM	Dr. Anita. S. Goswami-Giri	Indian Patent office	08/08/2019	Patent - Herbicide compounds, Methods of preparation and compositions containing the compounds (Patent: Indian patent 1 611/MUM
<a href="#">View File</a>				

### 3.2.3 – No. of Incubation centre created, start-ups incubated on campus during the year

Incubation Center	Name	Sponsored By	Name of the Start-up	Nature of Start- up	Date of Commencement
Research Inculcation at UG Level	Research Scholar Programme (2 year Certificate Course)	College (The meagre budget of Research project is adjusted in Departmental Budget)	NA	NA	01/07/2019
NSS	NSS	University of Mumbai	NSS	Rakhi selling in c ollaboration with Sobati foundation	08/08/2019
DLLE	DLLE	University of Mumbai	DLLE	Career Project: Interview of Professional ist	28/02/2020
<a href="#">View File</a>					

### 3.3 – Research Publications and Awards

#### 3.3.1 – Incentive to the teachers who receive recognition/awards

State	National	International
0	0	0

#### 3.3.2 – Ph. Ds awarded during the year (applicable for PG College, Research Center)

Name of the Department	Number of PhD's Awarded
Department of Chemistry	3

#### 3.3.3 – Research Publications in the Journals notified on UGC website during the year

Type	Department	Number of Publication	Average Impact Factor (if any)
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International	Chemistry	1	5
International	Environmental Science	2	5
International	Physics	1	5
<a href="#">View File</a>			

3.3.4 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
Zoology	1
Physics	2
Chemistry	5
Staistics	1
<a href="#">View File</a>	

3.3.5 – Bibliometrics of the publications during the last Academic year based on average citation index in Scopus/ Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation
History of rubisco and its future scope from solanumxanthocarpum leaves	Ashwini pawar and Anita Goswami Giri	Research journey in ternationa l e- journal	2019	1	VPMs B. N. Bandodkar College of Science, Thane	Nill
Density, Viscosity and speed of sound of Binary liquid mixture of Vinyl acetate with butyl vinyl ether, di-isopropyl ether, anisole and dibutyl ether	Ajit Bhumkar, M. V. Rathnam	Journal of Chemical T hermodynam ics	2019	12	VPMs B. N. Bandodkar College of Science, Thane	2
Thermoph ysical behaviour of Diethyl carbonate ether	Ajit Bhumkar, P. S. Wagh, M. V. Rathnam	Journal of Molecular Liquids	2019	12	VPMs B. N. Bandodkar College of Science, Thane	3

binary mixture at T(303.15, 308.15 and 313.15)K						
Environmental benign synthesis in green synthesis	P. P Dhawale and A.S.Goswami-Giri	Rasayan Journal Chemistry	2019	1	VPMS B. N. Bandodkar College of Science, Thane	Nil
Densities and Viscosities of Binary (Butyl acetate n-Alkanes) Mixtures at T (303.15, 308.15 and 313.15K	Pralhad S Wagh, Manapragada Rathnam	Journal of Applicable chemistry	2019	0	VPMS B. N. Bandodkar College of Science, Thane	Nil
Excess volume, Viscosities and Speeds of Sound for Binary Mixtures of Ethyl methanoate Alkanes: Application of Viscosity Models	Pralhad S Wagh, Manapragada Rathnam	Journal of Applicable chemistry	2019	0	VPMS B. N. Bandodkar College of Science, Thane	Nil
Symmetric supercapacitor: Sulfurized graphene and ionic liquid	Jasmin S Shaikh, Navajsharif S Shaikh, Rohini Kharade, Sonali A Beknalkar, Jyoti V Patil, Mahesh P Suryawanshi, Pongsakorn Kanjanaboots, Chang Kook Hong, Jin Hyeok	Journal of colloid and interface science	2019	13	Department of Chemistry, University of Mumbai	25

	Kim, Pramod S Patil					
Dielectric study of Binary Liquid Mixtures of 1,2 di-amino-propane with Methanol at 9.85 GHz Microwave Frequency	S. S. Meshram, U B Tumberphale, P G Gawali	Int.Res. J.of Science Engineering	2019	0	N.E.S. Science College, Nanded	Nill
Molecular interaction study of Allyl Amine with 2-Methoxy Ethanol at 2MHz frequency	S. S. Meshram, U B Tumberphale, P G Gawali	International journal of basic and applied research	2019	0	N.E.S. Science College, Nanded	Nill
Behavioural Studies of Boleophthalmus Dussumieri	S. D. Rathod	International Journal of Advance and Innovative Research	2019	0	VPMS B. N. Bandodkar College of Science, Thane	Nill
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### 3.3.6 – h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
Environmentally benign green synthesis of intermediates and their derivatives of 2-cyclohexylcarbonyl-4-oxo-1,2,3,6,7,11B-hexahydr	Dhawle P.P., Goswami-Giri A.S.	Rasayan Journal of Chemistry	2019	1	Nill	VPMS B N Bandodkar College of Science, Thane

o-4H-pyrazino[2,1-A]isoquinoline via N-alkylation/acylation						
Thermophysical behaviour of diethyl carbonate ether binary mixtures at T (303.15, 308.15 and 313.15) K	Bhumkar A.N., Wagh P.S., Rathnam M.V.	Journal of Molecular Liquids	2019	13	Nill	VPMS B N Bandodkar College of Science, Thane
Density, viscosity, and speed of sound of binary liquid mixtures of vinyl acetate with butyl vinyl ether, diisopropyl ether, anisole and dibutyl ether	Bhumkar A.N., Rathnam M.V.	Journal of Chemical Thermodynamics	2019	13	Nill	VPMS B N Bandodkar College of Science, Thane
Photoelectrochemical performance of MoBiGaSe <sub>5</sub> thin films deposited by vacuum deposition technique	Patil S.V., Ghanwat V.B., Mandhare R.Y., Kondalkar V.V., Bhosale P.N.	Journal of Materials Science: Materials in Electronics	2019	13	Nill	VPMS B N Bandodkar College of Science, Thane
On a certain subclass of meromorphically uniformly convex functions at	Shinde A.S., Ingle R.N., Thirupathi Reddy P.	Advances in Mathematics: Scientific Journal	2020	1	Nill	VPMS B N Bandodkar College of Science, Thane

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Excess Volume, Viscosity, and Isentropic Compressibility of Methyl Acrylate Alkane Binary Mixtures	Wagh P.S., Bhumkar A.N., Rathnam M.V.	Journal of Chemical and Engineering Data	2020	13	Nill	VPMS B N Bandodkar College of Science, Thane
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### 3.3.7 – Faculty participation in Seminars/Conferences and Symposia during the year :

Number of Faculty	International	National	State	Local
Attended/Seminars/Workshops	26	106	9	66
Presented papers	4	2	Nill	2
Resource persons	1	Nill	1	10
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### 3.4 – Extension Activities

3.4.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Tree Plantation	NSS Unit VPMS B.N. Bandodkar College/ASC Thane Army Boys in Collaboration with Hariyali Foundation	2	56
Anti Drug Rally 2019	NSS Unit VPMS B.N. Bandodkar College/ASC Thane Army Boys in Collaboration with Civil Hospital	5	100
Tree plantation	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Hariyali Foundation	2	10
Vasundhara Divas	NSS Unit VPMS B.N. Bandodkar College in Collaboration with GSBAS	3	100

Plastic Cleanup drive	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Khushiya Foundation	3	10
Roti ghar cleanup drive	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Khushiya Foundation	3	20
River cleanup drive	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Khushiya Foundation	3	22
Orientation Program	NSS Unit VPMS B.N. Bandodkar College in Collaboration with GSBAS	5	180
Kargil Vijay Diwas 2019	ASC Thane Army Boys/NSS Unit VPMS B.N. Bandodkar College of Science in Collaboration with 1 MAH BN Mumbai B Group	4	50
Blood Donation Camp	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Lions club of Millennium and Blood band	5	90
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3.4.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Dance	1st	Traffic Awareness Program by RTO ,Thane.	1
Singing	3rd	Yuvatarang, Intercollegiate competetion	1
Street play	2nd	Gandharv Intercollegiate competetion	10
UDAAN FEST- Street play performance poster making	Certificate of Extension Work	Department of Lifelong Learning Extension (DLLE) -Mumbai	16



		University	
Blood Bank	1st	Red Ribbon Club	300
Cleanliness	Appreciation	Big Mumbai clean-up	300
Digital poster making	3rd	Uddan, Intercollegiate competetion	1
Street play	3rd	Voters awareness	10
Street play	1st	Traffic Awareness Program by RTO ,Thane.	10
RAP	1st	Traffic Awareness Program by RTO ,Thane.	1
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3.4.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agency/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
NSS	NSS Unit VPMS B.N. Bandodkar College NSS Unit VPMS B.N. Bandodkar College in Collaboration with Hariyali Foundation	Tree Plantation	1	16
NSS	NSS Unit VPMS B.N. Bandodkar College NSS Unit VPMS B.N. Bandodkar College in Collaboration with Hariyali Foundation	Tree plantation	2	10
NSS	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Khushiya Foundation	Plastic Cleanup drive	3	10
NSS	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Khushiya Foundation	Roti ghar cleanup drive	3	20
NSS	NSS Unit VPMS B.N. Bandodkar	River cleanup drive	3	22

	College in Collaboration with Khushiya Foundation			
NSS	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Sobati Foundation	Rakhi selling	5	25
NSS	NSS Unit VPMS B.N. Bandodkar College in Collaboration with Tahsildhar office ,Thane	Voter Awareness Program	6	126
NCC	ASC Thane Army Boys/ NSS Unit VPMS B.N. Bandodkar College of Science in Collaboration with Palak Sobati Group	Rakhi Posted to Soldiers at the Borders	15	200
DLLE	DLLE in Collaboration with University of Mumbai	Annapurna Yojna( Provided food)	2	15
NSS	NSS Unit VPMS B.N. Bandodkar College of Science in Collaboration with Government of India	Ek Bharat Shreshta Bharat	6	80
<a href="#">View File</a>				

### 3.5 – Collaborations

3.5.1 – Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration
Workshop on Research Based Pedagogical Tool Organized by IQAC of B N Bandodkar College of Science, Thane (West) in association with Centre of excellence in Science and Mathematics Education (COESME),	79	Vidya Prasarak Mandal Management and B. N. Bandodkar College of Science	2

IISER, Pune Newton Bhabha Fund, British Council			
Department of Physics organized National Conference in collaboration with The Institute of Science, Mumbai on "Materials and Their Applications: A broad Perspective	300	Vidya Prasara Mandal	2
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3.5.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Health Awareness - Extension Activity	International Yoga Day	In collaboration with Swami Vivekananda Kendra, Thane.	21/06/2019	21/06/2019	85
Consultancy for Project Work	"Antibacterial analysis" by agar cup method	Satish Pradhan Dnyanashadan College, Thane	12/06/2019	13/06/2019	1
<a href="#">View File</a>					

3.5.3 – MoUs signed with institutions of national, international importance, other universities, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Department Biophysics, University of Mumbai	05/11/2019	Student exchange, Research Facility exchange	1
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## CRITERION IV – INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 – Physical Facilities

4.1.1 – Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development
8.15	10.17

4.1.2 – Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added
Campus Area	Existing
Class rooms	Existing
Laboratories	Existing
Seminar Halls	Existing
Classrooms with LCD facilities	Existing
Seminar halls with ICT facilities	Existing
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added
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## 4.2 – Library as a Learning Resource

### 4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
KOHA	Fully	18.11.03.000	2017

### 4.2.2 – Library Services

Library Service Type	Existing		Newly Added		Total	
Text Books	6600	625143	208	28764	6808	653907
Reference Books	24245	9141395	381	313123	24626	9454518
e-Books	Nill	Nill	160809	Nill	160809	Nill
Journals	Nill	Nill	41	56900	41	56900
e-Journals	Nill	Nill	6293	Nill	6293	Nill
Digital Database	Nill	Nill	3	996201	3	996201
CD & Video	627	Nill	10	Nill	637	Nill

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### 4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e-content
Prof Venkatraman	Study Material	D-Space	30/01/2020
Tejas Jadhav	Tutorial	D-Space	25/02/2020
Dr Sandeep Kahandal	Video	You Tube	25/04/2020
Dr Pralhad Wagh	Video	You Tube	25/04/2020
Dr Rohini Mandhare	Video	You Tube	20/04/2020

Ms Trupti Londhe	Video	You Tube	27/04/2020
Mr Shubham Mishra	Video	You Tube	26/04/2020
Ms Pooja Singh	Video	You Tube	12/05/2020
Dr Kalpita Mulye	Study Material	D-Space	16/04/2020
Dr Anita Goswami Giri	Study Material	D-Space	16/04/2020
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#### 4.3 – IT Infrastructure

##### 4.3.1 – Technology Upgradation (overall)

Type	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwid th (MBPS/ GBPS)	Others
Existin g	232	6	62	1	1	1	13	62	15
Added	0	0	0	0	0	0	0	0	0
Total	232	6	62	1	1	1	13	62	15

##### 4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

62 MBPS/ GBPS
---------------

##### 4.3.3 – Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Video Repository	<a href="http://vpmthane.org/ytindex/index.php">http://vpmthane.org/ytindex/index.php</a>

#### 4.4 – Maintenance of Campus Infrastructure

##### 4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilities
32.25	15.34	27.1	20.2

##### 4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website, provide link)

The functioning of BNBCS is as per the rules and regulations of the University of Mumbai, Government of Maharashtra and UGC. The CDC and IQAC function as per the framed policies for overall development. The main aim of formulating the policy is: • To ensure the best possible utilization of the facilities provided • To maintain the constant and smooth functioning of the facilities. • To retain standard procedure for the use and maintenance of the facilities. • To form a proper channel of communication from all the stakeholders. The administrative office is a facilitator for staff and students apart from academics. The concerned administrative staff maintain the records of teaching and non-teaching recruitment, service book record, salary, salaries, leave records etc. They are also involved in the students admission process, all concessions, different certificates, exam forms, scholarship and free ship related matters with the help of special cell committee. The purchase

committee is looks after the overall supervision on acquisition of new purchases as per the demand of academics. It scrutinizes the proposal as per need, budget available and quotations received. The purchased material is entered into Dead Stock Register and audited by concerned HOD, Coordinator and Principal at the end of financial year. Library Advisory Committee meets to discuss the function, requirements, utilization of resources. All 5 libraries in the Campus are interconnected and functional with WebOPAC (<http://opac.vpmthane.org:50500/>) and books can be issued by completing the procedure of Inter-Library Loan. External membership facility is available for society. Library automated with Coaha software and digital repository is developed for content management. The Book bank facility is available to the low-income group, meritorious and reserve category students. Library is in the surveillance of CCTV cameras and library is regulated by a magnetic gate which opens by a valid activated I-card. A well-equipped Gymkhana organises indoor-outdoor games, sports day, and celebrates Sports Prize distribution. The schedules of the inter-collegiate and university tournaments are informed to the students through notices and public announcement system and participants are given the practice. Sports kits, TA and refreshments are provided to the students who participated in the tournaments. Entry to college is with valid activated smart I-cards. Wi-fi campus, CCTV surveillance, classrooms, well-equipped Seminar room and auditorium, Yog Kendra, Ladies Common room, Sanitary napkin vending machine, water coolers, water purifiers, fire extinguishers, first aid box, air conditioners, Inverters and photocopiers are maintained by administrative office through regular supervision and AMC. In case of any computer-related problem, an online link <https://vpmthane.org/helpdesk/> is developed for resolution. Pest control of the college premises is conducted periodically. Regular maintenance of classrooms, library, laboratories, college building, Biocompost bin and washrooms is managed by housekeeping staff. For segregation of wastes red and blue dustbins are kept in the departments and corridors for dry and wet wastes. For scrap material, prior permission has to be taken from the College Development Committee and then the material is allowed to be scrapped. Periodic feedback from all stakeholders is considered for improvement in

<https://www.vpmthane.org/VPMS-Library-OPAC.html>

## CRITERION V – STUDENT SUPPORT AND PROGRESSION

### 5.1 – Student Support

#### 5.1.1 – Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees
Financial Support from institution	College endowment prizes	26	11170
Financial Support from Other Sources			
a) National	Government of India Scholarship and free ship	423	6095366
b) International	Director of Higher Education	27	164418
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5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
-------------------------------------------	-----------------------	-----------------------------	-------------------

College Fest	14/12/2019	10	DLLE unit, VPM's B. N. Bandodkar College of Science, Thane
Dandiya-Raas	23/10/2019	8	DLLE unit, VPM's B. N. Bandodkar College of Science, Thane
SYBSc Zoology practical examination	19/09/2019	4	DLLE unit, VPM's B. N. Bandodkar College of Science, Thane
Zoology Exhibition	29/08/2019	16	DLLE unit, VPM's B. N. Bandodkar College of Science, Thane
YOGA SESSIONS	01/08/2019	480	VPM's B. N. Bandodkar College of Science, Thane
DANCE	13/05/2020	35	VPM's B. N. Bandodkar College of Science, Thane
CALLIGRAPHY	13/05/2020	17	VPM's B. N. Bandodkar College of Science, Thane
RAMP WALK	10/05/2020	10	VPM's B. N. Bandodkar College of Science, Thane
SKETCHING	01/05/2020	15	VPM's B. N. Bandodkar College of Science, Thane

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5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passed in the comp. exam	Number of students placed
2019	Guidance for IIT-JAM exam by Chemistry Department	57	Nill	1	Nill
2019	Guidance session on TIFR competitive examinations	241	Nill	5	Nill
2019	Career Counselling	Nill	60	Nill	Nill

session by  
Dr. Abhishek  
Mule on: 'Bi  
o-similars:  
the future  
of biology'

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5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
Nill	Nill	Nill

## 5.2 – Student Progression

5.2.1 – Details of campus placement during the year

On campus			Off campus		
Name of organizations visited	Number of students participated	Number of students placed	Name of organizations visited	Number of students participated	Number of students placed
S2 Infotech	46	Nill	Skytech Systems Pvt Ltd, Envirocare Labs PVT Ltd., Vedant Dyestuffs Intermediate Pvt Ltd., Asolution Pharmaceuticals Pvt Ltd.	4	4

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5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Department graduated from	Name of institution joined	Name of programme admitted to
2019	1	B.Sc. Botany	Botany	Ramniranjan Jhunjhunwala College, Mumbai	M.Sc. Botany
2019	4	B.Sc. Botany	Botany	Guru Nanak Khalsa College, Mumbai.	M.Sc. Bioinformatics
2019	1	B.Sc. Botany	Botany	PES Modern College, Pune	M.Sc. Plant Biotechnology
2019	1	B.Sc. Botany	Botany	Pune University, Pune.	M.Sc. Bioinformatics



2019	1	B.Sc. Botany	Botany	R.K.Talreja College, Ulhasnagar	M.Sc. Botany
2019	3	B.Sc. Botany	Botany	Padmashree .D.Y.Patil School of Bi otechnology and Bioinfor matics, Navi Mumbai.	M.Sc in Food Science and technology
2019	2	B.Sc. Botany	Botany	K.J.Somaiya College,Mumb ai	M.Sc in Botany
2019	1	B.Sc. Botany	Botany	VPM's B.N. Bandodkar College of Science, Thane.	Advance diploma course in Hospital Management.
2019	1	B.Sc. Botany	Botany	IBS,Powai Mumbai.	MBA in Operation and Finance
2019	1	B.Sc. Botany	Botany	Vivo institute AKA Delhi paramedic institute ,Thane.	Diploma in Radiology

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5.2.3 – Students qualifying in state/ national/ international level examinations during the year  
(eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying
Any Other	5
Any Other	1
Any Other	1

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5.2.4 – Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants
Badminton 1	College Level and University Level	165
Table Tennis 1	College Level and University Level	99
Chess 1	College Level and University Level	52
Kabaddi 1	College Level and University Level	124
Kho-Kho 1	College Level and University Level	108

Athletics 1	College Level and University Level	481
Carrom 1	College Level and University Level	236
Love Letter Writing 1	College Level	48
Rangoli(Solo) 1	College Level	5
Srujan (Elocution , Eassy, Debate, Poem recitation, Story telling, Letter writing, Quiz Competetion) 1	College Level and University Level	516
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### 5.3 – Student Participation and Activities

5.3.1 – 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	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2019	NA	National	Nill	Nill	Nill	NA
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5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

The Student Council of BNBCS is formed according to Maharashtra public ordinance University act 28 (dated 26th November 2017). Members of the student council are selected by inviting applications, scrutiny of applications and interview. Student members of the council elect among themselves 'Secretary' of the respective council. This stringent selection process makes the students familiar with parliamentary procedures and fosters their leadership qualities.

BNBCS Students' Council consists of: secretaries of cultural committee, gymkhana, NCC, NSS Secretary and Jt. Secretary of magazine committee, Jt. Secretary of cultural committee and NSS, class representatives as invited members along with senior college authorities. Student secretary is also a member of college IQAC and CDC committee. The students learn the importance of discipline, teamwork and sincerity in organizing various events. Sense of responsibility and 'decision making' are inculcated in them. Cultural committee: Along with Teachers' day celebration and several events to encourage the budding talents, BNBCS witnessed transformation in the Annual Fest 2019-20 which was organized in 'Gadkari Rangayatan', a renowned auditorium in Thane, following the long-cherished dream of BNBCS students, in collaboration with Rotary Club of Thane mid-town. Students' enthusiasm couldn't stop them even during lock-down period with various online competitions were organized.

Gymkhana: Well-equipped gymkhana and open grounds for students encouraged them participate (282 students) in 18 different sports activities. The Council was actively involved in organizing Annual Sports Event. NCC: The NCC unit of college is engaged in moulding the youth into disciplined and patriotic citizens. The unit organized and participated in following activities apart from basic military training and parades: Swachata Pakhwada, participation in cleaning of Historical Monuments, organisation of Complete Health Check Up Camp for women are the activities to name a few. It was a proud feeling for the students to represent during the republic day parade at Delhi. NSS: The dynamic NSS unit of BNBCS dedicated to sensitize students towards societal issues and provide hands-on experience in delivering community services organized diverse

array of activities throughout the academic year: Organizing/ participating in cleanliness drives, tree plantation, NSS orientation programme, blood donation drive, Old Cloth Collection drive, Rakhi selling project (rakhis made by differently abled children), Voter Awareness Rally, Swachhata Abhiyan street play, Teachers' day Celebration, Sadbhavana divas and NSS foundation day, lectures on waste management, Crowd Control and related voluntary work during Ganapati festival, organisation of the pulse polio awareness program and awareness campaign on World AIDS Day. BNBCS has been awarded certificate for being a social warrior during the 'Big Mumbai Clean-up'. Academic Representation: Every class has class representatives who mediate messages and suggestions at Department level, acting as link between students and teachers. Class representatives are also responsible for organizing Departmental club activities and Departmental fests. Right from planning of the event to its execution, the students are well-trained in event organization. Magazine committee: BNBCS magazine 'Sanyuja' provides a platform for staff and students to express through literary writing. Deciding theme of magazine to inviting articles, students play important role in the publishing process.

## 5.4 – Alumni Engagement

### 5.4.1 – Whether the institution has registered Alumni Association?

Yes

BNBCS has played a crucial role in widening the horizons of knowledge in the life of students while shaping their career. The Institute is inclined to remain associated with its alumni through alumni association 'Anubandh'. Anubandh means attachment, the bonding of love, that college wishes to maintain even after the students step-out from the college. Anubandh has been functional since year 2000, nurturing the bond with its Alma mater. Official formalities like formation of the executive committee of Anubandh, registration of Anubandh under VPMs name and opening of separate bank account were however completed in 2018. BNBCS alumni contribute significantly to the development of the Institute through non-financial means as follows: Competitive Exam Guidance: Alumni of Department of Biotechnology and Microbiology, who have cleared competitive examinations like TIFR, IIT-JAM, JNU etc. for higher studies and got admitted to renowned Institutions of International repute, have been regularly guiding the students regarding preparation for these exams. Three such sessions were organized during this academic year by Mr. Subhash Khatri (currently pursuing integrated M.Sc. Ph. D. from TIFR, Mumbai), Mr. Aditya Chhatre (MSc. from TIFR, Mumbai, currently pursuing Ph. D. from Max Planck Institute, Germany) and Mr. Nikhil Pahelkar (M.Sc. From IIT Mumbai, currently pursuing Ph. D. from Indian Institute of Science, Bangalore). Another session was by Mr. Subhash Khatri to discuss his recently published research work on "Anabolic SIRT4 Exerts Retrograde Control over TORC1 Signalling by Glutamine Sparing in the Mitochondria" on 15th January 2020. His research work has been published in International research journal 'Molecular and Cellular Biology', a research journal of high repute (impact factor 4). The Alma matter (Mr. Aditya Chhatre and Mr. Nikhil Pahelkar) also conducted competitive exam paper solving sessions (Total 17 hours) in September 2019. These sessions were kept open for all Biological Sciences students of BNBCS. Guest Speakers: Alumni are invited for guest lectures to share experiences in their career path with current students. These guest lectures encompass a wide spectrum of career opportunities from acting to research. They not only give the students true picture of recent developments in the respective fields but also make them aware of the struggle they would be facing while pursuing particular career. Curriculum enrichment: The Alma matter contributes for curriculum enrichment through their structured feedback on curriculum collected on the day of convocation. This also helps BNBCS to design hands-on workshops, guest lectures and value-added courses to fill the existing gaps in syllabus. Faculty: Thirty-five staff members,

including the Principal and Vice-principals of the college belong to the Alma matter of the college, and are making a significant contribution in college development. IQAC: Alumni are active members of IQAC and their inputs help significantly for quality enhancements. During lockdown also, Alumni association organized online webinar for the students.

5.4.2 – No. of enrolled Alumni:

117

5.4.3 – Alumni contribution during the year (in Rupees) :

3000

5.4.4 – Meetings/activities organized by Alumni Association :

Meeting conducted: 16.11.2019 7.12.2019 23.6.2020 27.6.2020: Webinar on The Role of Data Analytics and Digital Assets in Post COVID world” by Mr. Shailesh Dhuri 17.8.2019: Department of Biotechnology and Microbiology had organized an Alumni meet on at 4:00 pm with an objective of reviving the pleasant memories of their bachelors’ era. Invitation for the same was given to alumni through ‘e-brochure’. Sixty alumni were present for the meet.

## CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 – Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Management of VPM believes in unlocking leadership potential and decentralizing power of decision making. It has established a defined framework of organizational hierarchy. The Management takes major policy decisions related to institutional progress, infrastructure development, financial management and link-ups with industries/research institutes. The constructive ideas are disseminated to IQAC of sister institutes through their respective Principals. The actual action plan of BNBCS is devised by Principal and IQAC Coordinator to ensure inclusive and equitable education of students who can prove their global competence. College Development Committee (CDC) reviews the issues related to execution of action plan. Head of the Departments and Coordinators of various Committees have freedom to shape these activities as per availability of resources. The efficiency of administrative management is enhanced by Special cell. College has separate purchase committee which takes decision related to procurement of various articles to upgrade infrastructure facility ? This year, decision regarding ‘Academic-Autonomy’ is a major leap for BNBCS. For this, college organized various discussions between experts-stakeholders. It developed clear understanding and positive outlook for ‘Academic-Autonomy’. The visionary Chairman and members of VPM supported the decision of entire staff of BNBCS and college underwent two audits, viz., ‘Academic-Autonomy’ and ‘University Audits’. The prestigious ‘Academic-Autonomous’ status by UGC will be a stepping stone towards achieving new heights in academic excellence by empowering education system. ? BNBCS offers harmonious environment for participative management through several activities. The action plan of college is based on innovative ideas, constructive suggestions and critical feedback obtained from various stakeholders’ such as VPM members, eminent scientists, devoted social workers, dedicated academicians, Principals, teaching-nonteaching staff, parents, current and alumni students. The academic calendar of curricular, co-curricular and extracurricular activities is prepared as per this action plan in month of April. The action plan is implemented by collective effort of various committees, associations and departmental clubs. Participative management is greatly reflected at departmental functions where at least one staff member is represented in IQAC, Research, Examination,

Cultural, NSS, Employment Cell and Mentor committees who ensures the accomplishment of several tasks related to respective committees. BNBCS has 54 committees which are formed by the active participation of students who are given responsibility as Secretary, Joint Secretary and Treasurer in departmental clubs, students council, cultural, magazine, 'Anubandh'-Alumini committee and 'Sahitya Sahwas'. They organized various innovative activities nurtured the intellectual and creative abilities of students and provide excellent platform to showcase their hidden talents. This year, 'Chemophilic', 'Srishti' 'Araynay' and 'Nature club' came up with themes of ecofriendly solutions and conservation related talks over environmental problems. In 'Physics Carnival', 'Mathlete-2020', 'Sankhya' and 'TranspoZone', the models, games, coding languages and scientific fun events were major attractions. CS/IT conducted orientation regarding new software. Through 'Jeevika' club 'Acquired the Required' skill programmes, students manifested their creativity. In addition to this 'Journal-Movie club' of all departments inculcate scientific aptitudes among students. These activities under the mentors were planned and executed by students for the exhibition of managerial skills and leadership quality among the students.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

## 6.2 – Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Curriculum Development	The BOS of respective subject from University of Mumbai designed the curriculum which is followed by BNBCS. Timely changes in curriculum as approved by the university are implemented. Seven staff members of BNBCS are represented in BOS. College runs numerous skill based certificate and 'Naipunya' courses whose curriculum is designed by faculties of the respective department. College sends faculty for syllabus related workshops and FDP that leads to curriculum development process.
Teaching and Learning	Along with Traditional teaching learning methods, teachers executed ICT techniques such G-suite applications and Digital Repository. Advanced learners engaged through activities of workshops, seminars, journal-movie clubs quiz, seminars and group discussions. Additional classes through mentoring were taken for slow learners. Students are also involved in Industrial-Academic interactions, internship activities and field visits, project based Lifelong learning, Model exhibitions, team work based activities, Leadership skills, and inculcation of social, moral and physical fitness values. Various

certificate courses are introduced for students to bridge the gap in syllabi. Quality of teaching is ensured by systematic feedbacks from all stakeholders.

#### Examination and Evaluation

For UG sem I, III and V and PG SEM I and III examinations were conducted as prescribed by university of Mumbai Orientation is conducted for newly recruited teachers and for FY, UG and PG students. Due to pandemic situation, as per the guidelines UGC and University online examination were conducted for the remaining semester for the academic year 2019-20. For online examination the college examination committees oriented teachers and students for the smooth conduction of examination. Faculty members were involved in examinations and evaluation. Departmental results are analyzed every semester and necessary actions are taken for improvement.

#### Research and Development

To inculcate research culture, college promotes research through Research Scholar Program, Science Square College-School complex committee and Research committee. It promoted research projects and research paper publications, consultancy work, and participation in various conferences. College organized National conference along with two preparatory workshops. Under the theme of 'Past, Present and Future" college students organized exhibition for BNBCs students and school children. Every year National Science day is celebrated by organizing talks of eminent scientist, release of e-journal JBNC and exhibition of scientific books. Budding researchers get opportunity to present their research paper interact with scientists.

#### Library, ICT and Physical Infrastructure / Instrumentation

Green and Wi-Fi campus, well equipped auditoriums, classrooms, laboratories, administrative office, staff room, Examination and IQAC room, Gymkhana, Ladies Room, open air theatres, Jnanapath, Obstacle path/Track(NCC), Photocopy center, Canteen, botanical/butterfly garden, Bio compost, water harvesting, Yoga center, Recreation center are key factors. LAN connected computers with servers, Direct Lease lines, Laptops,



projectors, ICT and SR software, Scanners, Web printer, Printer, Photocopy machines, announcement system, etc. Library automated with Koha software and Institutional Repository is developed for content management. Strict surveillance is implemented at entry points. Entry of stakeholders is restricted using Smartcards. Suggestion box is available for improvement.

#### Human Resource Management

The institute has employee friendly hierarchical flow of information. Orientation is given to the newly recruited staff members. Delegation of power, shared responsibilities for successful completion of the tasks as per capacity, interest and expertise of staff is followed. Regular meeting of stakeholders are conducted for innovative planning and implementation. Skilled persons and laboratory resources are mobilized as per the requirement. Recruitments of staff are as per the UGC, Govt. of Maharashtra and UOM norms. However, contractual staff in aided and unaided department is appointed by management.

#### Industry Interaction / Collaboration

In order to give industrial exposure, every department arranges industrial visits and encourages students to take up internship. Healthy interaction with industry experts and eminent personalities is promoted by departmental clubs and also in conferences/seminars/workshops. Employment cell invites renowned companies for campus placements such as Cap Gemini, TCS etc. College has Collaboration with HOPE, Hariyali, Jidnyasa TERI, SACCON, WWF, SREERAM, NASS, IAAB, TMC, ZP and UOM Biophysics etc. for various activities.

#### Admission of Students

Detailed information regarding courses, fees structures, cancellation process, exam pattern, staff members committees etc. has been mentioned in prospectus which is available on website and in hard copy. For EVS and Biodiversity PG admissions are given with entrance examination. Help desk, Subject wise Flex boards and Flyers is available for all students during the admission process. Strict transparency is maintained as per norms and regulations by Government of Maharashtra and University of Mumbai.

For diploma and certificate courses the norms laid down by VPM are followed. The college has MIS system where all academic and administrative activities loaded on website.

#### 6.2.2 – Implementation of e-governance in areas of operations:

E-governance area	Details
Student Admission and Support	After receiving online applications from the students , admissions are given strictly on Merit basis as per Govt. norms. For the convenience, comfort and affordability for the students, Online, offline and instalment basis mode of payment services are rendered. Social media, suggestion box, complain register, website, email, telephonic and personal dialogues are various means of communication. Travel concession, 'Earn and Learn scheme', book bank facility and online study material is available. For any difficulty mentor system is available.
Examination	College Examination committee has a separate room under the surveillance of CCTV and equipped with ICT tools for communication with university portal. ICT technique designed by BNBCS is employed for regular, revaluation and ATKT examination process which generates -Hall tickets, Marksheets, Examination attendance , Student data entry department wise and subject wise statistics, revaluation receipts etc. Other than university examination, college is also Centre for various Government,competitive and entrance examinations.
Planning and Development	Academic calendar includes details of academic, administrative and extracurricular activities. The calendar is executed by means of two way communication among the stakeholders. VPM conducts the meetings of all Principals/Directors of VPM institutes periodically to ensure the functioning of academic calendar efficiently at all levels. The strategic planning, decisions and roadmap is delivered to all institutes. In next meeting, the execution of plan is reviewed and suggestions are taken for improvement. The decisions taken in management meeting, informed to teachers through Departmental Heads. Principal conducts meeting with



nonteaching and teaching staff at the beginning of the year term end and also as per the situational demands. The meetings key agenda comprises of execution, procedures and to update of routine work. Many activities pertaining to teaching, learning, research and planning processes are covered during these meetings. Jt. Director (Govt.) and University of Mumbai communicates various new circulars and GR to the institute and conducts meetings with Principals of the colleges whenever required. The same is percolated to the stakeholders.

The changes in the curriculum are communicated by BOS, university of Mumbai through the subject workshops for the teachers. A Progressive institute is the one which abides by the time and hence at BNBCS, Principal, Vice Principal IQAC, CDC, HOD's and various committees make sure that the short and long term time horizons are well addressed. IQAC coordinator is the part of all meetings along with vice principal. The IQAC members are the primary Strategic Planning group. Principal and IQAC coordinator discuss the decision of the management and supporting decisions are put forth in CDC for approval. College policies are decided in CDC meetings. Any new decisions to be implemented are discussed with Heads of departments and concerned coordinators well beforehand.

Social media and emails are used for communication and discussion for day-to-day activities along with personal dialogues. For the overall growth of students, Plan-Do-Study-Act (PDSA) is implemented to achieve targets beyond excellence in all aspects. The Core competencies are reviewed by IQAC through internal and external audits, online feedback forms related to syllabus, academic, extracurricular activities infrastructural facilities and PTA meetings. Online forms of Grievance redressal, complaint register Portal and special cell are updated on website to maintain the transparency in system. The transparent ICT helps to reduce the intricacy with the proactive participation of all the stakeholders which is essence of good and effective e-governance and enhance the overall growth of college.

Administration	<p>To improve efficiency of Administrative services, transparent and speedy information, dissemination and smooth functioning of college.</p> <p>Important notices are regularly uploaded on the website and on the display screen. The same are displayed on various notice boards and announcement through Public Announcement System. All inwards related policies, rules and regulations and circulars are mailed on official mail Id to the staff. Fully automated office and library, biometric and online attendance, computerized examination cell, admissions and smartcard ID cards are used for the administrative purpose. College encourages administrative staff to maintain the data through proper use of ICT.</p>
Finance and Accounts	<p>The institution prepares annual budgets for allocation of funds for effective use of available resources. The college budget is prepared taking into consideration the priorities that need to be catered during the academic year. The College uses the SR software developed by the college management for transparent functioning of Finance and Accounts department. The administrative staffs maintain the Books of Accounts, which helps in auditing procedure to maintain accuracy in financial transactions such as salary, fees and examination bills. The college conducts periodic audits of books of accounts.</p>

### 6.3 – Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2019	Mrs. K. H. Manjrekar	One day Workshop on "Preparing AQAR under New NAAC Guidelines"	V. G. Vaze College ,Mulund, Mumbai	1000
2019	Ms. Aishwarya Deshmukh	One day Workshop on TYBSc Botany Syllabus ,	M. D. College, Parel	500
2019	Dr. Urmila Kumavat	One day Workshop on	M. D. College, Parel	500

		TYBSc Botany Syllabus ,		
2019	Ms. Sumaiya A. Shaikh	One day Machine Learning Workshop Using python	K. J.Somaiya College,Vidyavihar Mumbai	1200
2019	Ms. Manasi Narkhede	Faculty Development Programme on "Shaping a Data Science Curriculum: Unleashing Potential of IoT,Machine Learning and Artificial Intelligence"	K. C. College Churechgate, Mumbai	500
2019	Ms. Divya Nair	Faculty Development Programme on "Shaping a Data Science Curriculum: Unleashing Potential of IoT,Machine Learning and Artificial Intelligence"	K. C. College Churechgate, Mumbai	500
2019	Ms. Mohini Kushwaha	One day seminar on `Vital elements for institutional quality improvement :Emphasis on Teaching-Learning and Student Support' organized by IQAC	K. M. Aagrawal College kalyan	500
2019	Ms. Tanzim Shaikh	Workshop on Data organisation in revised Accreditation framework of NAAC	Vidyalankar Institute of technology Mumbai	1000
2019	Ms. Umalaxmi Patne	Workshop on Data organisation in revised Accreditation	Vidyalankar Institute of technology Mumbai	1000

		framework of NAAC		
2019	Dr. A. S Goswami-Giri	Workshop on Data organisation in revised Accreditation framework of NAAC	Vidyalankar Institute of technology Mumbai	1000
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6.3.2 – Number of professional development / administrative training programmes organized by the College for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2020	Webinar on An Introduction to ORCID	NA	01/06/2020	01/06/2020	53	Nil
2020	Webinar on The Patenting Process	NA	06/06/2020	06/06/2020	57	Nil
2020	Understanding Journal Indexing and citation Database	NA	13/06/2020	13/06/2020	85	Nil
2020	NA	Webinar on Resilience and mental well being	21/06/2020	21/06/2020	Nil	12
2020	Basic Understanding and Applications of drawing Softwares	NA	26/06/2020	26/06/2020	77	Nil
2019	Workshop on Research based pedagogical Tool	NA	30/08/2019	30/08/2019	79	Nil
2020	NA	Online Soft Skill	17/04/2020	22/04/2020	Nil	22

6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
UGC Sponsored Refresher Course in Mathematics,	5	19/08/2020	31/12/2020	14
UGC sponsored short term course Development in in advanced drug delivery system and drug discovery to treat life learning diseases	1	22/06/2020	27/06/2020	6
Two Weeks Faculty Development Programme onMANAGING ONLINE CLASSES and CO-CREATING MOOCS:2.0	4	18/05/2020	30/06/2020	17
Four week MOOC program on Cooperative learning Pedagogy	1	22/05/2020	18/06/2020	28
One week online multi-disciplinary faculty development programme on Moocs, e content development and OER	2	28/05/2020	03/06/2020	6

6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teaching		Non-teaching	
Permanent	Full Time	Permanent	Full Time
Nill	67	Nill	40

### 6.3.5 – Welfare schemes for

Teaching	Non-teaching	Students
<ul style="list-style-type: none"> <li>• Yoga classes.</li> <li>• With pay Duty leave given to attend seminar/ conferences/ workshops.</li> <li>• Staff felicitation on retirement and appreciation for good work</li> <li>• Felicitation and appreciation on winning awards and competitions and on award of research grants.</li> <li>• Teachers are appreciated for their achievements annually.</li> <li>• RO water facility available,</li> <li>• Medical health camp.</li> <li>• VPM's Employees' Coop. Credit Society, Loan Facility.</li> <li>• Awareness lectures for physical, mental health and wealth.</li> <li>• VPM publishes monthly magazine 'Disha' from 1996 which serves as a platform for sharing expressions of management and VPM staff.</li> <li>• Intercampus library facilities, Competitive Examination books are available</li> <li>• In case of emergency college has association with Dr. Bedekar hospital, Thane.</li> <li>• Well-equipped gymkhana to increase physical wellbeing.</li> <li>• Recreation activity like Carom Club, Acharya Abhinav Katta open theater for swaranjali.</li> <li>• Gymkhana facility, Gymkhana arranges sports day for teaching staff and felicitation of winners.</li> </ul>	<ul style="list-style-type: none"> <li>• Yoga classes.</li> <li>• Staff felicitation on retirement, RO water facility available,</li> <li>Medical health camp.</li> <li>• VPM's Employees' Coop. Credit Society, Loan Facility, Interest free Festival advance is given.</li> <li>• Awareness lectures for physical mental health and wealth.</li> <li>Gymkhana facility.</li> <li>• VPM publishes monthly magazine 'Disha' from 1996 which serves as a platform for sharing expressions of management and VPM staff.</li> <li>• Intercampus library facilities, Uniform is given for unaided class IV employees, Gum boots and rain coats are given to watchmen.</li> <li>• Safety measures are provided with gloves and safety goggles.</li> <li>• In case of emergency college has association with Dr. Bedekar hospital, Thane.</li> <li>• Well-equipped gymkhana to increase physical strength.</li> <li>• Recreation activity like Carom Club Acharya Abhinav Katta for Swaranjali.</li> <li>• Gymkhana arranges sports day for nonteaching staff and felicitation of winners.</li> </ul>	<ul style="list-style-type: none"> <li>• Yoga classes, Book bank facility for low financial income group, meritorious students and unaided courses along with reserve category students.</li> <li>• Intercampus library facilities,</li> <li>• Competitive Examination books and study facility.</li> <li>• Annual magazine 'Sanyuja' published by BNBCS from 1976 which serves as platform for expressing hidden literary talents of students.</li> <li>• Railway Concessions for travel/and commuting.</li> <li>• Two security gates under observation of security guards and smart entry.</li> <li>• Jnanapath , College Katta and Acharya Abhinav Katta for recreation activity.</li> <li>• Well-equipped ladies/girls common room.</li> <li>• Special coaching facility for various games.</li> <li>• Disposal sanitary napkin vending machine in ladies common room.</li> <li>• International / National level winners also are felicitated,</li> <li>• TA and refreshment allowance are paid to the students for participation in extracurricular activities.</li> <li>• RO Purified water facility available</li> <li>• Medical health camp.</li> <li>• In case of emergency college has association with Dr. Bedekar hospital, Thane.</li> <li>• Well-equipped gymkhana to increase physical wellbeing.</li> <li>• In medical emergency college has association with Dr. Bedekar Hospital, Thane.</li> <li>• Social Awareness programme through NSS,</li> </ul>

NCC, WDC, DLLE  
Counselling services, •  
Literary association to  
promote reading habits,  
writing skills etc. • E-  
passes issued to attend  
cultural event 'Akanksha'  
at Gadkari Rangaytan.

#### 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

BNBCS conducts internal and external financial audits regularly to monitor financial balance and transparency in accounts. This year in addition to internal audits, Government, Zilla Parishad (Z.P.) and Joint Director (J.D.) audits, University and UGC authorities were conducted by IQAC of College. Qualified chartered accountant internal auditor takes a sight quarterly at the planning and actual functioning of the budget to minimize the errors. An external financial audit by chartered accountant is conducted Periodically.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose
Mangroves cell	144000	To isolated industrially important enzyme producing Microorganism
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6.4.3 – Total corpus fund generated

843122
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#### 6.5 – Internal Quality Assurance System

6.5.1 – Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	University of Mumbai and UGC, Autonomy committee	Yes	IQAC
Administrative	Yes	University of Mumbai and UGC, Autonomy committee	Yes	IQAC

6.5.2 – Activities and support from the Parent – Teacher Association (at least three)

Parent teacher meetings are conducted for all UG and PG courses. 1. Syllabus related feedback 2. Performance of the student, 3. Departmental activities etc. are discussed. 4. Suggestions and feedback taken from the parents and changes are implemented.

6.5.3 – Development programmes for support staff (at least three)

1. Soft communication skill with stakeholder 2. Our 22 support staff attended -

Soft skill training program organized by management so that they are able to handle the online admission and registration of students. 3. Mock visit was arranged to train the non teaching and support staff to face visits by various external committee visit

#### 6.5.4 – Post Accreditation initiative(s) (mention at least three)

a. Alumni Association actively functioning b. Introduced a stringent feedback analysis system c. Recognized ISO 9001:2015 Certificate-2019 d. Autonomy committee visited to the college e. University Academic audit has been conducted on 4th Feb 20 f. Regular internal audits such as green audit, teaching-learning audits, documentation audit, departmental and committee audits. g. Enhanced use of ICT by faculty in the teaching-learning process

#### 6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b) Participation in NIRF	Yes
c) ISO certification	Yes
d) NBA or any other quality audit	Yes

#### 6.5.6 – Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2019	Shaniwaree Vidnyanwaree	01/07/2019	01/07/2019	01/07/2019	8
2019	Educational and industrial visits by all departments	01/07/2019	01/07/2019	15/03/2020	510
2019	Constant motivation and guidance provided for designing of certificate and the Naipunya courses	05/07/2019	05/07/2019	05/07/2019	13
2019	Brain storming session for IQAC members	02/08/2019	02/08/2019	02/08/2019	12

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### CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES

#### 7.1 – Institutional Values and Social Responsibilities

7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of Participants
------------------------	-------------	-----------	------------------------



			Female	Male
Sexual harassment awareness programme	14/08/2019	14/08/2019	60	22
Lecture and Mime act for celebration of International day for Elimination of violence against women	25/11/2019	25/11/2019	67	16
Workshop on -Self defense	12/02/2020	12/02/2020	64	36
International women's day: Movie trailer review and discussion	07/03/2020	07/03/2020	24	10

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources
<p>Percentage of power requirement of the College met by the renewable energy sources: At present, the college is utilizing conventional electrical fixtures and majorly utilizing conventional energy resource. But in spite of this, college has taken initiative by sensitizing students and staff about fair usage and avoiding wastage of electricity and water. This was achieved by short information campaign addressed in every classroom and putting stickers in classrooms, staffrooms, labs and washrooms which reminds to switch off lights and taps, when not in use. Along with this BNBCS has taken some initiatives for spreading Environmental Consciousness and Sustainability. Energy Audit and Water Audit of the campus have been regularly conducted by the M.Sc. Environmental Science students as a part of their dissertation, for past 6 years. Unfortunately, this year due to lockdown during the pandemic, students could not complete data regarding energy and water consumption. These audits provide valuable information regarding usage and opportunities to improve. As a part of extension activity, On 21st July 2019, ten NSS volunteers participated in a Big Mumbai Clean-up drive organized by Khushiya Foundation. Total 15 kg of plastic waste was collected through this drive. In terms of environmental outreach activities, BNBCS has reached to society via Lecture series. In collaboration of NGO HOPE, college has started BNB-HOPE Eco-lecture series activity, where eminent personalities from the field of environment are invited to share their knowledge and expertise. These lectures are open and free to all students as well as any interested citizen. There have been 24 such lectures organized and they are popular among students and nature enthusiasts alike. These eco-friendly activities and (few also mentioned in 7.1.7) are conducted on regular basis, over the years. For cleanliness of the campus, college has been recipient of prestigious ECO-ROX award for green campus and has also awarded by 1st prize for Clean and Green Campus by Thane Municipal Corporation in 2019.</p>

7.1.3 – Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	Nil

Provision for lift	No	Nil
Ramp/Rails	Yes	Nil
Braille Software/facilities	No	Nil
Rest Rooms	Yes	Nil
Scribes for examination	Yes	Nil
Special skill development for differently abled students	No	Nil
Any other similar facility	No	Nil

#### 7.1.4 – Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadvantages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2019	Nil	1	21/07/2019	6	Big Mumbai Clean-Up drive with Khushiya Foundation.	20 kg of nondegradable waste was collected through this drive, Banks of thane creek and area around visarjan ghat were cleaned	22
2019	Nil	1	01/08/2019	8	Old clothes collection drive	Clothes and food items were donated to the children in orphanage and to the people who were trapped in the floods in	54

						Maharasht ra through proper channel.	
2019	Nill	1	14/08/2 019	2	Rakshab andhan	volunte ers tied Rakhis to Officers and gover nment employees	50
2019	Nill	1	14/08/2 019	2	Cleanli ness Drive was.	cleaned the college campus se parating plastic and biode gradable waste aside. created awareness in students	20
2019	Nill	1	14/08/2 019	4	Street play -Swa chchhta Abhiyaan	awareness among people about the harmful effects of plastic through their street play and about waste man agement.	15
2019	Nill	1	15/08/2 019	8	Tree pl antation	planted around 100 saplings in the area of the Air Force station and did m aintenanc e and gardening of other	43

						plants.	
2019	Nill	1	18/08/2019	8	Tree plantation	planted around 150 saplings with	30
2019	Nill	1	18/08/2019	8	Tree plantation	'HARIYALI NGO' along with NSS UNIT on at Khandi talao (Mowgli che Talao), I lthanpada Digha..	30
2019	Nill	1	06/09/2019	6	Event management	Helping people and police for smooth conduct of Ganpati immersion	15
2019	Nill	1	08/09/2019	6	Crowd controlling	helping police officers. to maintain discipline	15
<a href="#">View File</a>							

7.1.5 – Human Values and Professional Ethics Code of conduct (handbooks) for various stakeholders

Title	Date of publication	Follow up(max 100 words)
College brochure-2019-20	01/04/2019	College brochure provides students with guidelines, rules and regulations and code of conduct as per the University of Mumbai, Maharashtra Act -2005(238/9), 2016 2017 related to the functioning of college. Information related to oath, various courses, fees structure and its schedule, admission, scholarship and endowment

		prize, library, co and extracurricular activities, anti-ragging, counselling and mentor, etc. is provided. College brochures are updated every year in the month of June before the start of academic year.
ISO Manual	28/05/2019	Control and uncontrolled issues along with Standard Operating Procedure of College are mentioned. According to the 7th pay commission for Teaching February 20, 2019 Salary - 2019/Ref No. 8 /Service 1 and Non-teaching February 22, 2019 Salary - 1219/Ref No. 19 /19/DNT 3 role and responsibility of Principal, Vice Principal, IQAC coordinator, Heads, In-charges of Computer and Management System, Teachers, Librarian, Senior Clerk, Committee coordinators, various Council member, Examination, Admission and Evaluation process, WDC, Anti Ragging, Internal Compliant cell, Special Cell, DLLE, RTI etc. are performed as per the revision of Maharashtra University Act from time to time
Display of Code of conduct for students	06/11/2019	Code of conducted is displayed in the college campus such that it is easily accessible to students. It is a small effort taken by the college to constantly remind the students about maintaining college decorum.
Display of emergency numbers	06/11/2019	Emergency numbers were displayed at the entry gate to get quick access, in case of accidents / mishaps.
Handbook for Non-	01/08/2019	For smooth functioning

teaching Staff		of college office, responsibilities and code of conduct for Non-teaching staff members are available in handbook format in college office.
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#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants
International Yoga Day	21/06/2019	21/06/2019	85
Vasundhara Divas	15/07/2019	15/07/2019	100
NSS Orientation Program	23/07/2019	27/07/2019	180
NSS Orientation Program	09/08/2019	09/08/2019	126
Voter Awareness Program	03/10/2019	03/10/2019	50
Raksha Bandhan Celebration	14/08/2019	14/08/2019	80
Independence Day Celebration	15/08/2019	15/08/2019	215
Sadbhawana Divas	22/08/2019	22/09/2019	123
Ek Bharat Shreshta Bharat	29/08/2019	29/08/2019	80
Helping the disabled	13/09/2019	17/09/2019	5
<a href="#">View File</a>			

#### 7.1.7 – Initiatives taken by the institution to make the campus eco-friendly (at least five)

- BNBCS has 13.5 acres of large campus and a part of it has been systematically designed to make it a 'Green Campus'. There are old trees, well maintained gardens and pathways all along the campus.
- In addition to this, the college has developed a butterfly garden in the year 2015-16 which is well maintained facility where various plants essential for the butterflies have specifically studies and planted. The butterflies in the campus have been monitored by the staff since year 2000. Development of butterfly garden has led to appreciable leap in campus butterfly species from 52 to over 100.
- The college has always been in the forefront in terms of reducing Carbon footprint and striving to make the campus ecofriendly. The Solid Waste is a very broad term and cover a plethora of types of wastes. Various types of solid waste get collected such as leaf litter, dried sticks and other garden waste, from the planted trees, maintained gardens and pathways throughout the campus is fed to the active four chambered Bio-compost unit for composting. This is done on fairly daily basis which not only dispose off the waste in environment friendly manner but also generates around 680 kg of bio-compost per year which is again applied to trees and plants in the garden there by reducing the cost of additional fertilizer. Some part of this waste is also used in a small-scale vermicomposting unit maintained by Dept. of Environmental Science which also produces the organic manure.
- The college has also been associated with Thane Municipal Corporation for plastic waste management. Students and staff are made aware of this initiative are oriented to discard their plastic properly in the bins. Plastic waste collected from all over the college is separated into bins and after

sufficient amount is collected, it is handed over to TMC which either gets recycled or converted into biofuel at the municipal facility. • Other important component of the solid waste i.e. Electronic waste is also a major cause of pollution. The college started the E-waste collection drives since 2018 to efficiently manage e waste but not just at college but at societal level to reach and sensitize the citizens. The college organizes E-waste collection drives every 6 months, the word of which is advertised to students, staff and sister institutes in the campus via posters and citizens, acquaintances, groups via social media to ensure public reach. Students of Environmental Science, Wildlife Management, NSS and NCC manage the collection and keep detail record of waste and its donor. The e waste thus collected is recycled and proceedings are donated to NGOs working for environment. College has conducted five such drives till now and successfully prevented more than 4 tons of e-waste from going into environment.

## 7.2 – Best Practices

### 7.2.1 – Describe at least two institutional best practices

In continuation with past best practices for the year 2019-20, we observed the following two best practices: 1. Intercollegiate creative platform 'SRUJAN' 2. Symposium organized as A unique tribute to Legendary leadership

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

<https://www.vpnmthane.org/BNB/Best%20Practices.aspx>

## 7.3 – Institutional Distinctiveness

### 7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

"To mould students into rational thinkers, competent workers and socially aware citizens" is the mission with which BNBCS is consciously striding. Educators at BNBCS believe the expression of Mahatma Gandhi which says "education is the basic tool for the development of consciousness and reconstitution of the society". To have better society of tomorrow, one needs to ensure the value inculcation happen at young age which would result in creation of social awareness. Social awareness encompasses having an in-depth understanding of societal and communal formats, environments, struggles, norms and cultures. The socially aware generation would Contribute positively toward solving your society's problems in a most effective way. The development of social awareness is most successful at a young age through a combination of traditional education and co-curricular and extracurricular programs designed to enrich the learning of students through various participative community activities. In today's world, environmental awareness has gained the importance like never before. And It has become one of the key elements of social awareness. To inculcate the same, NSS committee with collaborations and linkages with many renowned NGOs organized and executed numerous programs. Cleanliness Drive Tree plantation events at four different locations with NGO Hariyali, Big Mumbai Clean-Up drive, cleanliness drive, solid waste management activity, e-waste collection drive are the activities to name a few where participative learning helped students gain lot of practical 'know how' for providing solutions to the problems - communities are facing. Guest lectures organized on plastic waste and its management provided the forum for students to interact with the experts in the field. Another related field is 'community health'. Students got sensitized about the problems HIV positive individuals face while surviving with community. To sensitise community with respect to the social stigma associated with the disease, the NSS volunteers participated in awareness campaign. Similarly, students were motivated to contribute their service for

pulse polio awareness program which was organised in collaboration with Rotary Club Of Thane. Blood donation camps were also organized in the college. Though located in urban areas the students were made aware about the superstitions that make societies vulnerable to mishaps through organisation of Guest lecture on 'Superstition Is The Death Of A Thinking Mind'. They were made aware about the daily struggle the volunteers face while working in society for 'Andhshraddha nirmulan' In order to Inculcate the value of 'Donating and supporting the needy and less fortunate members of society' an Old Cloth Collection drive was organized in August 2019 by N.S.S Unit in collaboration with NCC unit of the College. The collections were donated to the children in orphanage and to the people who were trapped in the floods in Maharashtra. All the mentioned and many such activities are helping in participative learning of masses. Each of these events are conducted in college have specific objective of shaping a life of socially oriented, capable youth. An overwhelming response and participation of students was observed in all activities that were conducted throughout the year.

Provide the weblink of the institution

<https://www.vpmthane.org/BNB/AboutCollege.aspx>

## 8.Future Plans of Actions for Next Academic Year

In continuation with last year activities following plans are designed to be observe the effective implementation of autonomy:-

- To modify Syllabus relevant to the current needs.
- To modify examination system
- To prepare quality manual for effective functioning of examinations
- To conduct workshops on curriculum development as societal needs for teaching faculty.
- To conduct Induction programme for the students as per the UGC guidelines
- To conduct Induction programs for newly appointed faculty members
- To organize Faculty Development program.
- To motivate students for participating in projects offered by commercial settings or professional institutions.
- To strengthen the Academia Industry interphase by motivating individual departments to work towards collaborative projects/ Internships.
- To undertake various measures for effective record keeping
- To continue internal audits- teaching learning, administrative, dept. and committees, students performance outcome etc.
- To encourage and help departments to organize workshops / conferences for the benefit of students and teachers.
- To motivate teachers for accelerating the Competitive Exam Guidance activity.
- To encourage students for participating at national and international forums in different categories
- To apply for quality awards.
- To improve activities of placement cell
- To rejuvenate alumini
- To conduct Induction programs for newly admitted students
- To conduct Universal Human values programme for students
- To conduct leadership development activities for students
- To upgrade capabilities and infrastructure for conducting online activities.