PEER TEAM REPORT ON

Institutional 3rd Cycle Accreditation of

Vidya Prasarak Mandal's B. N. Bandodkar College of Science, Thane Place: Thane; Dist: Thane; Pin:- 400 601, State: Maharashtra

> Visit Dates 5th -7th October 2015



National Assessment and Accreditation Council P. O. Box No. 1075, Nagarbhavi, Bangalore -560072, Karnataka, India

9. PEER TEAM REPORT ON

Institutional Accreditation of Vidya Prasarak Mandal's

B. N. Bandodkar College of Science, Thane (3rd Cycle) Place: Thane; Dist: Thane; Pin:- 400 601, State: Maharashtra

| Section I: GENERAL | Information | | |
|--|--|--|--|
| 1.1 Name & Address of the Institution: | Vidya Prasark Mandal's B. N. Bandodkar College of Science Thane – 400 601, Dist. Thane | | |
| 1.2 Year of Establishment: | 1969 | | |
| 1.3 Current Academic Activities at the Institution (Numbers): | UG:13; PG:15 | | |
| Faculties / Schools: | 01 | | |
| • Departments / Centres: | 14 | | |
| • Programmes / Courses offered: | UG: 13; M.Sc. (By Papers): 05; M.Sc.(By Research): 05; Ph. D.: 05 | | |
| Permanent Faculty Members: | 34 | | |
| Permanent Support Staff: | 50 | | |
| • Students: | 1768 as on October 05, 2015 | | |
| 1.4 Three major features in the institutional Context (As perceived by the Peer Team): | One of the most reputed science colleges in the region. Good physical and infrastructural facilities. Excellent work culture and good academic ambience. | | |
| 1.5 Dates of visit of the Peer Team (A detailed visit schedule may be included as Annexure): | 05 th – 07 th October, 2015 | | |
| 1.6 Composition of the Peer Team which undertook the on-site visit: | | | |
| Chairperson | Prof. R.M. RANGANATH | | |
| Member Co-ordinator | Prof. D. CHANDRA SEKHARA REDDY | | |
| Member | Prof. R.L. MATHUR | | |
| Assistant Adviser, NAAC: | Dr. GANESH HEGDE | | |
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| Section II: CRITERION WISE ANALYSIS | Observations (Strengths and / or Weaknesses) on Key-Aspects | | |
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| | (Please limit to three major ones for each and use telegraphic language (It is not necessary to indicate all the three bullets each time; write only the relevant ones) | | |
| 2.1 Curricular Aspects: | | | |
| 2.1.1 Curricular Planning and Implementation: | • The college adopts curricula designed and developed by the affiliating university, University of Mumbai. | | |
| | Adequate measures taken for effective curriculum delivery and implementation. | | |
| | • One Academic council member and Four senior faculty members, who are members of Board of Studies of the University take part in the design and development of the curriculum. | | |
| 2.1.2 Academic Flexibility: | Choice Based Credit System yet to be introduced. | | |
| | • Limited academic flexibility exists in terms of number of subject combinations. | | |
| | Nearly 15 certificate courses offered as part of additional skill development programmes. | | |
| 2.1.3 Curriculum Enrichment: | Several programmes conducted/certificate courses offered to enrich holistic development of students. | | |
| | • Adequate measures taken to supplement the University's curriculum to ensure that the academic programmes and Institution's goals and objectives are integrated. | | |
| | Value addition accomplished through different programmes. | | |
| 2.1.4 Feedback System: | • 22 members of senior faculty participate in the design and development of the curriculum. | | |
| | • A Computerized mechanism exists for the collection of feedback on curriculum from the students. | | |
| | Feedback analyzed and conveyed to the concerned teachers. | | |
| 2.2 Teaching-Learning and Evaluation: | | | |
| 2.2.1 Student Enrolment and Profile: | • Widely publicized, transparent and merit based on-line admission process. | | |
| | • Implementation of reservation policy of the State Government reflects National commitment to diversity and inclusion. | | |
| | • A structured mechanism is in place to review the admission process and student profiles annually. | | |
| * | • Approximately 50% of the students admitted are girls. | | |

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| 2.2.2 Catering to Student Diversity: | • A mechanism is in place to assess the student's needs in terms of knowledge and skills. | | |
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| | • Remedial classes conducted and bridge courses offered (Ex: Personality development courses/English speaking courses etc.) to bridge the knowledge gap of the students enrolled. | | |
| | Additional measures taken to identify and respond to special educational needs of slow and advanced learners. | | |
| 2.2.3 Teaching-Learning Process: | Academic calendar, teaching plans and evaluation blueprints prepared and distributed to students at the beginning of the academic year. | | |
| | Learning made more student-centric by introducing projects, field trips, role play, debates, seminars etc. | | |
| | • Traditional teaching methods followed in addition to ICT in teaching learning process. | | |
| | • Optimal use of library resources to augment teaching learning process. | | |
| 2.2.4 Teacher Quality: | • Faculty recruitment on merit basis and as per the guidelines of the UGC and State Government. | | |
| | • Out of 39 faculty, 18 are Ph.D and 10 are M.Phil. degree holders. | | |
| | • Many faculty members attended refresher courses / orientation programmes during the last four years. | | |
| 2.2.5 Evaluation Process and Reforms: | • Adequate measures taken to ensure the students and the faculty are aware of the evaluation processes. | | |
| | • A mechanism is in place to ensure effective implementation of the evaluation reforms of the University and those initiated by the institution. | | |
| | The faculty and the institution use assessment / evaluation as an indicator for evaluating student performance/achievements. | | |
| | • Established norms/procedures followed for redressal of grievances with regard to evaluation. | | |
| 2.2.6 Student Performance and Learning Outcomes: | Student performance monitored through internal tests and semester end examinations. | | |
| | • Traditional / ICT based teaching-learning strategies adopted to achieve intended learning outcomes. | | |
| | A formal mechanism needs to be established to collect and analyze data on student performance and learning outcomes. | | |
| | • A provision exists to publish student's research work from selected projects. | | |
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| 2.3 Research, Consultancy and Extension: | |
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| 2.3.1 Promotion of Research: | • Research committee constituted to oversee research activities. |
| | • Appropriate measures taken to facilitate smooth progress and implementation of research projects. |
| | • Institute-industry collaboration needs to be promoted further to get external funding for research. |
| | • Measures to be taken to provide seed money to the faculty to promote research. |
| 2.3.2 Resource Mobilization for Research: | • The college received 'O' level grants (Rs. One Crore) from DST (FIST) and funds (Rs. One Crore) from DBT under "STAR College Scheme". |
| | Budget allocation yet to be made for carrying out research activities. |
| | • Resource mobilization for research is mainly through UGC Major (5 Nos.) and Minor (4 Nos.) research projects and projects from University of Mumbai (1 Nos). |
| 2.3.3 Research Facilities: | • Only a few departments have well developed research facilities. |
| | • Steps taken to ensure optimal use of available equipment and general facilities. |
| | • Initiatives to be taken to garner special grants from the industry and other PPP sources. |
| 2.3.4 Research Publications and Awards: | Four staff members applied for patents. |
| | • 167 research articles published in National and International journals during the last five years. |
| | • One staff member from the Department of Chemistr published papers with good impact factor. |
| 2.3.5 Consultancy: | • Institute-industry interface yet to be established. |
| | • Consultancy services offered to Government / NGOs and generated Rs. 78,000/- during the last four years. |
| | • The institution needs to evolve a stated policy to promote consultancy. |
| 2.3.6 Extension Activities and Institutional Social Responsibility: | • Institution-neighbourhood-community network promoted through NSS / NCC. |
| | Additional outreach programmes conducted in association with several NGOs / Research Organizations and Government of Maharashtra programmes. |
| | • Two trophies awarded from the State Government for implementing "Jagar Janivancha" programmes. |
| 2.3.7 Collaboration: | • A formal mechanism needs to be established to collaborate and interact with research laboratories / industry to promote research activity. |

| | • 15 State / National conferences organized during the last four years. | | |
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| | • MoUs signed with three organizations. | | |
| 2.4 Infrastructure and Learning Resources: | ** | | |
| 2.4.1 Physical Facilities: | • 20 class rooms and 20 laboratories available to facilitate effective teaching-learning process. | | |
| | • Sufficient infrastructural facilities provided for co- curricular and extracurricular activities. | | |
| | • Adequate common campus facilities available for students. | | |
| 2.4.2 Library as a Learning Resource: | • The library has a total built up area of 353 sq.mts and ~ 27139 books, 14000 book titles and 43 journals with a seating capacity of 125. | | |
| | • Fully automated and computerized library having facilities such as DELNET, INFLIBNET, OPAC, E-journals, E-publications etc. | | |
| | • Specialized services provided include reprography, Inter Library Loan, download and printing. | | |
| 2.4.3 IT Infrastructure: | • A total of 229 computers available and free of cost Internet/Wi-Fi facility provided to students and staff. | | |
| | • Year-wise budget provision made for procurement, upgradation, deployment and maintenance of computers. | | |
| | • ICT tools provided to each department for effective teaching-learning process. | | |
| 2.4.4 Maintenance of Campus Facilities: | Necessary budget allocations made for upkeep and maintenance of physical facilities. | | |
| | • Management plays an important role in maintenance and upkeep of infrastructural facilities and equipment. | | |
| | Necessary steps taken for location, upkeep and maintenance of sensitive equipment. | | |
| 2.5 Student Support and Progression: | | | |
| 2.5.1 Student Mentoring and Support: | • An updated prospectus comprising information regarding admission procedure, course structure, academic schedules, scholarships etc. published at the beginning of every academic year. College website also updated on a regular basis. | | |
| | • Students belonging to SC/ST/BC/ OBC categories receive Government fellowships every year. | | |
| | • Specific support services such as remedial coaching, grievance redressal cell, placement cell, journal club, bridge courses, women development cell etc. are available. | | |

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| 2.5.2 Student Progression: | • Student progression from UG to PG is around 64%. | | |
| | • Subject wise pass percentage in relation to University apparently satisfactory. | | |
| | • Special assistance provided to the students who are at risk of failure or drop out. | | |
| 2.5.3 Student Participation and Activities: | • Very good student participation in sports and games, cultural and extension activities. | | |
| | Sizeable number of students won Medals / Prizes / Awards at University/State/National level competitions in curricular /extracurricular activities. | | |
| | Two girl students won Gold medals at University / National level competitions and underwent training in Australia in Gymnastics. | | |
| | Active participation of Student Council in organizing cocurricular and extracurricular activities. | | |
| 2.6 Governance, Leadership and Management: | | | |
| 2.6.1 Institutional Vision and Leadership: | • The Vision and Mission statements fully reflect the Institutions goals and objectives. | | |
| | • The Management and the Principal provide effective academic and administrative leadership. | | |
| | • Informal feedback obtained from the stakeholders used for monitoring and evaluation of the policies of the institution. | | |
| | • Participative management practiced in academic and administrative spheres. | | |
| 2.6.2 Strategy Development and Deployment: | • Perspective short term and long term plans prepared for overall development of the institution. | | |
| | • A well defined internal organizational structure and decision making processes exist to oversee quality improvement strategies of the institution. | | |
| | •Academic audit conducted by external experts to identify developmental goals. | | |
| 2.6.3 Faculty Empowerment Strategies: | Adequate measures taken to enhance professional development of teaching and non-teaching staff. | | |
| - | • Faculty encouraged to empower themselves by participating in orientation programmes / refresher courses / workshops / conferences etc. | | |
| ÷ | • Annual Academic Performance Index (API) reports prepared every year for faculty evaluation. | | |
| 2.6.4 Financial Management and Resource Mobilization: | Well defined and efficient financial management system exists. | | |
| | • Internal and external auditing of accounts done every year. | | |
| e e e e e e e e e e e e e e e e e e e | • Concerted efforts to be made to mobilize resources form industry/external funding agencies. | | |
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| 2.6.5 Internal Quality Assurance System: | • IQAC takes active part in academic development and quality assurance processes. | | |
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| | • Internal and external academic audit undertaken to improve institutional processes. | | |
| | A mechanism is in place to review and monitor teaching learning process. | | |
| 2.7 Innovations and Best Practices: | | | |
| 2.7.1 Environment Consciousness: | Green and clean campus. | | |
| | • Appropriate measures taken to make the campus eco- friendly (ex: tree plantation, hazardous waste management, e-waste management, solid waste management etc.). | | |
| | • NGOs in collaboration with the institution promote environmental consciousness amongst the students. | | |
| 2.7.2 Innovations: | • Four patents filed. | | |
| | • Publication of e-journal J-BNB. | | |
| | Assigning PRN to all students for monitoring the academic progress. | | |
| 2.7.3 Best Practices: | Association with NGOs to enhance institutional social responsibility. | | |
| | • Imparting value education through "Jagar Janivancha", Yoga and other value added courses. | | |
| Section III: OVERALL ANALYSIS | Observations (Please limit to five major ones for each and | | |
| | use telegraphic language) (It is not necessary to denote all the five bullets for each) | | |
| 3.1 Institutional Strengths: | Strategic location and good academic ambience. | | |
| | • A Principal leading by example, committed faculty, supportive staff and Management. | | |
| | Good student support services. | | |
| | • Award of "Best College" status by UOM. | | |
| | Short listed for CPE status by UOM | | |
| 3.2 Institutional Weaknesses: | Attrition of unaided staff in some courses. | | |
| | Absence of a robust research culture. | | |
| | Absence of a formal mechanism to promote consultancy. | | |
| | • Less than adequate interaction with Industry. | | |
| 3.3 Institutional Opportunities: | To obtain autonomous status. | | |
| | Conducive ambience for introduction of additional viable job oriented / diploma / certificate courses. | | |
| | • Highly placed influential Alumni and local philanthropists. | | |

| | Academic linkage for consultancy and collaborative research. | | |
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| | • Effective utilization of the academic ambience to ensure global competitiveness. | | |
| 3.4 Institutional Challenges: | Retaining the past tradition and present reputation. | | |
| | Changing the mind set of students towards innovation and change. | | |
| | • Mobilization of additional resources for furtherance of institutional processes. | | |
| | Creation of additional physical facilities for new courses. | | |

Section IV: RECOMMENDATIONS FOR QUALITY ENHANCEMENT OF THE INSTITUTION

(Please limit to ten major ones and use telegraphic language)
(It is not necessary to indicate all the ten bullets)

- Initiate steps to introduce Choice Based Credit System.
- Take measures to obtain autonomous status on priority basis.
- Establish English language laboratory for improving communication skills of students.
- Motivate teachers to get major research projects from National funding agencies such as UGC, DST, DBT, MoES, CSIR etc.
- Establish linkages with Mumbai Federation of Commerce and Industry to enhance employment opportunities of students.
- Take steps to see that IQAC plays a proactive role in promoting overall development of the institution.
- Take measures to promote research and consultancy.
- Take additional measures to promote institute-community-interaction.
- Take measures to conduct academic audit on a regular basis.
- Introduce a stringent feedback analysis system.
- Develop the library as a hub of modern teaching learning process.

I agree with the Observations of the Peer Team as mentioned in this report.

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Signature of the Head of the Institution

Principal
V.P.M.'s
B.N. Bandodkar College of Science
Thane (W.)

Seal of the Institution

Signatures of the Peer Team Members:

| Name and Designation | | Signature with date |
|--|-------------------------------|---------------------|
| Prof. R.M. RANGANATH (Former Registrar, Bangalore University& Professor Dept. of Botany) Resi: No.112, 8 th 'B' Main Road, 4 th Block Jayanagar, Near Ganesha Temple, Bangalore-560 011, Karnataka | Chairperson | PM 7/16/15 |
| Prof. D. CHANDRA SEKHARA REDDY UGC Emeritus Fellow Department of Fishery Science and Aquaculture Sri Venkateswara University, Tirupati-517 502, Andhra Pradesh | Member Co- ordinator | - Barmy Highs |
| Prof. R.L. MATHUR (Former Principal, Lachoo Memorial College of Science & Technology) Resi: B-35, Shastri Nagar Jodhpur-342 003, Rajasthan | Member | Janmes . |
| Dr. Dr. GANESH HEGDE | Assistant Adviser, NAAC | |

Place: Thane, Maharashtra

Date:

| | | . PROFILE OF THE INST | TITUTION | | |
|------------------------------|--|--|-----------------|------------------------|--|
| Nam | Name of the Institution Vidya Prasark Mandal's B.N. Bandodkar College of Science | | | | |
| | | Place: Thane, Pin-400 601. State: Maharashtra | | | |
| Date | s of visit | 05 th - 07 th October, 2015 | | | |
| Affi | iating University | University of Mumbai | | | |
| Stati | is of the College | Affiliated: \(\square\) Constituent: \(\Autonomous: \) | | | |
| Fina | ncial Category | Grant-in-aid \(\sqrt{\) Government funded Self-financing \(\sqrt{\)} | | | |
| Туре | e of College | Men Women Co-education √ | | | |
| No. | of Departments | Arts: N.A. Science: 14 Commerce: N.A. | | | |
| NI- | -C D | Any other: | Total: 14 | | |
| INO. | of Programmes | | G: 10 | M. Phil: | |
| Year | of Establishment | 1969 | Any other: | Total: | |
| | Crecognition | Under 2 (f) and 12 B: Yes | | | |
| Location of the College | | Urban √ Semi-urban | | bal | |
| Area | of the campus (in acres) | 13.5 | | | |
| No. | of Teachers | Men | Women | Total | |
| Pern | nanent: | 19 | 15 | 34 | |
| | porary: | 18 | 35 | 53 | |
| | l no. of Teachers Ph. D: | 12 | _ 10 | 22 | |
| | l no. of Teachers M. Phil.: | 01 | 02 | 03 | |
| Total no. of Teachers P. G.: | | 24 | 38 | 62 | |
| No. of Non-teaching staff: | | Men | Women | Total | |
| Technical Staff: | | 49 | 03 | 52 | |
| | inistrative Staff: | 18 | 16 | 34 | |
| | of Students: | | | | |
| UG: | | 675 | 940 | 1615 | |
| PG: | | 50 | 74 | 124 | |
| M. P | hil: | N.A. | N.A. | N.A. | |
| PhD | | 13 | 16 | 29 | |
| Any | other: | | | | |
| | | Name | Sig | nature with date | |
| 1. | Chairperson: | Prof. R.M. Ranganath | Ruhster 7/10/15 | | |
| 2. | Member Coordinator: | Prof. D. Chandra Sekhara Reddy | Josep | Januar 7/10/15 | |
| 3. | Member: | Prof. R.L. Mathur | Janua - Flicht | | |
| 4. | Assistant Adviser, NAAC: | Dr. Ganesh Hegde | | | |
| | | SOUAR | | the Principal and Seal | |

P.P.M.'s
W.P.M.'s
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