

SELF-STUDY REPORT

(FOR RE-ACCREDITATION)

VOLUME – I

(Preface, Executive Summary, Profile of the University and Criteria-Wise Analytical Report)

Submitted by:



Nirma University
Sarkhej-Gandhinagar Highway, Ahmedabad- 382 481
Web Site: www.nirmauni.ac.in

Submitted to

Director

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

April 2015

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PREFACE

Nirma University, the first private state university of Gujarat and promoted by legendary industrialist and philanthropist Padma Shri Dr. Karsanbhai K. Patel, has moved from strength to strength and its commitment to quality is unwavering. This is why it went for the NAAC accreditation as soon as it became eligible for it. Now it is poised for the second cycle of accreditation.

Nirma University has six constituent institutions, i.e., Institute of Technology, Institute of Management, Institute of Pharmacy, Institute of Science, Institute of Law and Institute of Architecture. Another important institution of the University is Centre for Continuing Education that serves the needs of the existing students, outside students, executives and public at large.

The University is ranked among the top five private universities in the countries by prestigious magazines, like the Week in June 2014. Further, it is ranked as 6th best university among the top 25 universities in India by *Higher Education Review* in 2014. Its various institutions are also ranked among top professional colleges. For example, Institute of Management is consistently ranked among top 25 business schools by magazines like *Business Today*, *People Matters*, and *Outlook*. Similarly, Institute of Technology is ranked in the category of ‘Premier Engineering Colleges’ amongst the Best Engineering Colleges across the country by *The Education Post* in 2014. Further, it is listed in the category of Top Engineering Colleges of Super Excellence by *Competition Success Review* in 2013 and 2014. In addition, it is ranked at 12th in the *DataQuest* CMR T-School Survey 2014. The ISTE has given the Institute Best Chapter Award for the year 2008, 2009, 2010, 2011, 2012, 2013 and 2014. Moreover, the ISTE has given the Institute National Awards for the Best Teacher in Gujarat state in the year 2002, 2003, 2004, 2005, 2007, 2008, 2009, 2010, 2012 and 2013. The Fee Regulatory Committee of the state of Gujarat has categorised the Institute of Technology, Institute of Management and Institute of Pharmacy as A grade institutions.

During the assessment period, the University commenced Institute of Architecture in 2014 and launched B.Arch. programme. Institute of Management started an integrated BBA-MBA programme in 2013. Similarly, Institute of Technology started eight M.Tech. programmes as under:

- Instrumentation and Control (Control & Automation)
- Mechanical Engineering (Design Engineering)
- Mechanical Engineering (Computer Integrated Manufacturing)
- Electrical Engineering (Electrical Power Systems)
- Electronics and Communication Engineering (Embedded System)
- Computer Science & Engineering (Information & Network Security)
- Mechanical/Electrical / Chemical Engineering (Energy System)
- M.Tech. Programme - By Research (For all branches)

In the same vein, Institute of Law commenced one year LL.M. programmes in:

- Constitutional and Administrative Law
- Corporate and Commercial Law
- Criminal and Security Law
- Science, Technology and Law

- Legal Pedagogy and Research

The Institute of Pharmacy commenced the following M.Pharm. programmes in:

- Clinical Pharmacy
- Regulatory Affairs and Quality Assurance

Finally, the Institutes of Pharmacy and Science started the following Master programme:

- M.Sc. in Cosmetic Technology

The University adopted Outcome Based Education (OBE) and restructured the curricula of various undergraduate and postgraduate programmes in 2013. Further, it is consistently moving towards learner-centric education and focussing on developing faculty to meet new educational requirements. All institutes have focussed on blended learning and have used ICT creatively to enhance student learning. Faculty members have not only performed their roles as an instructor but also as a mentor to focus on the holistic development of the student. The University also reformed its examination system and decided to focus equally on formative and summative assessment.

The research focus of the University has been bolstered by providing greater funds and developmental opportunities to the faculty. Its various institutes have produced increasingly higher number of articles in national and international journals and filed a substantial number of patents. The Department of Science and Technology, Government of India, New Delhi provided SIRO recognition to the University. Further, it provided FIST grant to the Institute of Pharmacy. The University has closely worked with its recognised research centres and added value to them and benefitted from their expertise and recourses.

The University has constantly stressed on employability and entrepreneurship among the students. Its students are well placed in different industries and its interface with the industry is being fortified. This is why the University has become the most preferred educational institution in the region.

Quality assurance is a participative and systematic process. The University has worked constantly on quality assurance over last five years with different stakeholders, such as students, faculty, academic leaders, administrators, recruiters, industry experts and management representatives. Institutional leaders and IQAC co-ordinators have played important roles in promoting quality in their respective institutes. Finally, management has provided unequivocal support to various quality initiatives. I take this opportunity to express my heart-felt gratitude to one and all and hope that we shall continue our march to provide high quality education to our students and to supply world class graduates to our recruiters.

(Anup Kumar Singh, Ph.D.)

EXECUTIVE SUMMARY

Preamble:

Dr. Karsanbhai K. Patel, the internationally renowned entrepreneur and the founder of Nirma Industries, crystallized his long cherished dream of providing world class facilities through the foundation of Nirma Education and Research Foundation (NERF) in 1994. While establishing the NERF, the objects were defined which were subsequently translated into the Vision and the Mission statements of the University as mentioned underneath:

VISION

Shaping a better future for mankind by developing effective and socially responsible individuals and organizations.

MISSION

Nirma University emphasizes the all-round development of its students. It aims at producing not only good professionals but also good and worthy citizens of a great country, aiding in its overall progress and development. It endeavours to treat every student as an individual, to recognize their potential and to ensure that they receive the best preparation and training for achieving their career ambitions and life goals.

Starting the journey with the above Vision and Mission, it was decided to start the higher education programmes in engineering and technology and accordingly in the year 1995, Nirma Institute of Technology was established with an aim of imparting quality education at under graduate level in engineering and technology.

Thereafter, in 1996, the Institute of Management was established with full academic autonomy given by the AICTE to run post-graduate diploma programme.

In furtherance to the existing programmes, the Institute of Diploma Studies was incepted in the year 1997 to offer diploma programmes in engineering. The objective was to provide more practical exposure by giving it a unique edge over the other existing diploma programmes. Hence, the programmes offered were of four years instead of conventional three years programme. The Government of

Gujarat was kind enough to give the Institute a complete autonomy since its inception. There were separate Academic Council and Board of Studies in the Programme and the Chairmen of these academic bodies were from the industry.

As a natural consequence of the outstanding performance in their respective areas by the first three institutions, the Government of Gujarat, in 2003, approved the proposal of the NERF to grant the status of a University titled, 'Nirma University of Science and Technology (NUST)' under a special Act passed by the Gujarat State Legislative Assembly. The University Grants Commission (UGC) recognized the Nirma University of Science and Technology under the Section 2(f) of the UGC Act in 2004. While awarding the recognition U/s 2(f) of the UGC Act, a few observations were made by the visiting committee to be complied with. The compliance report was sent to the UGC and the commission in its meeting held on July 31, 2013 under Item No.5.03 has accepted the compliance report and conveyed to the University under its Letter No. 8-24/2012 (CPP-I/PU) dated August 23, 2013.

Having achieved success in the launch of first three Institutes and keeping in view the future requirements and dearth of quality institutions in other professional areas, the University conceptualised and founded four more institutions namely: Institute of Pharmacy in 2003, Institute of Science in 2004, Institute of Law in 2007 and Institute of Architecture in 2014.

With the view to expand beyond the scope of science and technology in the existing act, the University decided to send a proposal to the Government of Gujarat to amend the Act in terms of the scope in year 2007. The proposal of the University was accepted by the Government of Gujarat and the Act was amended in July 2009. The Act amended the name of the University as 'Nirma University' in place of Nirma University of Science and Technology. Subsequently the University approached UGC for the change of the nomenclature vide letter no. NU/AC/UGC/amended NU Act/09-1072 dated August 07, 2009. The UGC approval for the same has been granted vide letter no.9-29/2009(CPP-I/PU) dated December 17, 2014.

The Institutes under NERF opted to go for continuous self-assessment and hence all the Institutes under NERF went for accreditation by the National Board of Accreditation (NBA) and the NBA awarded to them grades between A and B. Consequently, after the establishment of the University, the process of self-assessment was initiated through different mechanisms. The University adopted the process of peer-review mechanism and invited the external agencies to assess the over-all quality standards of the University. Among such agencies was an expert committee from the Association of Indian Universities.

The University, though eager to approach the NAAC immediately after the inception, faced the limitation due to stipulation of the mandatory requirement of completion of five years of inception. However, immediately on completion of five years, the University approached NAAC in the year 2008 and obtained permission to apply for accreditation. The duly filled SSR was submitted to NAAC on April 17, 2009. In pursuance to that SSR, the NAAC Peer Team visited the University under the Chairmanship of Dr.R.Natarajan, Former Chairman, AICTE. At that time, the University being in nascent stage could not reach up to the expectation of the Peer Team, particularly in the area of research. Though the University had to its credit a number of completed and ongoing research undertakings yet it could not compete with the long-standing and established universities in terms of research. Even, in the grant-winning category from the government funding agencies, the University faced the bottleneck of not being under U/s 12(B) of the UGC Act. The seed money from the University could not be increased to a certain point as the fee structure for the programmes was stipulated by the Fee Regulatory Committee constituted by the Government. **In spite of having this constraint, the University could get the grade point of 2.93 and fell short of just 0.08 to get the grade A.** However, on the basis of the report of the Peer Team, the University has worked extensively to remove the deficiencies/weaknesses as pointed out by the NAAC. The comparative statement of progress made in this area of weaknesses is submitted herewith as Section I and II in separate chapter on page no. 25-37 (Action Taken Report on the Observations made by the NAAC Peer Team). Further, the University also ensured that the strengths pointed out by the NAAC Peer Team should not only to be sustained but also to be enhanced. Accordingly, utmost care was taken to

ensure that the University strengths do not go down. The information about the comparative statement of maintaining and enhancing the strengths is given in Section III, page no. 38-39 (Action Taken Report on the Observations made by the NAAC Peer Team).

Today, the under-graduate, post-graduate and doctoral level programmes offered by the constituent institutes of Nirma University are ranked highly by the industry, business magazines and the students. Innovation, excellence and quality are the driving forces on the campus and this has translated the vision of these institutions into a reality over a short period of time.

The criterion-wise summary is presented below:

Criterion – I: Curricular Aspects

Curriculum Design and Development:

- The University has adopted ‘Outcome Based Education (OBE)’ for all its programmes in 2013. The Programme Educational Objectives (PEOs) and the Programme Learning Outcomes (PLOs) of different programmes have been aligned with the Vision and Mission of the University.
- The University has a systematic process of curriculum design and development. It has a feedback mechanism where both internal and external stakeholders partake. In all the constituent institutions of the University, the faculty members deliberate in their group meetings over the suggestions received from various stakeholders. These are discussed at meetings of the respective Boards of Studies, which then send their recommendations to the Faculties of the respective discipline. These recommendations are further discussed at the Academic Council meetings and finally approved.
- The University follows the mandate of regulatory bodies for the development and / or restructuring the curriculum. At the same time, the curriculum of various programmes is benchmarked against the leading national institutes, like IITs, IIMs, NIPER, National Law University, etc.

Curriculum Enrichment:

- The curricula of the University across subjects and specializations emphasize

on global trends, emerging technologies, ethics, social values, self-development and relevant industry practices. Overall, the curriculum architecture consists of fundamental courses, core courses, enrichment courses, supplementary courses and advanced courses. In addition, there are elective courses. All these courses, put together, fulfil the needs of industries and the society.

- The University offers a variety of value-added and socially relevant courses. Several such courses are part of the regular curriculum. For many value-added/enrichment courses, the students are provided a menu from which they select as per their requirement and choice. A few examples in this regard are: Yoga, Ethics & Values, English and Communication Skills, Foreign Language, Critical Thinking, Creativity & Innovation, Entrepreneurship, Performing Arts, Engineering Economics, Law for Engineers, Drafting Skills, Moot Court Training, Human Rights Practice, etc. In addition to this, the ICT is an integral part of the curricula of all programmes.

Feedback on Curriculum:

- The institutes are in regular interaction with all the stakeholders, including industry experts and senior academicians for gathering systematic feedback of the various programmes, regarding the contents of the curriculum, emerging areas, electives, updating laboratory work, exposure to professional/industrial practices, communication skills, etc. Wherever necessary, students are also associated with these efforts.
- Reviewing and upgrading the curriculum is a continuous process. Accordingly, all under-graduate programmes have been revised in 2013-14, using Outcome Based Education philosophy. This is done with a view to develop global competencies among the students and to follow global best practices. Revised Bloom's Taxonomy is the basis for developing programme learning outcomes and course learning outcomes.

Interdisciplinary Programmes:

- The University has started three interdisciplinary programmes in last five years, namely (i) M.Tech. in Energy System (jointly run by the Departments of Chemical, Mechanical and Electrical Engineering), (ii) M.Sc. in Cosmetic

Technology (jointly run by the Institutes of Pharmacy and Science), (iii) LL.M. in Law, Science and Technology (jointly run by the Institutes of Law, Science and Technology).

Criterion – II: Teaching-Learning and Evaluation

Student Enrolment and Profile:

- At Nirma University, the admission procedures for all the programmes are transparent and as per the guidelines received from time to time from the AICTE/UGC/Govt. of Gujarat. Also, the University is one of the premier institutes of the country and has emerged as the favourite destination for the students seeking quality higher education.
- For admissions to all the UG programmes at Institute of Technology (50% seats), Institute of Pharmacy (85% seats) and Institute of Architecture (50% seats), the admissions are given by the Admission Committee for Professional Courses (ACPC), formed by the Government of Gujarat.

Orientation Programme for the Students:

- At the beginning of each academic year, a week-long orientation programme is organized for the newly admitted students. Parents are also invited to the orientation programmes. During the programme, the students are informed about the rules and regulations of the University. The University offers bridge courses based on the needs of the students in certain cases.

Teaching-Learning Process:

- The University has earned a name for quality education due to its well established academic system. The academic calendar for each year is notified in the beginning of each semester, and is adhered to. The students are required to have a minimum 85% of attendance in all the courses.
- The students can choose subjects from a wide range of elective courses, like Department Electives, Institute Electives and University Electives. Also, the institutes offer Additional / Value Added Courses, Supplementary Courses, Audit Courses, etc.
- The University has a well-established mechanism for teaching, learning and evaluation. All the institutes have their academic calendars for different

programmes. Also, the teaching plan is prepared based on the Teaching Scheme and the Syllabus of the courses.

- For most of the courses, the course coordinator prepares a course web page/course blog for the course. The webpage of the course / blog includes the introduction of the course, outcomes of the course, course structure, academic calendar, lesson planning, *inter se* weightage of evaluation, class-test schedule, hand-outs, assignments, other learning resources, and useful web links.
- Course evaluation is performed under two components. These components are identified as: Continuous Evaluation (CE) and Semester End Examination (SEE). The CE component includes: Term Assignments (TA), Laboratory and Practical Work (LPW), Class Test / Quiz, etc. Appropriate weightage is assigned to all the components and evaluation is performed throughout the semester.
- Depending on the subject, all the teachers use different mixes of pedagogical tools, such as lectures, case study, simulations, exercises, student presentations, industry visits, seminars, etc. Thus, there is ample scope of individual as well as interactive learning for each student. In addition, the laboratory work, computing and library facilities provide a great help to the learners.
- Virtual Laboratories (VLAB), e-learning resources and open educational resources, like NPTEL videos, Massive Online Open Courses (MOOCs), Spoken Tutorials, instructional videos, and TED Talks are being used in courses, wherever available.
- The University has a policy of inviting experts, eminent speakers to deliver special lectures, seminars, public lectures, etc.
- Ample opportunities for participation in co-curricular activities are provided to the students. These are conducted by the departments and also by various students' associations. A large number of students participate in competitions at national/international events held within or outside the University. This brings out the latent talents and skills of the students. The students participate in international ROBOCON, SAE BAJA, Business Events and Moot Court competitions every year and have won prizes several times.

- The students can submit their innovative ideas to the Idea Lab and can get funding for the same from the University.
- Formal as well as informal feedback is obtained for monitoring of course delivery. Towards the end of each semester, the structured feedback from the students is taken regarding the course and the instructor. The online form is given to the students and their feedback is collected. This feedback is analysed and informed to the respective faculty by the Head/Director.

Course Evaluation:

- At the University, apart from the semester end examinations, the students are continuously assessed through class-tests, projects, presentations, seminars, etc. These are the tools of formative assessment. Assessed answer scripts of the exams are shown to the students. All examination results are declared promptly. This is due to central assessment and computerization. Vetting of question papers is a mandatory requirement as per the University regulations, which is a strong quality control measure.
- For various UG and PG programmes, regular review of assignments/lab work, student attendance monitoring, class participation, informal feedback about each course/teacher are some of the steps to maintain quality. Progress of the students, formal feedback and reviews are discussed at weekly institute level meetings. Monitoring and evaluation of projects, internships, etc. are systematically followed as per the University guidelines.

Teacher Quality:

- The University has a well-qualified pool of human resources to meet the requirements of the curriculum. The University has a robust policy to attract qualified faculty by selecting them through the regular process, by invitation and in absentia. They can be given a higher start-up salary. Apart from many attractive perks, the relocation allowance is also given to them.
- The intellectual capital is the backbone of effective teaching, research, and mentoring. Out of a total 329 qualified faculty members, 119 faculty have Ph.D. degree, while 209 faculty have Master's degree. More than 95 faculty are pursuing Ph.D.

- All the faculty are recruited by direct selection and the selection is strictly based on merit. There is a provision to invite a person of eminence as Professor Emeritus / Research Chair. Ad hoc appointments or contractual appointments are made in lieu of faculty deputed for long duration.
- Further, for qualification improvement of the teachers, the University has continued a scheme of deputing faculty for higher studies with full salary at various premier institutes like, IITs / NITs. Under this scheme, by now, 25 faculty have got a Ph.D. degree, while 62 faculty have obtained a Master's degree. The faculty members with UG qualifications were admitted to the Split M.Tech. programmes of the University. Many faculty members are permitted to do Ph.D. from the University.

Criterion – III: Research, Consultancy and Extension

Promotion of Research:

- At the University, the research activities are governed by the Faculty of Doctoral Studies and Research and Academic Development & Research (ADR) Cell.
- The University has framed a systematic 'Research Policy', which provides guidelines for all research related activities.
- The University encourages research through:
 - i) offering Ph.D. programmes
 - ii) establishing laboratories in highly specialized areas, and comprehensive library facilities on campus
 - iii) granting recognition to the research institutes of repute
 - iv) providing seed money for the major and minor research projects
 - v) organizing international, national conferences and workshops
 - vi) funding to faculty to attend conferences/seminars/workshops
 - vii) promoting consultancy work through attractive incentives to the faculty
 - viii) scheme of incentives and awards for the faculty members for outstanding contribution
- The University has granted recognition to various prestigious research organizations for promoting R&D activities. These include:
 - i) Physical Research Laboratory (PRL), Ahmedabad

- ii) Space Applications Centre, Indian Space Research Organization (SAC-ISRO), Ahmedabad
 - iii) Institute for Plasma Research (IPR), Gandhinagar
 - iv) Forensic Science Laboratory and Research Centre, Gandhinagar
 - v) B.V. Patel Pharmaceutical Education and Research Development (PERD), Ahmedabad
 - vi) Cadila Pharmaceuticals Ltd., Ahmedabad
 - vii) Piramal Pharmaceutical Development Services Pvt. Ltd.
 - viii) Intas Pharmaceuticals Ltd.
- The University offers stipends to the full time Ph.D. scholars and many PG students.
 - As far as Ph.D. programmes are concerned, in last five years, 71 research scholars have been awarded Ph.D. degrees in different disciplines. Currently, there are 346 doctoral students registered under 153 recognized guides.

Resource Mobilization for Research:

- The Institute of Pharmacy has received a funding of ₹ 55 Lacs under FIST programme from the Department of Science and Technology, New Delhi.
- The University has got recognition of ‘Scientific and Industrial Research Organization (SIRO)’ by the Department of Scientific and Industrial Research, Govt. of India, New Delhi.
- Currently, 76 research projects, worth ₹ 645.55 Lacs are under execution. In the last five years, 28 research projects have been successfully completed.
- The total amount of consultancy work and training for industries undertaken at the University is more than ₹ 300 Lacs in the last 5 Years.

Research Activities:

- More than 876 research papers have been published in national/international journals. Moreover, 127 books and 82 chapters in books have been published during the assessment period.
- Six patents have been published and 15 patents are filed.
- Various institutes of the University publish seven journals.

- It is noteworthy to add that, during the assessment period, 89 faculty members and 73 students of the University have received research awards in different categories.
- The constituent institutes of the University regularly organize national/international conferences in Engineering & Technology, Management, Pharmacy, Science and Law domains.
- Nirma University believes not only in putting in additional man hours and finance in order to raise the bar of its quality, but also in putting in place systems, processes and policies that are unique. Some of the spectacular initiatives taken by the University are:
 - i) Establishment of Centre for Continuing Education (CCE) to enhance the knowledge and skills of all needy stakeholders.
 - ii) Establishment of Idea Lab, wherein the students test their ideas and conduct research.

Extension Activities:

- The students are sensitized about societal issues through participating in extension activities, which are carried out through curricular courses, student & faculty projects, and student associations. Individual student groups, alumni, and faculty members work in collaboration with many NGOs in diverse areas.
- In order to expand the scope of extension activities, the University has requested the Govt. of Gujarat for awarding the Centre of NSS Activities. Subsequently, the Government has accepted the request and approved a Centre with 500 seats for NSS activities.

Collaborations:

- The University emphasizes the importance of linkages at national and international levels in order to cater to the core areas of research and development in the form of cooperative research, transfer of technology, curriculum development, continuing education programmes, testing and consultancy, development of industrial manpower, expert lectures by industry experts, students' projects, industrial visit, legal aid clinic,

internship, training and placement, student and faculty exchange, intellectual property sharing, sharing facilities and patent development.

Criterion – IV: Infrastructure and Learning Resources

Physical Facilities:

- The University has a sprawling 110 acres of beautifully landscaped campus with lush green surroundings and aesthetic architecture of buildings.
- There are separate buildings with wide open spaces in between planned for each institute. Apart from these, there is a separate University office, institute wise libraries, a gymnasium, hostels (separate for boys and girls), a guest house, a bank, a student store, canteens/dining halls, food courts, etc.
- Each Institution on the campus has independent infrastructure with the ICT enabled classrooms, state-of-the-art laboratories, air-conditioned auditoriums / seminar halls, conference rooms, computer centres, recreational facilities, etc.
- The classrooms and other facilities of the Institute of Management and the Institute of Law are air conditioned and equipped with all modern teaching aids. The Institute of Law has a separate Moot Court facility. The Institute of Technology has a dedicated building for post-graduate studies and research purpose.
- The University has two Auditoriums and seven Seminar Halls with air-conditioned and modern audio visual facilities. The University has an open air theatre with a capacity of 3,000 persons.
- Well-furnished hostels with 24X7 internet facility, with capacities of 524 male and 281 female students are available for the PG students. There is a separate guest house with a capacity of 32 air-conditioned rooms. The University has two food courts and two Canteens/Dining Halls.
- The University has made arrangements to provide medical facilities on the campus by appointing a full time Doctor, who is available from 11.30 a.m. to 6.30 p.m. on the campus.
- The University provides travel facilities to its students and the staff members. The University owns a fleet of 33 buses covering all areas of Ahmedabad and Gandhinagar. The University also has 30 small vehicles (Cars/Jeeps) to

provide the transport facilities to the senior professors/officers and outside experts.

- Large playgrounds for outdoor games, sports hall for indoor games, amphitheatre and well-equipped gymnasium are also available on the campus. For uninterrupted power supply, diesel generator sets with a total 1250 KVA capacity is also available.
- A separate Estate Department under the supervision of Chief Engineer looks after all the maintenance problems of buildings and facilities. For maintaining computers & associated facilities and trouble shooting, a separate service engineer is always available on site. Round the clock security is provided on the campus.

Library Facilities:

- Each institute has its own Library Resource Centre. The total library print collection includes 1,05,722 book volumes, 662 print periodicals, 1,949 Indian Standards, 13,008 bound volumes and 111 theses.
- The library is a member of DELNET, IITM, British Library, IIM-A, etc. The library has hosted a web portal that facilitates access to all its digital resources like journals, magazines, videos, CDs, etc.
- In all libraries, an open source web-based Library Management System KOHA is implemented.

IT Facilities:

- Processes from admission to alumni connect, teaching-learning to library resource management are all done through ICT tools. All institutes have their own computing facilities. All combined they consist of 34 servers and approximately 1,756 computer systems, which are interconnected by fibre optic cables and 256 Mbps leased line internet connectivity. The entire University campus, including the hostels, is equipped with Wi-Fi facility.
- The University has procured various licensed software tools to meet curriculum requirements and for the language lab.
- All the faculty members are provided with a laptop having Wi-Fi connection. Moreover, the home internet usage charges of faculty members are reimbursed by the University.

Criterion – V: Student Support and Progression*Student Mentoring and Support*

- At present, out of the total strength of 6,985 students, 2142 students are female. Being a private University, reservation is not applicable to the University. However, in case of seats filled by the ACPC (the Government of Gujarat), the admissions are given for reserved categories.
- The University has a well-defined mentoring policy to support the students for sharing their problems related to academic and non-academic matters.
- The University offers various types of scholarships to the economically weaker students. These include: (i) Scholarship based on Merit, (ii) Scholarship based on Merit cum Means, (iii) Interest Waiver on Bank Loan, (iv) Needy Student Fund, (v) Tuition Fee Waiver (TFW) Scheme (vi) Book Bank Facility, and (vii) Stipend to the meritorious masters as well as full-time Ph.D. students.
- The University has dedicated cells for placement services. The placement records of various programmes of the University are excellent over a period of last several years with a salary package comparable to other leading institutes.
- The University puts significant efforts for personal enhancement and development of students by organizing a large number of co-curricular and extra-curricular events throughout the year. These include: personality development workshops, motivational lectures, soft-skill development programmes, expert lectures, seminars, etc.
- The University has recently established an Entrepreneurship Development Centre to promote the awareness about the entrepreneurship amongst the students. The Centre has a full-time Officer In-charge to coordinate the activities.
- All relevant and necessary information required by the students is provided through the prospectus, handbooks, website, manuals and circulars (updated regularly), etc.
- All constituent institutes have alumni associations to maintain a continuous relationship with their pass outs. The institutes carry out many activities,

such as organizing alumni meets, arranging expert lectures by alumni, interaction with UG students for preparing them for job placement, publication of newsletter, etc.

Student Participation and Activities:

- A full-fledged Head- Students' Welfare and Chief coordinator for sports and cultural activities have been appointed. They look after the training in athletics and various sports, besides coordinating all other associated activities. The students participate in extra-curricular activities, like (i) sports day, inter class and inter institute tournaments for cricket, volleyball, football, etc., (ii) fresher's talent show, annual Raas-Garba celebration, cultural programmes, etc. The students also participate in inter-institute/inter-university youth festivals, debate, elocution, quiz, singing competitions and have won many prizes. Students' achievements, scholastic and extracurricular, are recognized by way of medals, trophies and prizes on the foundation day of the respective institute.
- The student members are included in Students' Welfare Board, Placement Cell, Library Committee, Anti-Ragging Committee, Women Development Cell and other such committees.
- The University provides financial assistance to the students participating in national /international sports and cultural competitions. Also, the students representing the University at national / international technical events, like ROBOCON, SAE BAJA, Moot Court and business competitions are given financial assistance. Full-time Ph.D. students are given financial assistance to attend and present research papers abroad at international conferences.
- Students' associations are one of the unique features of the University. The platform provided by students' associations gives the students an opportunity to work and develop together in various groups, leading to their all-round development. Apart from the student associations, a number of Committees, such as Sports, Drama, Library, Placement, Debate, etc. are formed by the students.
- In order to provide a congenial and safe working environment, provision for the Complaint Committee for Prevention from Women Sexual Harassment

Cell was constituted very early. Later, the Women Development Cell was also constituted. Both the bodies are fully functional. They cater to women empowerment and gender equality in addition to creating safe working conditions for the members of the University community.

- A formal, structured grievance mechanism is present and operated through a Grievance Redressal Cell. The grievance raised is redressed within the stipulated period of time through a committee. There are Grievance Redressal Committees at the Department / Institutes / University level to deal with the grievances of the students.
- The University has adopted a zero-tolerance approach towards ragging. No case of ragging has been reported in last four years.

Criterion – VI: Governance and Leadership

Institutional Vision and Leadership:

- The University draws its inspiration and strength from its President, Padma Shri Dr. Karsanbhai K. Patel, a leading industrialist and a renowned entrepreneur. He is also a recipient of various awards, such as ‘Udyog Ratna’, ‘Gujarat Businessman 1998’, ‘Ernst Young Lifetime Achievement Award 2006’.
- Under the Act of the University, three main authorities are provided, viz., Board of Governors, Academic Council and Finance Committee. Under the said Act, freedom is also given to constitute more authorities under the Regulations. It was thought to have not only the Academic Council but also to have various Academic Bodies. These include:
 - i) Faculty of Technology and Engineering (with 12 Board of Studies)
 - ii) Faculty of Management (with 6 Area Committees)
 - iii) Faculty of Pharmacy (with 5 Area Committees)
 - iv) Faculty of Science (Joint Board of Studies)
 - v) Faculty of Law (with 3 Board of Studies)
 - vi) Faculty of Architecture (Joint Board of Study)
 - vii) Faculty of Doctoral Studies and Research

- The President of the University chairs the Board of Governors (BoG) meetings. During one of the meetings, the Annual Report of the University is presented and the suggestions are invited for further improvement.
- Decentralization is implemented with proper and appropriate delegation of powers by the Board of Governors to the Director General, Head of Institutions, Head of Departments and to the Section Heads. The administration at all levels is decentralized in such a way that the staff from bottom to top can participate in the decision making process.
- The Director General of the University provides exemplary leadership by motivating the students, faculty and administrative staff to team up to fulfil the Vision and Mission of the University. As the Chairman of the Academic Council, Finance Committee, Faculty of Doctoral Studies and Research, Library Council, Students' Welfare Board, University Placement Advisory Council and also as a member of the Board of Governors, he provides necessary direction and guidance. To ensure the full involvement of the management in the academic and administrative activities of the University, two officers, namely Vice President and Chief Operating Officer, are appointed to facilitate the efficient and smooth functioning of the University.
- For implementation of various policy decisions and continuous improvement, the Director General (i) monitors progress made on the University strategic planning and research policy, (ii) holds regular meetings with the Institutes' Heads (HoI), (iii) supervises the academic audit of different institutes, (iv) invites quarterly report from the HoIs about the progress made by the institute regarding academic and research related matters, and (v) takes review of faculty development programmes.
- The Director General interacts with the Heads of Institutions (HOIs) and senior faculty regularly. The weekly minutes of the meetings of Institute level committees are sent to the Director General. At the University level, monthly coordination council meetings of HOIs with Vice President and Director General is also held for overall coordination.

Strategy Development and Deployment:

- The University has developed a Strategic Plan for the period 2014-19. It took the University one year to develop the plan as it involved rigorous exercise and participation from all stakeholders.
- The system of documentation has also been given importance up to an extent and the channel to be observed for processing the papers to the competent authorities has also been evolved. In each and every areas of administration, there are set procedures and at the same time, flexibility and autonomy to the Institution are also taken care of and proper delegation of power is also evolved.
- The University has consolidated the Regulations, Rules and Guidelines in three volumes, which are called Handbook-I (Academic Regulations), Handbook-II (Administrative Regulations) and Handbook-III (General Circulars, Guidelines, etc.), and these handbooks are available at all levels.
- The academic process strictly follows the academic calendar announced well in advance. All staff, teaching and non-teaching are recruited after a well laid-out process beginning with announcements in national newspapers, a written test if required and an interview by a duly constituted selection committee. All recruitments are by direct selection and are based on merit.

Faculty Empowerment Strategies:

- The University gives a lot of emphasis on Human Resources Development, especially faculty development. The University provisions for faculty development include deputation for higher studies with full salary, travel grant for international/national conferences, seed money for research, in service registration for Ph.D., sabbatical leave, organizing international/national conferences, liberalized consultancy rules, etc.
- The HR policies are at a par with or better than those of any other government or government-aided university. Some of the highlights are: mediclaim, medical allowance (for outdoor patients), children education allowance, relocation allowance, allowance for purchase of books /magazines/subscription towards journals, professional membership, career advancement schemes for non-teaching staff, leave travel concession, etc.

- Since inception, the University has given utmost importance to the professional development of teaching and non-teaching staff. It is covered under three categories, namely (i) Faculty Qualification Improvement Programmes, (ii) Faculty & Staff Development Programmes (iii) Funding for Research Activities.
- Considering the importance of Faculty and Staff development activities, the University has set-up its own system of 'Faculty Development' under the supervision of a Core Committee headed by the Director General. A senior professor is given charge of organizing and monitoring such activities. The Faculty Development Programmes are arranged in four different categories, namely (i) Induction Training Programme of 4 weeks for newly recruited faculty members before they go for class-room teaching, (ii) Orientation Programme of 2 weeks for teachers having 2-5 years of teaching experience, (iii) Refresher Course of 2 weeks, and (iv) Research Orientation of 2 weeks
- In order to enhance the quality of teachers, the University has constant measures in this direction, in addition to maintaining the Academic Performance Index (API) in different areas of performance. The feedback for the faculty members from the students has also been introduced as a system.
- The University is very serious about the academic audit of the constituent institutes and departments. Considering this, a separate portfolio of Academic Audit is created and a senior level professor is appointed to look after the activities. The University has a mechanism of Academic Audit at three levels, namely (i) Audit at the personal level, where the senior professors and the HoDs constantly audit the classroom teaching of the faculty members, (ii) Audit at the institutions level by an independent committee which conducts the overall audit of each departments / areas in academic, research, extension and related matters, and (iii) Audit by the University level committee for overall assessment of the different academic, research, extension and related aspects of the constituent institutions.
- Career Advancement Scheme (CAS) is implemented as per the UGC norms.

Financial Management:

- The financial implications in all the processes of the University are monitored by an efficient and reliable accounting system. The accounts are maintained systematically and are being audited on a concurrent basis by an Internal Auditor who is a Chartered Accountant.
- There is also an external statutory auditor, who submits the Audited Account Report to the Board of Governance (BoG) every year.
- The University has adopted a 'Bottom Up Approach' in preparing Annual Budget, where all faculty members participate.
- For every expenditure, there are well-defined budget heads and separate budget is allocated for each head. Also, throughout the year budget record in each head is maintained, thus financial resources are monitored effectively.

Internal Quality Assurance System:

- Quality Assurance is central to all planning processes of the University. The University has thus adopted all measures which have direct and indirect influence on the quality assurance. The University has established the Academic Development and Research (ADR) Cell to act as a nodal agency to coordinate all efforts to ensure that the quality of education always meets with the changing demands of the professions as also of society.
- Apart from this, the Internal Quality Assurance Cell is conceived as a mechanism to build and ensure a quality culture at the university/institute level. The committee comprises internal members as well as external members. It meets frequently to review and recommend various quality steps.

Criterion – VII: Innovative and Best Practices***Environment Consciousness:***

- The University gives the utmost importance to its environment and keeps the campus sylvan and pollution free. The green environment is maintained consciously by planting the various types of plants. Over the years, the trees have grown up and the green coverage has gone up. In addition, all attempts are being made for the minimal consumption of energy in the campus.

- The University has constituted a committee for conducting Green Audit of the University. The committee has prepared an Environmental Policy. It has also developed a series of action plans to supplement each of the University's environmental policy objectives.
- The water is supplied in all water rooms through press cock, which is an auto off type of cock, thus ensuring no wastage of water. The treated water is used for low end purposes, such as in toilets for flushing, gardening on the campus, etc.
- A sewage treatment plant, using Fluidised Media Reactor (FMR) technology having 400 m³ per day operating 24 hours with a designed flow rate of 16.66 m³ per hour, has been installed.
- An Organic Waste Converter Machine (OWC) is installed and it treats waste food and dry leaves/dry flowers, etc.
- The rain water collected from the campus is stored in a lake. The lake is spread over approximate 8,000 sq.mt. area and having an average depth of 25 feet.
- The campus has almost 81 different types of trees with total number of trees around 3,773. There is also a medicinal garden in the campus, with 156 different varieties of plants.

Innovations & Best Practices:

Several innovations have been introduced during the past years in the teaching-learning process, general administration and admissions. These include:

- i) Implementation of Outcome Based Education (OBE)
- ii) Introduction of various Enrichment / Value Added courses
- iii) Started innovative PG programme - M.Tech. (by Research)
- iv) Creation of Idea Lab and Robotic Lab
- v) Introduction of Academic Audit at all the Institutes of the University
- vi) Development of Research Policy, Quality Policy and IT Policy
- vii) Structured Faculty Training Programmes under ADR Cell
- viii) Bottom-up approach for preparation of Annual Budget
- ix) Creation of Centre for Continuing Education

- x) Seed money to the faculty members for the major and minor research projects
- xi) Scheme of incentives and awards to faculty members for outstanding contribution
- xii) Continuous evaluation of the students
- xiii) Showing the assessed answer sheets to the students

Conclusion:

Nirma University has been over the years attempting to create an educational and research institution of excellence to cater to the needs of the youth and the society. As a result of all its endeavours, the University has been recognized as a leading centre for education in technology, management, pharmacy, science, and law. The rankings published by the leading national magazines, like Business India, Business Today, Outlook, Competition Success Review, India Today, etc. validate the recognition gained by some of the constituent institutes of the University. The placement record of the University further indicates the success achieved by it. It also shows the high degree of acceptance of the students of this University by the industry. It may be appropriate to add that the tough competition witnessed in the admissions to all programmes of the University also indicates the quality and quest for excellence at the University.

Action Taken Report on the Observations made by the NAAC Peer Team (2010)

In just one decade, Nirma University has earned a name for quality education in the country, because of its well established academic system and continuous efforts to achieve excellence in all activities. In fact, after the visit of NAAC Peer Team in the year 2010, the University has put rigorous efforts in all dimensions of higher education to meet the highest standards of excellence, defined by NAAC in its value framework.

During the assessment period, the University has continued its best practices and at the same time has sustained the strengths, identified by the NAAC Peer Team. While sustaining the strengths, the University has taken several measures to overcome the weaknesses and implemented the recommendations given by the NAAC Peer Team. In addition, the University has also identified the challenges and initiated a host of actions to meet them.

This Action Taken Report is divided into three Sections. Section – I describes the actions taken by the University to remove the weaknesses, while Section – II narrates the action taken by the University to implement the recommendations given by the NAAC Peer Team. Finally, Section – III reports the efforts made by the University to sustain the strengths identified by the Peer Team.

SECTION – I

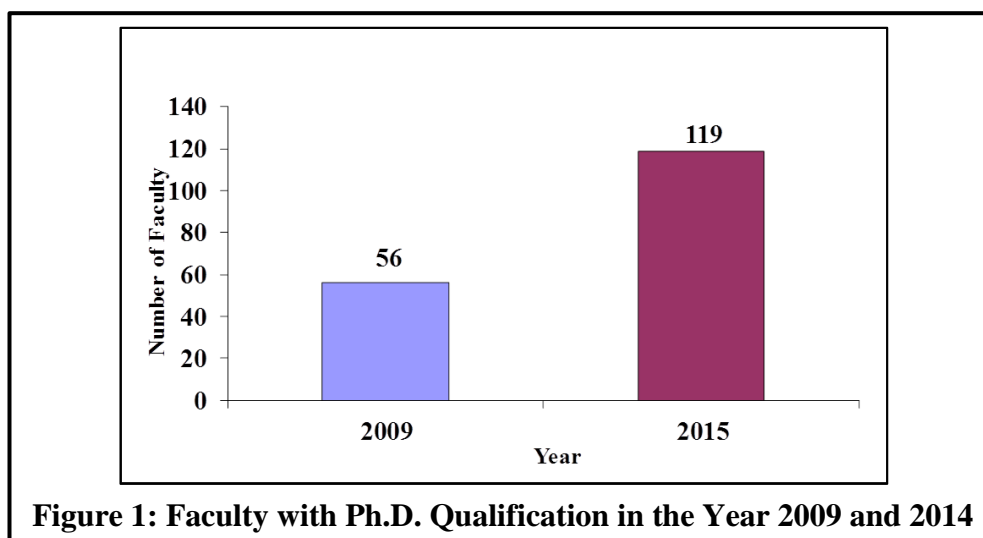
Action Taken to Remove the Institutional Weaknesses Identified by the NAAC Peer Team

Weakness-I: Lack of adequate faculty at the senior level with good research / industry experience and with Ph.D. qualifications.

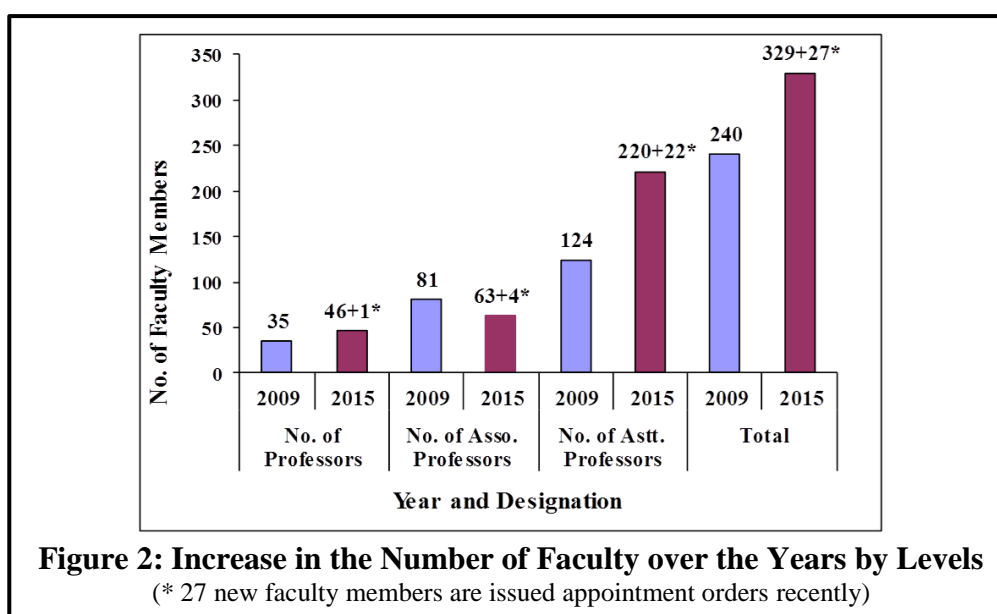
Action Taken:

The University is putting continuous efforts to appoint faculty members with good research / industry experience. To fill the vacant positions, the advertisements are given in national newspapers and the same is displayed continuously on the University website. Also, the University has appointed a consulting firm to find out the suitable candidates. The University has developed various strategies to attract and retain competent faculty members. There is a provision for appointment by invitation, considering the application of a highly qualified candidate in absentia and scheme of appointing Professor Emeritus, Adjunct Professor, etc. As a result of all these efforts, the following outcome has been achieved:

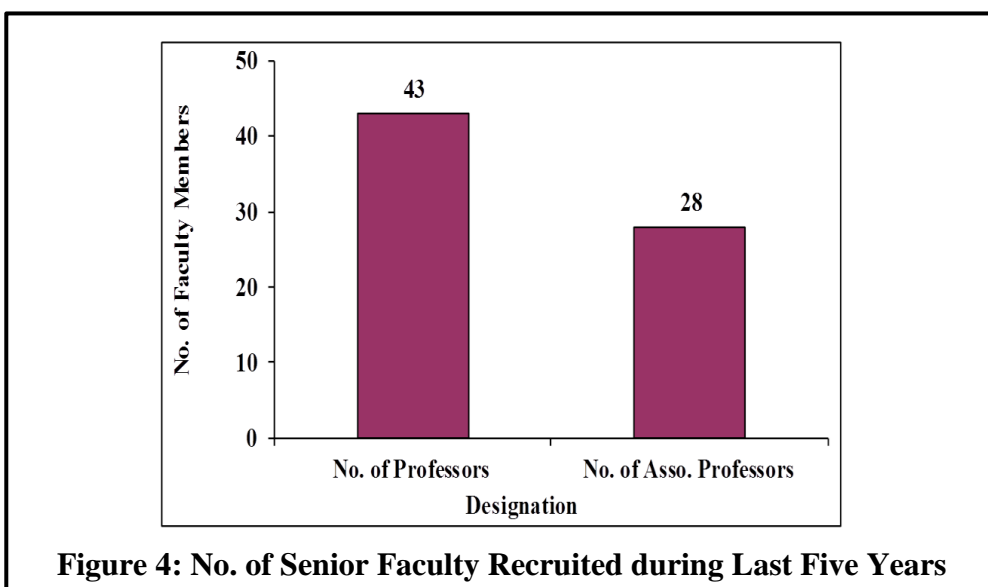
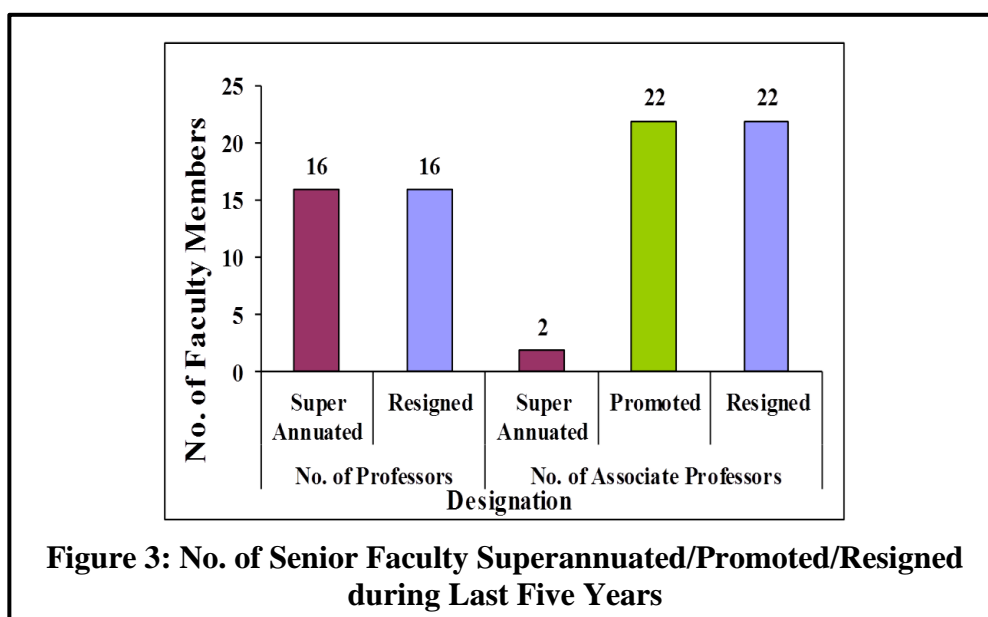
- Presently, the University has a pool of well-qualified 329 faculty members, out of which, 119 faculty members have Ph.D. degree. As evident from Figure 1, the number of Ph.D. qualified faculty members has increased to almost double compared to year 2009-10 (First cycle of Accreditation).
- A total of 209 faculty members have a Master's degree. It is noteworthy to add that, out of these 209 faculty, approximately 95 faculty members are pursuing a Ph.D. degree. Approximately, 40 faculty members have rich research experience, while 20 faculty members have a vast industry experience.



- Further, for qualification improvement of the teachers, the University has continued a scheme of deputing faculty for higher studies with full salary at premier institutes, like IITs/NITs. Under this scheme, by now, 25 faculty members have completed Ph.D. and 62 faculty members have obtained a Master's degree. The faculty with UG qualifications were admitted to the Split M.Tech. programmes of the University. Many faculty members are permitted to do Ph.D. from the University.
- The total faculty strength of the University has increased to 329 (year 2014-15), from 240 (year 2009-10). These include 46 Professors, 63 Associate Professors and 220 Assistant Professors. As evident from Figure 2, at all levels the faculty strength has increased.



- It is important to note that in spite of nation-wide shortage of experience faculty members and superannuation/promotion/resignation of several senior faculty members in last five years (please refer Figure 3), the University has put significant efforts to recruit faculty at senior level. As shown in Figure 4, 43 Professors and 28 Associate Professors have been recruited in last five years.



- Since its inception, the University has initiated Faculty Development Programmes to enhance the quality of faculty. In the recent years, the University has set-up a structured system of 'Faculty Development' under the supervision of a core committee headed by Director General. A senior professor is given the charge of organizing and monitoring staff development activities. The activities include, Research Orientation, Faculty Induction, Orientation Programmes and Refresher Courses. Further, the faculty members are encouraged to go for Industrial Training to get exposure of industrial challenges.
- Apart from these, to attract and retain eminent faculty, the University has taken several measures, which include:
 - i) A scheme of offering salary structure equivalent to Directors of IITs/IIMs to the Directors of the constituent institutes, who meet the requirements of high qualification, experience, etc.
 - ii) Faculty Welfare Schemes, such as Medical Reimbursement, Reimbursement of Expenditure on Children Education, Reimbursement towards Expenditure incurred

- due to Relocation, Allowance to visit Home Town, LTC, etc.
- iii) Allowance for purchase of books/magazines, subscription towards journals, professional membership, etc.
 - iv) Career Advancement Scheme (CAS) for the existing faculty members. In last five years, 50 faculty members are promoted under CAS.
 - v) Scheme of incentives and awards for the faculty members for outstanding contribution.
 - vi) Funding to the faculty members for major and minor research projects.
 - vii) Registration fees, TA/DA for attending workshops, seminars, conferences within and outside India.
 - viii) Generous policy to depute teachers for qualification improvement with full salary and study leave.
 - ix) Conducive environment and academic flexibility to the faculty members.
 - x) Pick-up and drop facility to the senior faculty members.

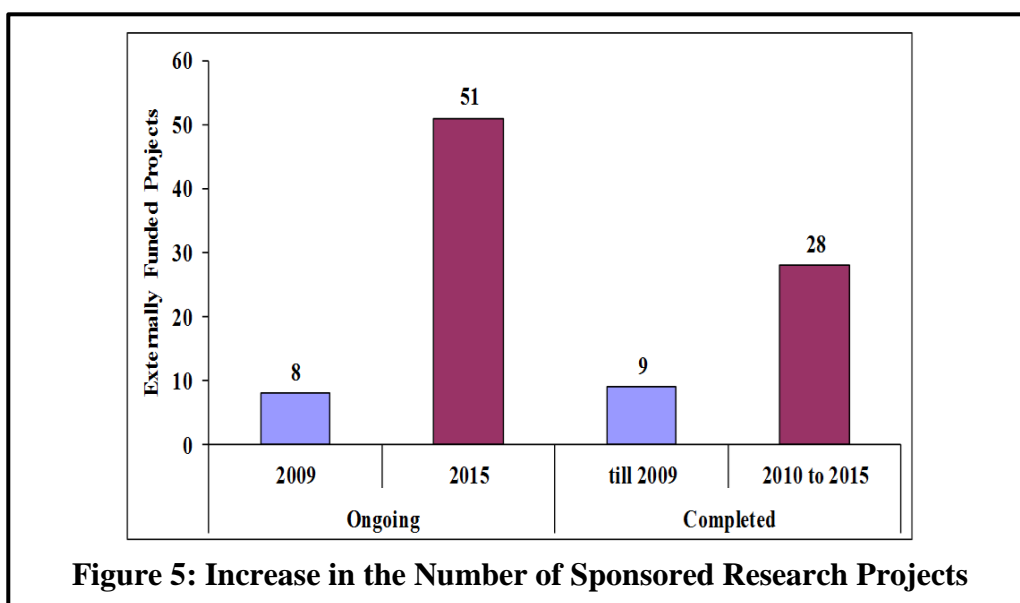
Weakness-II: Limited research, consultancy, sponsored research activities and research publications in most of the departments.

Action Taken:

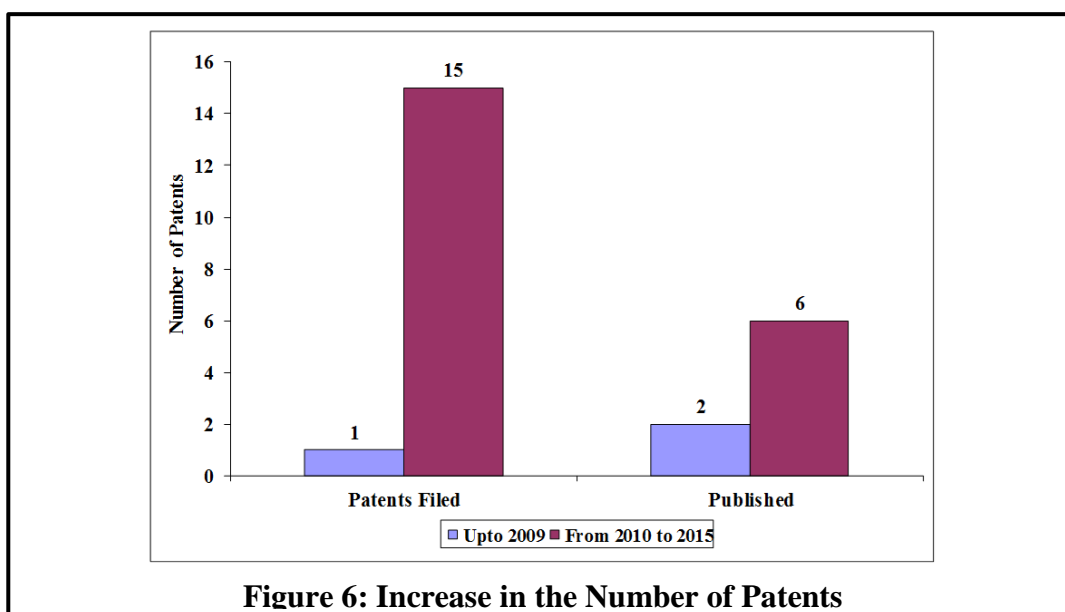
In last five years, the University has put significant efforts to increase research activities, including funded research projects, consultancy, publications and patents. The highlights of the research outcome of last five years is given below:

Research Outcomes in Last Five Years:

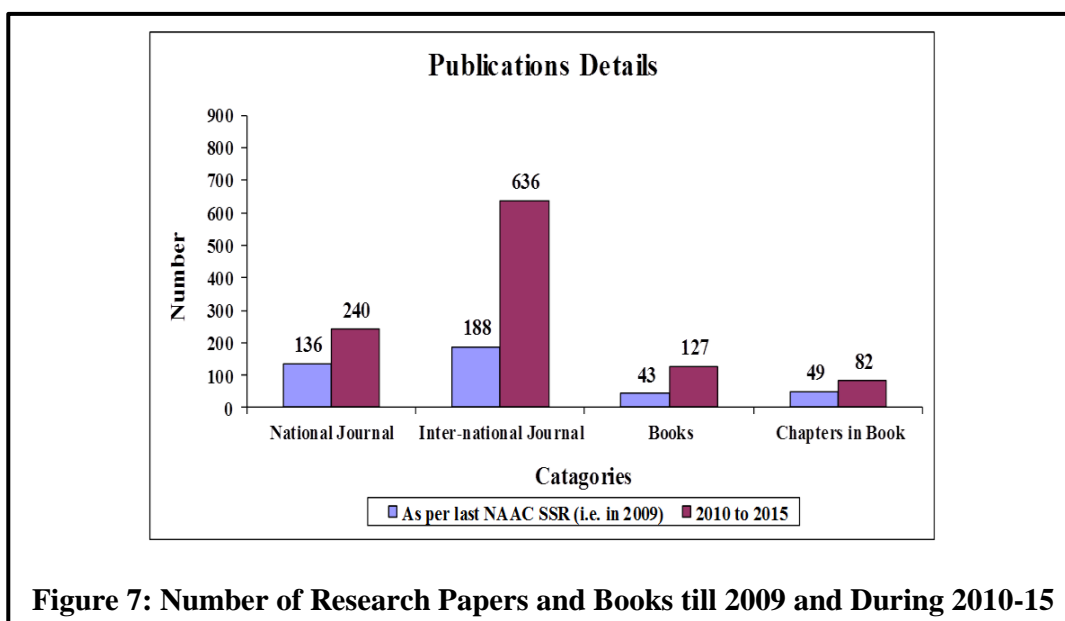
- The University has got recognition of ‘Scientific and Industrial Research Organization (SIRO)’ by the Department of Scientific and Industrial Research, DST, Govt. of India, New Delhi.
- Institute of Pharmacy has received a funding of ₹ 55 Lacs under FIST programme from Department of Science & Technology, New Delhi.
- As shown in Figure 5, the total number of sponsored major/minor projects has increased from 08 to 51 in last five years. Also, the University has funded several minor research projects in different areas.



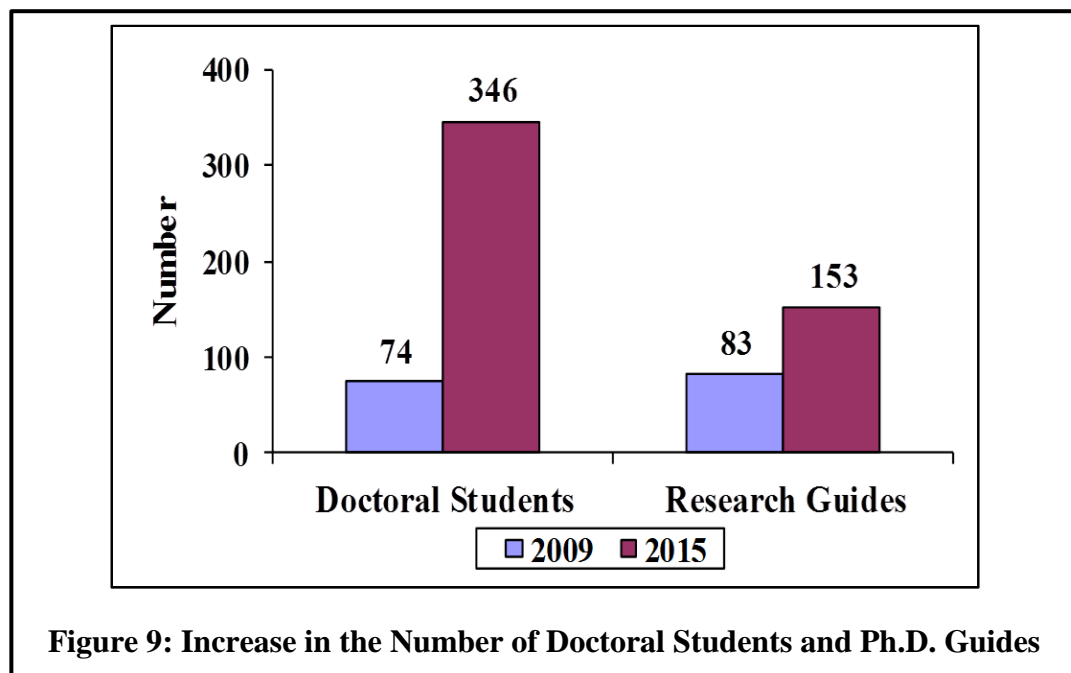
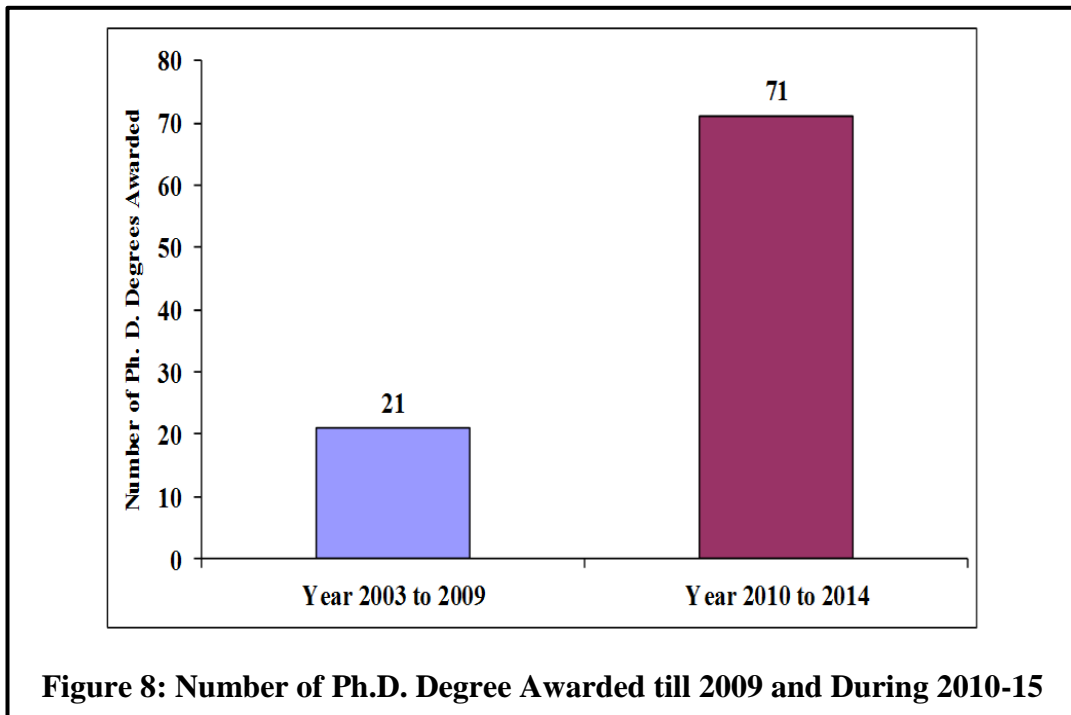
- The total amount of consultancy work and training for industries undertaken at the University is more than ₹ 300 Lacs/- in the last four years.
- As shown in Figure 6, the number of patents has also increased in last five years.



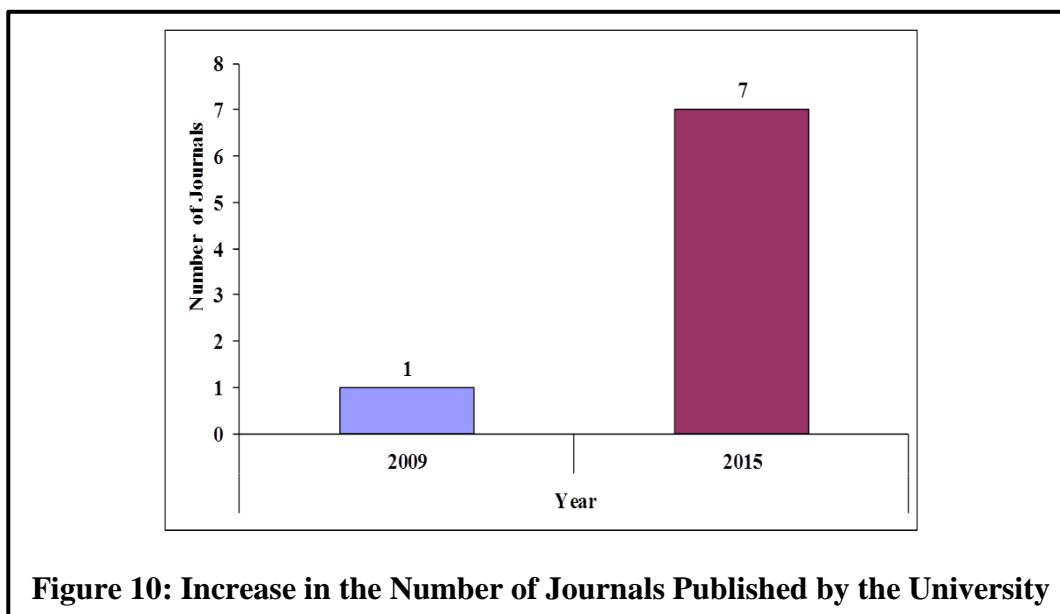
- As shown in Figure 7, the number of publications by the faculty members has increased significantly in last five years. The faculty members have published more than 240 papers in national journals, 636 papers in international journals. Moreover, 127 books and 82 book chapters have also been published.



- As shown in Figure 8, 71 research scholars have been awarded Ph.D. degree in different disciplines in last five years. This indicates the significant growth of research activities within the University. Also, as shown in Figure 9, the numbers of registered doctoral students and recognized Ph.D. guides have increased as compared to the year 2009.



- It is noteworthy to add that, during the assessment period, 89 faculty members and 73 students of the University have received research awards in different categories.
- The number of journals published by the constituent institutes of the University has also increased noticeably as shown in Figure 10.



The list of journals published by the constituent institutes of the University is given below:

- i) Nirma University Journal of Engineering and Technology
- ii) Nirma University Journal of Journal of Business and Management Studies
- iii) Nirma University Journal of Pharmaceutical Sciences
- iv) Nirma University Law Journal
- v) Journal of Centre for Social Justice
- vi) Journal of Centre for Law and Governance
- vii) Journal of Centre for Law and Corporate Governance

- The University regularly organizes national/international conferences, namely Nirma University International Conference on Engineering (NUiCONE), Nirma Institute of Pharmacy International Conference (NIPICON), Nirma International Conference on Management (NICOM), All India Conference of Doctoral Research in Management – ANVESH, etc.

Measures to Increase Research Activities:

The above mentioned research outcome is possible due to the following measures:

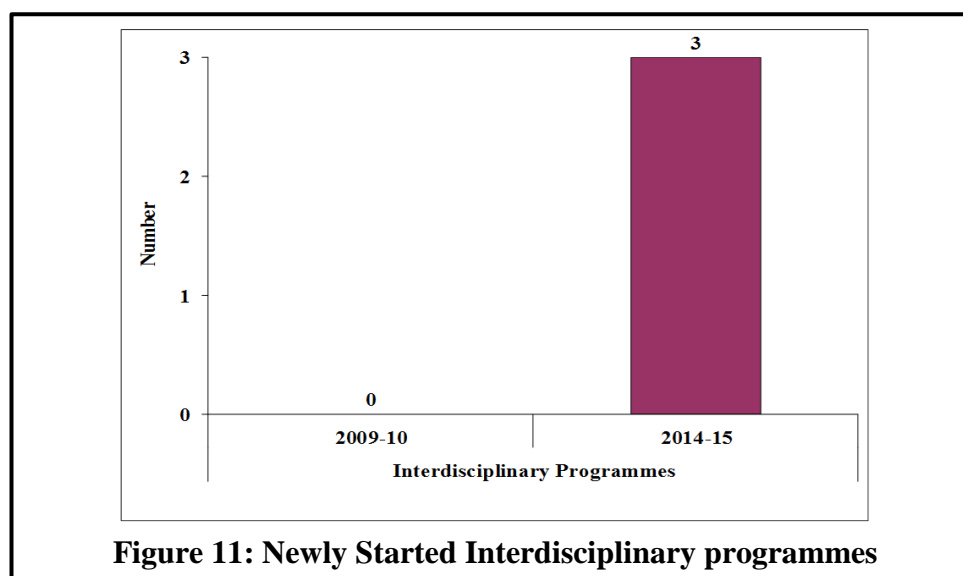
- The University has two committees to monitor and promote the research related activities, namely (i) Faculty of Doctoral Studies and Research, and (ii) Academic Development and Research (ADR) Cell.
- The University has devised a systematic Research Policy for enhancing research, ensuring quality, ethics in research, integrating teaching with research and incentivising research activities. Also, in the five year Strategic Plan, promotion of research is given the highest importance.
- Under the ADR Cell, continuous efforts are put to develop research culture by way of organising research orientation programmes, and conducting different workshops on scientific writing, IPR and Patent, plagiarism, etc.
- A plan is under execution for establishing a full-fledged Directorate of Research to put dedicated efforts for enhancing research activities, including identifying thrust areas of research, to provide mentoring to the faculty members, IPR issues, etc.
- The seed money given to the faculty members for carrying out minor research project has been increased from ₹ 25,000/- to ₹ 1 Lac.

- Under sponsored research projects, the procedures related to sanctions / purchases have been simplified and autonomy is given to the Principal Investigator.
- A separate Post-Graduate and Research building is constructed with necessary facilities for dedicated research.
- The University has granted recognition to several prestigious research organizations, like Physical Research Laboratory, SAC-ISRO, Institute for Plasma Research, Forensic Science Laboratory and Research Centre, B.V.Patel Pharmaceutical Education and Research Development, Cadila Pharmaceuticals Ltd., Piramal Pharmaceutical Development Services Pvt. Ltd., Intas Pharmaceuticals Ltd., etc. This has significantly increased the collaborative research activities.
- The University has established an Idea Lab, wherein the students test their ideas and conduct research.
- The Institute of Technology offers a very unique master level programme titled M. Tech. by Research. This programme is aimed at those students who are interested in exposure to in-depth research in different disciplines.
- In order to inculcate research skills amongst the students, a course on ‘Research Methodology’ is introduced in various PG programmes.
- For every Ph.D. student, a Research Progress Committee (RPC), comprising the Head of the Department, Concerned Guide(s) and two subject experts, is formed to regularly monitor the progress of the research scholar. For all Ph.D. scholars, it is mandatory to publish two research papers in peer reviewed journals before submission of the thesis.
- The faculty members having extra-ordinary achievements in terms of research activities including funded projects, publication of books /book chapters/research papers, etc. are felicitated on the Annual Day.

Weakness-III: Very little interdisciplinary activities.

Action Taken:

- During the assessment period, the University has started three interdisciplinary programmes as shown in Figure 11.



- The list of interdisciplinary programmes is given below:
 - i) M.Tech. in Energy System (run jointly by Chemical, Mechanical and Electrical Engg. Departments),
 - ii) M.Sc. in Cosmetic Technology (run jointly by Institutes of Pharmacy and Science),
 - iii) LL.M. in Law, Science and Technology (run jointly by Institutes of Law, Science and Technology).
- A summary of ongoing Interdisciplinary Ph.D. work and collaborative publications is given in Table 1.

Table 1: Summary of Interdisciplinary Activities

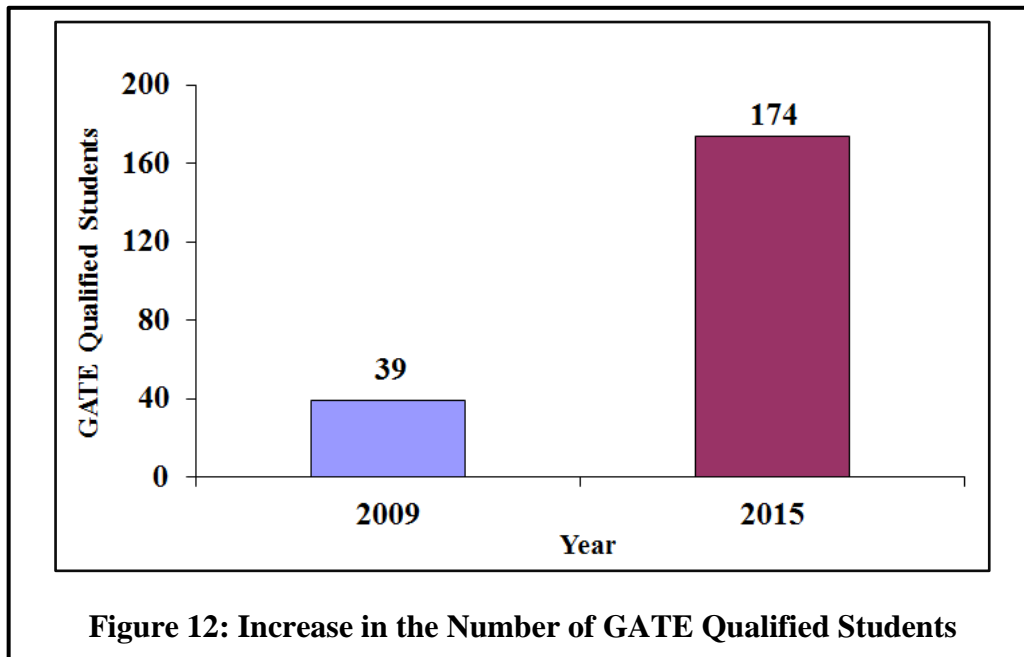
Interdisciplinary Ph.D. Topics	Collaborative Paper Publications
15	33

- The University has submitted two interdisciplinary projects proposals to the UGC for granting the status of 'Centre with Potential of Excellence in Particular Area (CPEPA)'. These interdisciplinary projects involve the faculty members of the Institutes of Pharmacy, Science and Technology.
- The University has submitted the following inter-disciplinary research proposals to various external funding agencies:
 - i) Understanding the functional role of co-activator binding protein PIMT in inflammation induced insulin resistance/Type 2 diabetes, (₹ 1.60 Crore) to DBT, New Delhi
 - ii) Development of microbial fuel cell for industrial waste water treatment and energy generation, jointly by the Institutes of Science and Technology, (₹ 62.23 Lacs), to Ministry of New and Renewable Energy, Govt. of India
 - iii) Glutathione Appended Polymeric Nanoconstructs of Asiatic Acid for Efficacious Neuroprotection against Alzheimer's disease, Institutes of Science and Pharmacy, (₹ 59.59 Lacs) to DST, New Delhi
 - iv) Understanding the role of gut microbiota association with Short chain fatty acids (SCFAs) in adiposity and inflammation in type 2 Diabetes, Jointly by the Institutes of Science and Pharmacy, (₹ 39.39 Lacs) to ICMR, New Delhi
- The University encourages Ph.D. students to take up interdisciplinary projects. Also, there are instances where the University has approved guides from different disciplines.
- The University has initiated several formal and informal collaborations with Industry, National and International organizations for research work. Several interdisciplinary collaborative projects are ongoing at the University.

Weakness-IV: Number of GATE qualified candidates in PG courses is small.

Action Taken:

The University puts continuous efforts to get quality students for all the programmes. Especially in PG level programmes, stipend is given to sizable number of students. As a result of this, the number of GATE qualified students in the year 2014 has increased to 185 compared to 39 in the year 2009, as shown in Figure 12.



SECTION - II

Action Taken to Implement the Recommendations for Quality Enhancement

Recommendation-I: A range of strategies should be evolved in order to attract competent faculty since they are the pre-requisites of quality and excellence in all academic activities like academic research, consultancy, and sponsored research.

Action Taken:

The University has evolved strategies to attract competent faculty members. Some of them are mentioned below:

Strategies to Recruit Competent Faculty:

- Advertising the vacancy of faculty positions with wide publicity at the national level through leading newspapers
- Hiring a suitable consulting firm for head hunting of appropriate candidates
- The faculty openings to be kept live on the University website and on-line applications are to be accepted throughout the year
- Developing a policy for appointing Emeritus Professor, Research Chair in every discipline and to put efforts to appoint suitable persons

Apart from these, the University gives many perks and facilities as listed in Action Taken on Weaknesses, Section-I.

Recommendation-II: More Centres of excellence should be established in well-defined thrust areas of national relevance, societal needs and international significance, similar to the proposed Nano-S&T Centre.

Action Taken:

The University is continuously striving for excellence and has sent two proposals for the status of Centre of Excellence. These include:

- i) Proposal to Government of Gujarat for granting the status of ‘Centre of Excellence’ to Nirma University
- ii) Proposal to UGC for granting a Centre with Potential of Excellence in Particular Area (CPEPA). Under this scheme, two project proposals were submitted to the UGC in interdisciplinary areas, with titles:
 1. Development of Nano-therapeutics for the treatment of Type II Diabetes and its Complications
 2. Bio-energy: Fuels, Chemicals and Electricity from Biomass via Thermo-chemical Processes

Recommendation-III: Since the University has a large number of industries in the vicinity, the potential synergy benefits should be exploited through well planned collaborative activities.

Action Taken:

The University has established a full-fledged Industry-Institute Interaction Cell and appointed a senior person as Head – Corporate Relations. At institute level, Manager - Corporate Relations looks after the collaborative activities with the industries. Several collaborative activities carried out by the University with the nearby industries, research organizations, NGOs, Corporates, etc. are highlighted below:

- i) Tailor-made training programmes/MDPs for the neighbouring industries / research organizations. (More than 80 such programmes have been arranged during the assessment period.)
- ii) The University has offered a 90-days diploma programme to Adani Enterprises Ltd.
- iii) Joint Research Projects, Paper Publications, Patents, etc. Several research projects are ongoing with Space Applications Centre (SAC-ISRO), Ahmedabad and Institute for Plasma Research, Gandhinagar.
- iv) Consultancy, testing, environmental audit, etc. for neighbouring industries
- v) Recognition to experts of prestigious research organizations as Ph.D. guides

Centre for Continuing Education (CCE):

Apart from the above, the University has established a Centre for Continuing Education to provide continuing education, knowledge, training facilities, etc. in various fields. It identifies the needs of specific sectors, plan and organizes suitable training programmes for them. It conducts short and long duration programmes in three areas:

- i) Education Enrichment
- ii) Areas of Social Relevance
- iii) Training of Stakeholders

Recommendation-IV: The University should benchmark itself against world class universities and replicate their best practices to achieve higher level quality and excellence.

Action Taken:

The University puts continuous efforts to benchmark itself against the international as well as national institutes / universities in all activities, including academics and administration.

It is worthwhile to note that, while revising the curriculum of various programmes in the year 2013, the constituent institutes have thoroughly scanned the curriculum of leading

national institutes, like IITs, IIMs, NIPER, National Law School, etc. and a few leading foreign Universities.

Best Practices of the Prominent Institutes Adopted by the University:

- i) Implementation of Outcome Based Education (OBE)
- ii) Establishment of Centre for Continuing Education Centre (CCE)
- iii) Started innovative PG programme - M.Tech. (by Research)
- iv) Introduction of various Enrichment / Value Added Courses
- v) Continuous Evaluation of the students
- vi) Course Grading System
- vii) National Level Entrance Exam for UG and PG Programmes
- viii) Evolving a Structure System of Faculty Development Programmes
- ix) Developing a systematic process of Academic Audit at the faculty, institute and university level

Conference & Seminar on Quality Assurance and Best Practices:

During the assessment period, the University has organized two programmes on Quality Assurance and Best Practices. These include:

- i) National Seminar on, “Best Practices for enhancement of Institutional Quality and Excellence” during May 24-25, 2012 with the support of NAAC.
- ii) National Seminar on, “NextGen Universities: Roadmap for Higher Education in India” on April 17, 2013.

Recommendation-V: The university should enhance its focus, especially in engineering to include in addition to undergraduate, post graduate education and research.

Action Taken:

As recommended by the peer team, the University has given importance to the engineering courses and following measures are taken:

- In last four years, eight new post-graduate programmes have been started, namely M. Tech. in:
 - i) Instrumentation and Control (Control & Automation)
 - ii) Mechanical Engineering (Design Engineering)
 - iii) Mechanical Engineering (Computer Integrated Manufacturing)
 - iv) Electrical Engineering (Electrical Power Systems)
 - v) Electronics and Communication Engineering (Embedded System)
 - vi) Computer Science & Engineering (Information & Network Security)
 - vii) Mechanical/Electrical / Chemical Engineering (Energy System)
 - viii) M. Tech. Programme - By Research (For all branches)
- A separate Post-Graduate and Research building is now functional with all necessary facilities.
- Necessary budget provisions are made for all PG programmes.
- Sizable numbers of PG students are given stipend.
- Introducing Idea Lab: The students can submit their innovative ideas to the Idea Lab and can get funding from the University.
- More numbers of premier R&D organizations are given recognition for conducting Ph.D. research.
- More number of internal and external Ph.D. guides is added.

Recommendation-VI: *The faculty members should be encouraged and motivated to be elected as fellows of relevant national academics and professional societies, which demand excellence in academics and professional activities.*

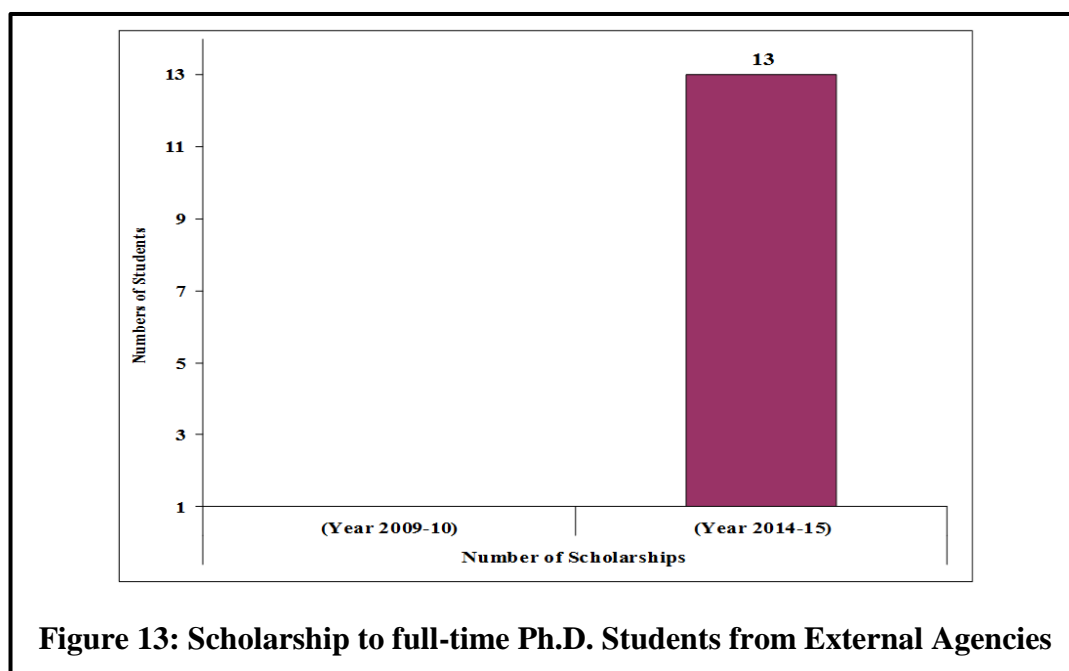
Action Taken:

The University encourages all the faculty members to actively participate in professional activities and to become members of professional societies. The University also reimburses the membership fees of professional bodies.

Recommendation-VII: *Scholarships should be provided to full-time Ph.D. scholars through extramural grants of the faculty.*

Action Taken:

The University is encouraging full-time Ph.D. students by offering them scholarships. As shown in Figure 13, currently, 13 Ph.D. students are getting scholarships through the funded research projects and various government schemes.



Recommendation-VIII: *Correction in the nomenclature of the B.Pharm. (Hons) degree: The degree certificate of B.Pharm. (Hons) needs to be corrected as it misrepresents duration of the course (five year integrated course) vs actual time spent by the student (one year).*

Action Taken:

The programme has been discontinued in pursuance to the recommendation given by the NAAC Peer Team.

SECTION - III

Action Taken to Sustain the Institutional Strengths

Strength-I Identified by the NAAC Peer Team:

Aesthetically laid out campus, very good guest house and MDP hostel, well-designed hostels with adequate facilities and amenities and excellent gymnasium which is well utilized by students

Action Taken:

- In last five years, substantial infrastructure has been added, while maintaining the campus aesthetics and keeping the environment pollution free
- Addition of class-rooms, modernization of laboratories and library
- Modernisation of the campus lighting, irrigation system and the University main gate
- Construction of sewage treatment plant
- Development of Sports Ground, Cricket Stadium and Synthetic Sports Complex with modern lighting system
- Up gradation of hostel rooms
- A big project of a multi-storied building is planned and the construction work has been initiated. This new building will comprise of class-rooms, faculty rooms, cafeteria, large-size additional auditorium, student facilities, etc.

Strength-II Identified by the NAAC Peer Team:

Excellent academic ambience for UG education and effective use of ICT in Teaching - Learning process

Action Taken:

- Adopted 'Outcome Based Education' for all programmes
- Revamping of curricula in the year 2013
- Inclusion of value-added/enrichment courses in the curriculum
- Institute Elective as well as University Elective Courses have been introduced as per Choice Based Credit System (CBCS) guidelines
- Course web page/course blog for 24X7 ICT based learning
- Promotion of MOOC courses, NPTEL, Virtual Labs, instructional videos and Open Source software, etc.
- Introduced 'Idea Labs'
- Continued best practices of continuous evaluation
- Initiated rigorous Academic Audit System
- Started intensive Faculty Development Programmes

Strength-III Identified by the NAAC Peer Team:

The UG engineering programmes are the preferred destination for Gujarat domiciles

Action Taken:

UG engineering programmes have now become the favourite destination for the students of the entire country. This is because, now 50% of the total seats are filled on the basis of JEE results from all over the country.

Strength-IV Identified by the NAAC Peer Team:

Very good information availability, transparency and documentation of systems and processes

Action Taken:

- Processes from admission to alumni connect, teaching-learning to library resource management; accounts, exam and general administration are examined time to time and relevant modifications are made to make them more transparent and effective. Further, all such processes are made faster by the use of ICT.
- All assessed answer books, including Semester End Exam (University Exam) are shown to the students.

PROFILE OF THE UNIVERSITY

1. Name and Address of the University:

Name: Nirma University
 Address: S. G. Highway
 City: Ahmedabad
 Pin: 382 481
 State: Gujarat
 Website: www.nirmauni.ac.in

2. For Communication :

Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Director General	Dr. Anup K. Singh	079-30642711	09825034700	02717-24280	dg@nirmauni.ac.in
Executive Registrar (I/c)	Dr. A. S. Patel	079-30642671	09879609650	02717-24280	exe_registrar@nirmauni.ac.in
Steering Committee Coordinator	Dr. Dhaval Pujara	079-30642670	09925965718	02717-241917	dy.director.adr@nirmauni.ac.in
University Telephone Numbers:			079-30642000 and 02717-241911/12/13/14/15		

3. Status of the University:

State University -
 State Private University ✓
 Central University -
 University under Section 3 of UGC (Deemed University) -
 Institution of National Importance -
 Any other (please specify) -

4. Type of the University:

Unitary ✓
 Affiliating -

5. Source of Funding:

Central Government -
 State Government -
 Self-financing ✓
 Any other (please specify) -

6. Date of Establishment of the University:

17/04/2003

Prior to the establishment of the University, was it a/an		
	YES	NO
i) PG Centre	-	-
ii) Affiliated College	√	-
iii) Constituent College	-	-
iv) Autonomous College	√	-
v) Any other (please specify)	-	-
If yes, give the date of establishment:	Institute of Technology : 1995 Institute of Management : 1996	
Note: Prior to the establishment of the University, the Institute of Technology was affiliated to Gujarat University and Institute of Management was an autonomous institute.		

7. Date of recognition as a university by UGC or any other national agency:

Under Section	dd	mm	yyyy	Remarks
2(f) of UGC*	03	06	2004	-
12(B) of UGC	-	-	-	The University has applied for Section 12(B) of UGC Act.
3 of UGC [#]	-	-	-	-
Any other ^{&} (specify)	-	-	-	-
* The copy of the UGC notification granting the status of 2(f) is attached as Annexure – I. * The copy of the UGC notification for the change of the name of the University is attached as Annexure – II.				
[#] The copy of the approval letter from the Pharmacy Council of India is attached as Annexure – III. The copy of the approval letter from the Bar Council of India is attached as Annexure – IV. The copy of the approval letter from the Council of Architecture is attached as Annexure – V.				

8. Has the University been Recognized:

a.) By UGC as a University with Potential for Excellence?
The University has applied for the status of Potential for Excellence, vide letter No. NU/ADR/ER/UGC/CPEPA/14, dated September 27, 2014

If yes, date of recognition: (dd/mm/yyyy)	– Not Applicable
b.) For its performance by any other governmental agency?	– Not Applicable
If yes, Name of the agency and	– Not Applicable
Date of recognition: (dd/mm/yyyy)	– Not Applicable

9. Does the university have off-campus centres?

NO	
If yes, date of Establishment:	– Not Applicable
Date of Recognition:	– Not Applicable

10. Does the university have off-shore campuses?

NO	
If yes, date of Establishment:	– Not Applicable
Date of Recognition:	– Not Applicable

11. Location of the Campus and Area:

	Location *	Campus Area in Acres	Built up Area in sq. mts.
Main Campus Area	Urban	110 Acres	131141.31
Other Campuses in the Country	NO		
Campuses Abroad	NO		
*Urban, Semi-Urban, Rural, Tribal, Hilly Area, Any other (please specify)			

12. Provide information on the following:

Auditorium / Seminar Complex with Infrastructural Facilities:

The University has 02 Auditoriums and 07 Seminar Halls with air-conditioned and moderns audio visual facilities.

Sports Facilities:	
Playground:	The University has play grounds and Student Activity Centre for various indoor and outdoor games. The indoor game facilities include, carom, chess, table tennis, etc. Apart from these, the University has Tennis Court, Basketball Court, Volleyball Court, Cricket Ground and Football Ground with all the required equipment.
Swimming Pool:	NO
Gymnasium:	The University has a well-equipped gymnasium.

Any other (please specify):	--
Boys' Hostel:	
Number of Hostels:	02
Number of Inmates:	524
Facilities:	Dining Hall, Television Room, Internet and Laundry, Wi-Fi
Girls' Hostel:	
Number of Hostels:	01
Number of Inmates:	281
Facilities:	Dining Hall, Television Room, Internet and Laundry, Wi-Fi
Working Women's Hostel: – NIL	
Number of Hostels:	-
Number of Inmates:	-
Facilities:	-
Residential Facilities for Faculty and Non-Teaching Staff: Nil	
Cafeteria: The University has two (02) Cafeterias and two (02) Canteens / Dining Halls.	
Health centre – Nature of facilities available – inpatient, outpatient, ambulance, emergency care facility, etc.: Health Centre – Nature of Facilities: The University has made arrangements to provide medical facilities on the campus by appointing a full time Doctor, who is available daily from 11.30 a.m. to 6.30 p.m. on the campus. The Health Centre provides treatments as outpatient for all primary diseases and has all basic facilities. Also, the Government Civil Hospital is near to the University Campus. Also, a First-Aid Box is kept in each block.	
Outpatient: Approximately 15 to 20 patients per day.	
Ambulance: Facility is available on call.	
Emergency Care Facility: A doctor is available on call during any emergency.	
Facilities like Banking, Post Office, Book Shops, etc.: A Bank, a Tuck Shop and a Book Shop are available within the University campus.	

Transport Facilities to Cater to the Needs of the Students and Staff: Yes, The University provides travel facilities to its students and staff members. The University owns a fleet of 33 buses covering all areas of Ahmedabad and Gandhinagar. The University also has 30 small vehicles (Cars / Jeeps) to provide transport facilities to the senior professors/officers and external experts.
Animal House: The University has an Animal House maintained by the Institute of Pharmacy.
Incinerator for Laboratories: Yes, the University has an Incinerator for Laboratories.
Power House: 3 DG sets are available with a total capacity of 1250KW.
Waste Management Facility: Waste management facility and a Sewage Treatment Plant are available.

13. Number of Institutions Affiliated to the University:

– Not Applicable

Type of Colleges	Total	Perman ent	Temporary
Arts, Science and Commerce			
Law	Not Applicable		
Medicine			
Engineering			
Education			
Management			
Others (specify and provide details)			

14. Does the University Act provide for conferment of autonomy (as recognized by the UGC) to its affiliated institutions? If yes, give the number of autonomous colleges under the jurisdiction of the University.

– Not Applicable

Yes	Not Applicable
No	
Number	

15. Furnish the Following Information:

a. University Departments	Institutions	Number	Number of Students
b. Constituent Colleges		06	6932

c. Affiliated Colleges		NA	NA
d. Colleges under 2(f)		NA	NA
e. Colleges under 2(f) and 12(B)		NA	NA
f. NAAC Accredited Colleges		NA	NA
g. Colleges with Potential for Excellence (UGC)		NA	NA
h. Autonomous Colleges		NA	NA
i. Colleges with Postgraduate Departments		NA	NA
j. Colleges with Research Departments		NA	NA
k. University Recognized Research Institutes/Centres		08 (For conducting Research leading to Ph.D.)	53

16. Does the university conform to the specification of Degrees as enlisted by the UGC?

Yes	The University offers degrees as prescribed by the UGC.
No	-
If the university uses any other nomenclatures, please specify.	-

17. Academic programmes offered by the university departments at present, under the following categories:

Programmes	Number
UG	13
PG	38
Integrated Masters	01
M.Phil.	--
Ph.D.	05
Integrated Ph.D.	--
Certificate	--
Diploma	--
PG Diploma	--
Any other (please specify)*	--
Total	57

* The University offers various programmes through Centre for Continuing Education and the certificate of participation is given.

18. Number of working days during the last academic year:

Academic Year 2010-11	198
Academic Year 2011-12	198

Academic Year 2012-13	203
Academic Year 2013-14	203

19. Does the university have a department of Teacher Education?

NA

20. Does the university have a teaching department of Physical Education?

NA

21. In the case of Private and Deemed Universities, please indicate whether professional programmes are being offered?

YES	√
NO	-
If yes, please enclose approval / recognition details issued by the statutory body governing the programme.	

22. Has the university been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon.

Yes, the University has been reviewed by a UGC Expert Committee for granting the status of 2(f). Based on the inspection report, the University has submitted the compliance report. The compliance report was then placed before the UGC at its 494th meeting held on 31st July 2013 (Item No. 5.03) and the commission has accepted the report. The same was conveyed by UGC in its letter F. No. 8-24/2012 (CPP-I/PU) dated August 23, 2013.

The copies of the UGC inspection report and the compliance report submitted by the University are attached as Annexure VI and VII, respectively.

23. Number of Positions in the University:

Positions	Teaching faculty			Non-Teaching Staff	Technical Staff
	Professor	Associate Professor	Assistant Professor		
Sanctioned by the University	74	125	203	152	123
<i>Recruited</i>	40	63	190	123	103
<i>Yet to Recruit</i>	28	62	-17*	17	16
Number of persons working on the contract basis	06 (including 4 Adjunct professors)	--	30	12	04

* Additional Assistant Professors recruited against the post of Associate Professors.

Note: Additional 27 new faculty members are issued appointment orders recently.

24. Qualifications of the Teaching Staff:

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
Permanent Teachers							
	Male	Female	Male	Female	Male	Female	Total
Ph.D.	32	08	21	13	20	21	115
M.Phil.	--	--	--	--	02	01	003
PG	--	--	20	09	93	52	174
UG	--	--	--	--	--	01	001
Temporary Teachers							
Ph.D.	03	--	--	--	--	01	04
M.Phil.	--	--	--	--	--	01	01
PG	03	--	--	--	14	14	31
Part-time Teachers (Visiting Teachers)							
Ph.D.	--	--	--	--	04	--	04
M.Phil.	--	--	--	--	--	01	01
PG	--	--	--	--	28	14	42
UG	--	--	--	--	08	--	08

25. Emeritus, Adjunct and Visiting Professors:

The list of Emeritus, Adjunct and Visiting Professors who served the University during the assessment period are shown in Table given below:

Sr. No.	Associating Institute	Name of the Professor	Emeritus /Adjunct/ Visiting Professors
1.	Institute of Technology	Prof. G.I. Prajapati	Adjunct Professor
2.		Late Dr. N. Subrahmanyam	Adjunct Professor
3.		Prof. Kunal Ghosh	Adjunct Professor
4.	Institute of Management	Prof. A.C. Brahmabhatt	Adjunct Professor
5.		Prof. Rajesh Kikani	Adjunct Professor
6.		Prof. Raghuvir J. Modi	Visiting Faculty
7.		Prof. Sari A. Mattila	Visiting Faculty
8.	Institute of Science and Institute of Law	Dr. Vidyut Joshi	Emeritus Professor
9.	Institute of Law	Hon'ble Justice Mr. C. K. Thakkar	Honorary Visiting Professor
10.		Hon'ble Mr. Justice J.N. Bhatt	Honorary Visiting Professor
11.		Prof. (Dr.) Yogesh Mehta	Honorary Visiting Professor
12.		Prof. H.C. Dholakia	Honorary Visiting Professor
13.		Dr. Nirbhaya Indrayan	Adjunct Professor

26. Chairs Instituted by the University:

School / Department	Chairs
Institute of Law	01 (Research Chair)

The University has framed a policy for appointing Chairs and efforts are being made to appoint suitable persons.

27. Students enrolled in the university departments during the current academic year, with the following details: (Academic Year 2014-15)

Students	UG		PG		Ph. D.		Certificate		Diploma		PG Diploma	
	M	F	M	F	M	F	M	F	M	F	M	F
From the state where University is located	735	155	423	222	38	25	-	-	-	-	-	-
From Other States of India	215	105	195	102	07	07	-	-	-	-	-	-
NRI / NRI Sponsored Students	113	51	12	08	-	-	-	-	-	-	-	-
Foreign Students*	16	13	-	-	-	-	-	-	-	-	-	-
Total	1079	324	630	332	45	32	-	-	-	-	-	-

Note:

The above data is only for the newly admitted students during the academic year 2014 – 15. However, the total students' strength in the University is: 6985.

*Students who pass their qualifying exam from Foreign Countries are counted as Foreign Students.

28. 'Unit cost' of Education: (Data of year 2013-14)

- including the salary component
- excluding the salary component

Programmes	Including Salary (in ₹)	Excluding Salary (in ₹)
B.Tech.	126264/-	67285/-
M.Tech.	154055/-	82083/-
MCA	141424/-	77678/-
BBA-MBA	82800/-	65845/-
MBA	375101/-	253011/-
B.Pharm.	174547/-	94488/-
M.Pharm.	275403/-	173877/-

M.Sc.	185277/-	101115/-
B.A.L.L.B.(Hon's) / B.Com. L.L.B. (Hon's)	81493/-	54698/-

29. Academic Staff College:

The University does not have an Academic Staff College. However, the University has evolved a system of staff training through Academic Development and Research Cell. A senior level Professor is appointed to look after this activity.

Year of establishment: NA
Number of Programmes Conducted: 13

30. Does the university offer Distance Education Programmes (DEP)?

NO

31. Does the university have a provision for external registration of students?

YES	√ Ph.D. (External) M.Tech. (By Research)
NO	--
If yes, how many students avail of this provision annually? Currently, 244 students have registered for Ph.D. (External) and 15 students have registered for M.Tech. By Research – External Programme.	

32. Is the university applying for Accreditation or Re-Assessment? If Accreditation, name the cycle.

Accreditation - Cycle 2

33. Date of Accreditation - Cycle 1:

28-03-2010 (As mentioned on the Certificate of Accreditation)

Accreditation Outcome/Result:

Grade: B
CGPA: 2.93 on the scale of 4.00

The copies of accreditation certificate and peer team report are enclosed as Annexure VIII, and IX, respectively.

34. Does the university provide the list of accredited institutions under its jurisdiction on its website? Provide details of the number of accredited affiliated / constituent / autonomous colleges under the university.

Not Applicable

(As none of the constituent institutes of the University has been accredited separately)

35. Date of establishment of Internal Quality Assurance Cell (IQAC) and dates of submission of Annual Quality Assurance Reports (AQAR).

AQAR of 2010-11	03-11-2011
AQAR of 2011-12	28-12-2012
AQAR of 2012-13	19-12-2013
AQAR of 2013-14	24-11-2014

36. Any other relevant data, the university would like to include

- The University has got recognition of ‘Scientific and Industrial Research Organization (SIRO)’ by the Department of Scientific and Industrial Research, Govt. of India, New Delhi.
- The University has membership of, (i) Association of Indian Universities (AIU), (ii) Global Engineering Deans’ Council (GEDC), and (iii) Association of Commonwealth Universities
- The University is ranked among the top five private universities in the country by prestigious magazine like ‘*The Week*’ in June 2014. Further, it is ranked as 6th best university among the top 25 universities in India by ‘*Higher Education Review*’ in 2014.
- The Institute of Technology is ranked in the category of ‘Premier Engineering Colleges’ amongst Best Engineering Colleges across the country by ‘*The Education Post*’ in 2014. Further, it is listed in the category of Top Engineering Colleges of Super Excellence by ‘*Competition Success Review*’ in 2013 and 2014. In addition, it is ranked at 12th in the ‘*DataQuest*’ CMR T-School Survey 2014. The ISTE has given the Institute Best Chapter Award for the year 2008, 2009, 2010, 2011, 2012, 2013 and 2014. Moreover, the ISTE has given the Institute National Awards for the Best Teacher in Gujarat state in the year 2002, 2003, 2004, 2005, 2007, 2008, 2009, 2010, 2012, 2013 and 2014.
- Similarly, the Institute of Management is consistently ranked among top 25 business schools by magazines like ‘*Business Today*’, ‘*People Matters*’, and ‘*Outlook*’.
- The Institute of Law has been ranked first for its innovation in curriculum by ‘*Flair Talk*’ Magazine in its July 2014 issue.
- The Institute of Pharmacy has received funding of ₹55 Lacs under FIST programme from Department of Science & Technology, New Delhi.
- Institute of Law has been ranked amongst 4th best private schools in a ranking carried out by ‘*Career 360*’ in January 2015.
- The Fee Regulatory Committee of the state of Gujarat has categorized the Institute of Technology, Institute of Management and Institute of Pharmacy as ‘A’ grade institutions.

ANNEXURE-I


UGC Notification Granting Status of 2(f)

38

ANNEXURE – A
[PART I.A(6)]

232351, 2323701, 2323721, 2323416
2323731, 2323747, 2323735, 2323437

UGC website-www.ugc.ac.in



प्रज्ञा-विज्ञान विद्युत्तये

विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002

UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

No. F.9-29/2003 (CPP-I)

NOTIFICATION

June, 2004
- 3 JUN 2004


A new university sponsored by "Nirma Education & Research Foundation" named as Nirma University of Science and Technology, Ahmedabad" has been established by Act No. 10 of 2003 of State Government of Gujarat and notified through the State Gazette vide Notification No. GH/SH/3/APB-2001-M-65-KHA dated 16-4-2003. The said university has been included in the list of universities maintained by the University Grants Commission under Section- 2 (f) of the UGC Act, 1956.

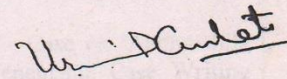
However, the above university, will not be eligible to receive any assistance from University Grants Commission and any other source funded by the Government of India.

(Mrs. Urmil Gulati)
Under Secretary

Copy to:-

1. The Vice-Chancellor, Nirma University of Science & Technology, Sarkhej, Gandhinagar Highway, Village-Chharodi, Ahmedabad (Gujarat).
2. The Secretary, Government of India, Ministry of Human Resource Development, (Department of Secondary & Higher Education), Shastri Bhavan, New Delhi-110 001.
3. The Principal Secretary to the Governor of Gujarat, Raj Bhavan, Gandhinagar.
4. The Secretary General, Association of Indian Universities, 16 Kotla Marg, New Delhi-110 002.
5. Director, (NAAC) National Assessment and Accreditation Council (NAAC), Bangalore-560 010.
6. The Director, Medical Council of India, Kotla Road, New Delhi-110 002.
7. The Secretary, Union Public Service Commission, Shahajahan Road, New Delhi-110 001.
8. The Joint Secretary, (SU), UGC, New Delhi.
9. Senior Statistical Officer, UGC, 35, Ferozshah Road, New Delhi-110 001.
10. JSO (web-site), UGC, New Delhi.
11. Section Officer (Meeting Section), UGC, New Delhi
12. All Regional Offices, UGC.
13. All Section of the UGC, New Delhi.
14. D.T.P. Cell, UGC, New Delhi.
15. Guard file.

Inward No.... 41
Recd. Dt.... 10/6/04
Dept.
To...
Sien. 


(Mrs. Urmil Gulati)
Under Secretary

ANNEXURE –II

UGC Notification for Change of the Name of the University

Ph. 23236351, 23232701, 23237721, 23234116
23235733, 23232317, 23236735, 23239437

www.ugc.ac.in



SPEED POST

विश्वविद्यालय अनुदान आयोग
बहादुरशाह जफर मार्ग
नई दिल्ली-110 002
UNIVERSITY GRANTS COMMISSION
BAHADURSHAH ZAFAR MARG
NEW DELHI-110 002

No. F. 9-29/2009 (CPP-I/PU)

December, 2014

17 DEC 2014

Notification

The name of Nirma University of Science and Technology, Gujarat which is already included in the list of State Private Universities maintained by University Grants Commission under Section 2 (f) of the UGC Act, 1956 has been changed as Nirma University, Gujarat vide Act No. 5 of 2009 passed by the State legislature of Gujarat and Notification No. G/GNR/2 dated 07.07.2009 issued by the Govt. of Gujarat.

Charan Dass
(Charan Dass)
Under Secretary (CPP-1)

o/c

Copy to: -

1. The Executive Registrar, Nirma University, Sarkhej-Gandhinagar Highway, Ahmedabad – 382481, Gujarat.
2. The Secretary, Higher Education, Govt. of Gujarat, 2nd Floor, Block No. 12, Dr. Jivraj Mehta, Gandhinagar.
3. The Secretary, Government of India, Ministry of Human Resource Development, (Department of Secondary & Higher Education), Shastri Bhavan, New Delhi-110001.
4. P.O. (Website) UGC, New Delhi.
5. SO (SU-II) UGC, New Delhi.
6. Guard File.

Charan Dass
(Charan Dass)
Under Secretary (CPP-1)

o/c

Puneet
10/12/2014



ANNEXURE-III

Approval Letter – Pharmacy Council of India



भारतीय भेषजी परिषद्
(भेषजी अधिनियम, 1948 के अंतर्गत स्थापित)
PHARMACY COUNCIL OF INDIA
(CONSTITUTED UNDER THE PHARMACY ACT, 1948)

तार Telegram : 'फार्मकाउंसिल' 'FARM COUNCIL'
दूरभाष Telephone : 23239184, 23231348
फैक्स Fax : 011-23239184
ई-मेल E-Mail : pci@ndb.vsnl.net.in
वेबसाईट Website : www.pci.nic.in

संयुक्त परिषद् भवन Combined Councils' Building
कोटला रोड Kotla Road
ऐवान-ए-गालिब मार्ग Aiwan-E-Ghalib Marg
पोस्ट बॉक्स नं. 7020 Post Box No. 7020
नई दिल्ली - 110002 New Delhi - 110002

Ref.No.17-1/2012-PCI / 43064-483

Regd.

23 MAY 2012

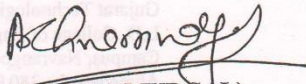
All Concerned Institutions

Sub.: Approval of D.Pharm/B.Pharm/Pharm.D & Pharm.D (Post Baccalaureate) course - Resolutions passed by 89th/Council (April, 2012) of the PCI.

Sir/Madam

With reference to the subject cited above, please find enclosed herewith, a relevant portion of the resolutions passed by the Pharmacy Council of India in its 89th meeting held in April, 2012 in respect of approval of your institution u/s 12 of the Pharmacy Act, 1948 for the purpose of registration as a pharmacist.

Yours faithfully


(ARCHNA MUDGAL)
Registrar-cum-Secretary


35

DEGREE

Item No./ File No.	Name of institutions	For admissions Limited to	Approved upto Academic session	Name of the Examining Authority
GUJARAT				
253	189/32-709/2009-PCI Smt. B.N.B. Pharmacy College Smt. B.N.B. Pharmacy College Salvav (Vapi), NH No.8 Salvav Tal-Pardi Distt. Valsad – 396191.	60	From 2006-2007 to 2013-2014	The Registrar Veer Narmad South Gujarat University University Campus Udhna – Magadalla Road Surat – 395 007. The Registrar Gujarat Technological University L.D. College of Engineering Campus, Navrangpura Ahmedabad – 380 015.
254	190/32-260/2011-PCI Rofel Shri G.M. Bilakhia College of Pharmacy, "Rofel Campus" Vapi – Namdha Road, P.B. No.11, Vapi (West) – 396 191.	60	2013-2014	The Registrar Veer Narmad South Gujarat University University Campus Udhna – Magadalla Road Surat – 395 007. The Registrar Gujarat Technological University L.D. College of Engineering Campus, Navrangpura Ahmedabad – 380 015.
255	191/32-711/2010-PCI Shree Krishna Institute of Pharmacy Krishna Campus, Shankhalpur Ta-Bechraji, Distt. Mehsana – 384 210.	60	From 2007-2008 to 2013-2014	The Registrar Hemchandracharya North Gujarat University P.B. No.21, University Road Tal. & Distt. Patan. (Upto 2007-2008) The Registrar Gujarat Technological University L.D. College of Engineering Campus, Navrangpura Ahmedabad – 380 015. (From 8 th July, 2008)
256	192/32-911/2010-PCI M.P. Patel College of Pharmacy, Jeevanship Campus, Kapadwanj – Kheda.	60	From 2008-2009 to 2013-2014	The Registrar Gujarat Technological University L.D. College of Engineering Campus, Navrangpura Ahmedabad – 380 015.
257	193/32-356/2011-PCI Institute of Pharmacy, Nirma University, Sarkhej- Gandhinagar Highway, Ahmedabad – 382 481.	100 (Raise in admns. from 60 to 100 from 2011-2012 a.s.)	2015-2016	The Registrar Nirma University of Health Sciences Sarkhej – Gandhi Nagar Highway Ahmedabad – 382 481.

ANNEXURE-IV

Approval Letter - Bar Council of India

<p>Grams : ALINDIABAR, New Delhi E-mail : info@barcouncilofindia.org Website : www.barcouncilofindia.org</p>		<p>Inward No. 201 Rec. Dt. 30/7/2012 Dept. B-57 To MBS Sign.</p>	<p>Tel. : (91) 011-4922 5000 Fax : (91) 011-4922 5011</p>
<h2 style="margin: 0;">भारतीय विधिज्ञ परिषद्</h2> <h2 style="margin: 0;">BAR COUNCIL OF INDIA</h2>			
<p>जे. आर. शर्मा सचिव J. R. SHARMA MA, B.Ed., LL.B., LL.M., MBA Secretary</p>	<p>21, राजज ऐवन्यू इन्स्टीटूशनल एरिया नई दिल्ली - 110 002 21, Rouse Avenue Institutional Area New Delhi - 110 002</p>		
<p>BCI:D:408 /2012(LE. Mtg. 7th July, 2012)</p>			
		<p>Dated : 18.7.2012</p>	
		<p>Regd. A.D.</p>	
<p>The Registrar, Nirma University of Science and Technology Sarkhej- Gandhinagar Highway Ahmedabad - 382 481 Gujarat</p>			
<p>Sub.: Temporary approval of affiliation of Institute of Law, Nirma University of Science and Technology, Ahmedabad, Gujarat for five year BA. LLB, B.Com. LLB and BBA.LLB law courses.</p>			
<p>Sir,</p>			
<p>Legal Education Committee at its meeting held on 7th July, 2012 considered the inspection report of the above mentioned college and Committee made the following recommendations:-</p>			
<p>The Legal Education Committee considered the recommendation of the Standing Committee. After consideration, Committee is of the view that extension of temporary approval of affiliation be granted to Institute of Law for imparting five year BA.LLB and BCom.LLB with existing strength of students for a period of three years from 2012-13 to 2014-15 and further new five year BBA.LLB course with intake of one section of 60 students for a period of two years from 2012-13 to 2013-2014 subject to the following conditions.</p>			
<ol style="list-style-type: none"> 1. The college management is directed to establish the Legal Aid Centre as per Clause-11, Schedule-III of Rule-11 of the Part-IV of the Legal Education Rules - 2008. 2. The institution is directed to upgrade the library by investing Rs. 50,000/- per year per stream. 3. Subject to further condition that teaching staff should be paid at least U. G. C. scale by Cheque. 4. Institute should submit affidavit in the compliance to the above conditions within three months. 			
		<p>Inward No. 1768 Rec. Dt. 31/7/12 Dept. LAW To I.C. Director Sign.</p>	

:2 :

The above recommendations were considered by the Bar Council of India at its meeting held on 8th July, 2012 and accepted the same.

College authorities are also required to apply to the Bar Council of India for further extension of approval of affiliation six months in advance before expiry of the period of approval of affiliation granted by the Bar Council of India i.e. on or before 31st December, 2013 for 5 year BBA. LLB and on or before 31st December, 2014 for 5 year BA.LLB & B.Com LLB courses failing which a late fee will be charged.

Yours Sincerely,


(J. R. Sharma)
Secretary


Copy to :

1. The Principal
Institute of Law
Nirma University of Science and Technology
Sarkhej- Gandhinagar Highway
Ahmedabad - 382 481
Gujarat
2. The Secretary,
Bar Council of Gujarat
3rd Floor, Satyamev Complex,
Opp. High Court Building
Ahmedabad, Gujarat

Encl: as above

ANNEXURE-V

Approval Letter – Council of Architecture



वास्तुकला परिषद्
Council of Architecture

वास्तुविद अधिनियम, 1972 के अंतर्गत भारत सरकार का एक स्वायत्त सांविधिक निकाय
(An Autonomous Statutory Body of Govt. of India, under the Architects Act, 1972)

D
24/5

AR (Acad.)

Ref: CA/5/Academic-GJ20
May 15, 2014

LETTER OF APPROVAL

Dr.A.S.Patel
Executive Registrar (I/c)
Nirma University
Sarkhej-Gandhinagar Highway
Ahmedabad-382 481
Tel: 02717-241900/01-04, Fax: 02717-241280
E-mail: exe_registrar@nirmauni.ac.in

Sub: Approval for introduction of **5 year full-time Bachelor of Architecture (B.Arch.) degree course**, from the Academic Session 2014-2015 - reg.

Sir,

I am directed to state that the Executive Committee of the Council of Architecture (COA) at its 129th Meeting held on 12th May, 2014, considered the assessment report of the Expert Committee that visited proposed **Institute of Architecture, Nirma University, Sarkhej-Gandhinagar Highway, Ahmedabad-382 481, Tel: 02717-241900/01-04, Fax: 02717-241280 E-mail: exe_registrar@nirmauni.ac.in** on 23rd April, 2014 (copy enclosed) together with the institutional report and other information provided by your institution/Trust/Society/University, for introduction of **5 year full-time Bachelor of Architecture (B.Arch.)** degree course from the Academic Session 2014-2015.

2. The Executive Committee after detailed discussions decided to accord its approval for introduction of **5-year full-time B.Arch. Degree Course** as detailed below, subject to recruitment of full-time faculty/fulfillment of conditions/ suggestions as contained in the report of the Expert Committee and / or prescribed by the Council and submission of compliance report of the same within 3 months. The admission of students for the academic session 2014-2015 be made only after the recruitment of requisite faculty as per norms of COA & a list of faculty with designation, qualifications, registration number issued by the Council, experience etc. be sent immediately to the Council for record.

3. The Executive Committee decided to **accord approval** for the introducing of 5 year full-time B.Arch. degree course as detailed below:-

NAME OF THE FULL-TIME COURSE	DURATION	LEVEL OF COURSE	ANNUAL INTAKE	PERIOD OF APPROVAL
Bachelor of Architecture	Five Years Full-Time	Under Graduate Degree Course	40 (Forty)	2014-2015

It may be informed that the decision of the Executive Committee regarding approval of your institution is based on assessment report of the expert committee as well as taking into consideration all other aspects and information provided by the experts and the institution. Further, any error/rectification in calculation of marks in the assessment report has also been taken into account by the Executive Committee.

The numerical scores assigned in the assessment report of the institution are only for the purpose of evaluation of Minimum Standards prescribed by the Council. These are not a reflection of the institutional merit and should not be used for any promotional purposes or in any other manner in the public domain. Any violation in this regard shall attract disciplinary action against the institution.

4. The final observations of the Executive Committee are mentioned below for necessary information/compliance:

1. College must shift to its own independent building within 3 years of commencement.
2. College must recruit qualified teachers with statutory procedures within one year.

5. The COA has devised an Institutional Code for your institution which is **GJ20**. Kindly take note of the same and use it in all your future correspondence with the COA.

Contd...P/2.

India Habitat Centre, Core - 6A, 1st Floor, Lodhi Road, New Delhi - 110 003, India
Ph : 91-11-24648415, 24654172-73, Fax : 91-11-24647746, Email : coa@ndf.vsnl.net.in, web : www.coa.gov.in

23/5

Go. Registrar



: 2 :

6. Your institution must not admit any student in the 1st year of 5 year full-time B.Arch. degree course from the academic session 2014-2015 without having affiliation to a "University" established under Central/State Legislation. The letter of affiliation must be submitted to the Council before commencement of B.Arch. course.

7. 5 year full-time Bachelor of Architecture (B.Arch.) degree course is to be imparted by an architectural institution in an independent building and separate land having its own infrastructure and budgetary provisions. Every architectural institution must acquire a built-up space of 3000 sq.mtr. (i.e. 15 sq.mtr. per student) of its own, available for the course for an annual intake 40 students within the next three years of its establishment. Further, an institution applying for additional intake shall be required to create adequate infrastructural facilities in proportion to the additional intake sought, as and when sanctioned by the Council. This may be verified by the Council at any stage, based on the prescribed Regulations, Norms and Guidelines.

8. The institution shall initiate necessary remedial actions based on the enclosed inspection report and send its observations/compliance on the same, if any, for further consideration of the Executive Committee. This approval is also subject to compliance of specific conditions attached herewith. The compliance of all conditions must be submitted to COA before commencement of the course.

9. The Expert Committee of the Council may visit your premises, if found necessary, to ascertain the facts that the said course is imparted as per the Rules/Regulations/Guidelines prescribed by CoA, from time to time, under the Architects Act, 1972.

10. Your Institution shall be required to follow the "Council of Architecture – Minimum Standards of Architectural Education, 2008" which have been prescribed pursuant to Section 21 of the Architects Act, 1972 supplementing the Council of Architecture (Minimum Standards of Architectural Education) Regulations, 1983, for imparting the above said B.Arch. degree course. These Standards are available at the website of the Council i.e. www.coa.gov.in.

11. Please note that as per the above referred Minimum Standards, your institution shall admit only such students who have passed an Aptitude Test in Architecture. The eligibility criteria for admission to B.Arch. shall be; (i) no candidate, with less than 50% marks in aggregate, shall be admitted to the architecture course unless he/she has passed an examination at the end of the new 10+2 scheme of Senior School Certificate Examination or equivalent with Mathematics as subjects of examination at the 10+2 level or (ii) 10+3 Diploma (any stream) recognised by Central/ State Governments with 50% aggregate marks or (iii) International Baccalaureate Diploma, after 10 years of schooling, with not less than 50% marks in aggregate and with Mathematics as compulsory subject of examination.

12. Adequate architecture teaching faculty are to be recruited as per the Minimum qualifications, experience and structure for teaching posts in a degree level architectural institution as prescribed in *Appendix-B1* of the Minimum Standards under reference. You are requested to adopt these Minimum Standards relating to Duration and Stages of the Course, Admission to the Architecture Course, Courses and periods of Studies, Standards of staff, equipment, accommodation, training and other facilities for technical education and Sanctions in your Institution, for imparting recognized architectural qualification under the Architects Act, 1972.

13. Please note that the Interview Board or Selection Committee etc. set up for recruitment(s)/promotion(s) in respect of architecture teaching faculty positions shall have a representative of the Council. The said COA representative will act as a full-fledged Member of the Interview Board or Selection Committee and help in scrutinizing the qualification, experience and other relevant details of the applicants for selection of suitable candidates. Recruitments or Promotions made to architecture teaching faculty positions in your Institution without the involvement of a COA representative shall not be deemed valid by the Council. Please also note that the Head as well as other architecture teaching faculty of your institution must have valid registration under the Architects Act, 1972 with the COA.

Yours faithfully,

R.K. Oberoi
Offg. Registrar

Encl: as above.

Contd...P/3.

: 3 :


CC: for information, please to:-

1. The Principal Secretary
Higher & Technical Education
Department of Education
Block No.5, 9th Floor, Sachivalaya
Gandhi Nagar-382 010 (Gujarat)
2. The Director
Directorate of Technical Education
Block No.2, 2nd Floor
Dr. Jivraj Mehta Bhavan
Gandhi Nagar-382 010 (Gujarat)
3. The Vice-Chancellor
Nirma University
Sarkhej-Gandhinagar Highway
Ahmedabad-382 481
Tel: 02717-241900/01-04

ANNEXURE-VI

UGC Inspection Report for Granting the Status of 2(f)

To,
Shri C D Jaleji


 ज्ञान-विज्ञानं विमुक्तये

विश्वविद्यालय अनुदान आयोग
 बहादुरशाह जफर मार्ग
 नई दिल्ली-110 002
 UNIVERSITY GRANTS COMMISSION
 BAHADURSHAH ZAFAR MARG
 NEW DELHI-110 002

UGC Website : www.ugc.ac.in

F.1-12(1)/2004(M&E) October, 2004

Principal Secretary & Commissioner
 Department of Higher Education
 Government of Gujarat
 7th Floor, Sachivalaya,
 Gandhinagar-382 010

Shri C D Jaleji
P. C. B. M.
29/10
done

Subject: Inspection Reports in respect of Nirma University of Science & Technology, Ahmedabad & Dhirubhai Ambani Institute of Information & Communication Technology Gandhinagar established in the State of Gujarat.

Sir,

I am directed to inform you that the Commission has conducted Inspection of Nirma University of Science & Technology, Ahmedabad & Dhirubhai Ambani Institute of Information & Communication Technology Gandhinagar established in your State in terms of UGC (Establishment & Maintenance of Standards of Private Universities) Regulations 2003. I am enclosing herewith a copy of the Inspection Reports submitted by the Inspection Committee constituted by the Commission for Inspection of the said University for your information and further necessary action.

Yours faithfully,
Sdh
 (R.K. Chauhan)
 Additional Secretary

Copy to

1. Vice-Chancellor, Nirma University of Science & Technology, Sarkhej, Gandhinagar Highway, Ahmedabad-382481 along with a copy of Inspection Report for information and necessary action.
2. Vice-Chancellor, Dhirubhai Ambani Institute of Information & Communication Technology, Near Indroda Circle, Gandhinagar-382 007, Gujarat along with a copy of Inspection Report for information and necessary action.

282
29-10-04
Un
SRBatal

Sdh
 (R.K. Chauhan)
 Additional Secretary

**University Grants Commission
Bahadur Shah Zafar Marg
New Delhi – 110 002**

**Report of the Inspection Committee on its visit to Nirma University of Science
and Technology, Ahmedabad (a private university) on May 15, 2004**

1. INTRODUCTION

The University Grants Commission had constituted an Inspection Committee as per the following composition to visit Nirma University of Science and Technology, a private university established in Ahmedabad (Gujarat) for the purpose of ascertaining the availability of physical and academic infrastructure at the University (Ref. F.No. 1-1/2004 (DS-Admn) of May 06, 2004) :

- | | | |
|----|--|------------------------|
| 1. | Dr. B S Sonde
Former Vice-Chancellor,
Goa University, Goa | Convener |
| 2. | Dr. J V Prabhakar Rao
Department of Management
Andhra University
Waltair, Vishakhapatnam –530 003 | Member |
| 3. | Dr. Kapil Kapoor,
(Formerly Rector, JNU)
Department of English
Jawaharlal Nehru University
New Delhi – 110 067 | Member |
| 4. | Dr. Dev Swarup,
Deputy Secretary
University Grants Commission
New Delhi | Member Secretary |

The Committee visited Nirma University of Science and Technology, Ahmedabad on May 15, 2004, as per the programme suggested by UGC. All the members of the Committee were present during the day long visit, which commenced at the University campus at 1015 hrs. Prior to proceeding to the University campus, the Committee had its internal meeting at the place of stay to discuss the procedure to be followed, identify the items to be specifically looked into and consider the steps necessary for validation of the filled-in-questionnaire (in UGC

format) submitted by the University. On arrival at the campus, the Committee was received by Prof. N V Vasani, Vice-Chancellor, Shri Ambubhai M Patel, Managing Trustee (Nirma Education & Research Foundation) & Members of the Governing Board, Shri Hiren Patel, Member of the Governing Board, Shri D P Chhaya, Executive Registrar Director of Institutes and Heads of Departments. After brief introductions, the Committee was formally welcomed by Prof. Vasani. The Convenor and the Member Secretary in their opening remarks explained the purpose of the Committee visit and the procedure for inspection.

This was followed by brief presentations on Nirma Institute of Technology by Dr. H V Trivedi, Director and on Nirma Institute of Management by Dr. Anup K Singh, Director. A video on Nirma University of Science and Technology covering its vision, mission, goals, institutes, programmes, campus, activities and achievements was also presented on this occasion. In the discussion that followed, the Convenor and the members of the committee sought clarifications from the Vice-Chancellor, Registrar and the Directors of Institutes on some items which came up in their presentations and also referring to the filled-in questionnaire submitted by the University, which were provided satisfactorily. The Committee then visited major parts of the campus, various infrastructure facilities, library computer Centre, laboratories etc. and also had useful interaction with representative groups of faculty members and students on the campus. At the concluding stage of the visit, the committee called on Shri Karsanbhai K Patel, Chairman, Nirma Education & Research Foundation and also President, Board of Governors of the University to know about the future plans of the University. The Committee had its second internal meeting in the evening to discuss the day's proceedings and to take steps for preparing the Report of the Inspection Committee for Submission to UGC.

This Report is divided into five sections. Following this Introduction, major provisions in the Act of Nirma University of Science and Technology are compared with those in the UGC (Establishment and Maintenance of Standards in Private Universities) Regulations, 2003. This is followed by the Inspection Report in section 3. An Overall Analysis is then presented in section 4, followed by concluding Remarks at the end. The filled-in-questionnaire submitted by the University is appended to this Report.

2. Nirma University Act Versus UGC Regulations

The Nirma University of Science and Technology Act 2003 (Gujarat Government Gazette Notification dated April 26, 2003) is the basis for the establishment of this non-affiliating, unitary university. This has many features similar to other well-established universities and also following the UGC Regulations in the country, like :

- ⇒ clearly laid down "Object";
- ⇒ "powers and functions" well defined;
- ⇒ authorities, officers as per established practice;
- ⇒ some provision for association with the State Government, UGC and other Statutory Bodies,
- ⇒ powers for framing regulations.

However, there are a few differences between the provisions of this Act and the UGC Regulations (2003) relating to private universities. They are :

- a) As per the Act (clause 4(iii), the objects of the university include :
"to develop patterns of teaching at certificate/diploma, undergraduate, post-graduate and doctoral level."

But, as ^{per} the UGC Regulations (clause 3.6):

"The programmes of study at a private university shall lead to a degree and / or postgraduate degree/diploma conforming to relevant regulations/norms of the UGC....."

The University has made use of its Act to include Nirma Institute of Diploma Studies ^{as} one of its constituents, which is only a polytechnic admitting students at X+ level. This seems to be a major departure from UGC expectations in the Regulations- 2003 as polytechnic level programmes are generally outside University System.

- b) The University Act is silent on the jurisdiction of the University. But the UGC Regulations clearly spell out (clause 3.3) that a private university established

under a State Act shall operate ordinarily within the boundary of the State concerned. However, the University is presently working within the boundaries of the State of Gujarat.

- c) There is a requirement as per UGC Regulations (clause 3.4), that a private university shall fulfill the minimum criteria in terms of programmes, faculty, infrastructural facilities, financial liability etc as laid down by UGC, AICTE and other Statutory Bodies. But in the Nirma University Act, there does not seem to be any provision for this. However, the University Act (clause 29) has provision for furnishing Returns and Information to UGC and other Statutory Authorities, when called for.
- d) The UGC Regulations (clause 3.6) require that the programmes of study offered by a private University shall conform to the relevant Regulations of UGC or the concerned Statutory Body. There is no such provision in the University Act.
- e) The admission of students and fixation of fees, shall be as per the norms/guidelines prescribed by UGC and concerned Statutory Bodies (UGC guidelines, clause 3.9). But there is no provision for this in the University Act.

3. INSPECTION REPORT

The following Inspection Report has been prepared by the Inspection Committee after carefully perusing the filled-in-questionnaire submitted by the University and on-site validation of this through visits to various infrastructural facilities on the campus and discussions with a cross section of stake holders of the University.

1	Name of the University	:	Nirma University of Science and Technology Sarkhej-Gandhinagar Highway, Ahmedabad – 382 481.
2	Date of Visit	:	May 15, 2004.
3	Registered Office	:	Ahmedabad, Gujarat
4.a	Name & Headquarters of the Society/Promoting Agency	:	Nirma Education & Research Foundation, Ahmedabad, Gujarat

4 b	Whether the agency is involved in promoting/running any other University/Institution? If yes, details	:	No
5.	Claimed Territorial Jurisdiction	:	The University Act does not include any reference to this.
6.	Programmes permitted to be offered by gazetted notification of Govt. & its reference	:	Certificate/Diploma/Under-graduate/Post-graduate and Doctoral levels as per clause 4(iii) of the University Act, Gazette Notification of 16 th April, 2003
7.a	Whether all documents requested by the inspection team provided	:	Yes.
7 b	If not, what are the deficit documents (list to be enclosed)	:	Not applicable
8.	Physical verification of administrative infrastructure.	:	Satisfactory, as per the details given under items 14,16 of the questionnaire filled-in and submitted to UGC.
8 a	Whether administrative authorities like Governing Council, Academic Council & BOS formed & minutes of their meetings produced?	:	Yes, details provided under items 12,13 of the Questionnaire filled in.
8.b	Whether VC, Registrar, FO & Administrative Officers appointed? If yes, whether they were physically present during inspection?	:	Yes, VC, Registrar, Directors of Institutes, Heads of Departments were present.
8.c	List of authorized University Officers present during the UGC Committee Inspection.	:	As listed above.
8.d	Administrative Office details like approx. total plinth area, separate officers for VC, Registrar Administrative Office, Committee Room, Reception cum students waiting room etc.	:	Plinth areas of all buildings are given in details under item 16 in the questionnaire filled in. All buildings have been planned aesthetically and well constructed. All facilities required for faculty/students/others provided on the campus.
8.e	Whether Office equipments like Computer(s) Telephone/Fax, Xerox machines available	:	Yes, in adequate numbers.
9.	Physical verification of Academic Infrastructure	:	The Committee is satisfied with the adequacy, quality and standard of the

	Infrastructure	infrastructure.
9.a	Corpus of the society shown to the inspection team (i) Land documents, if shown, extent of land registered in the name of the University & its location (ii) Deposits made in the name of Society/University, separately or jointly with State authorities.	: Yes Yes, Details given under item 14 in Questionnaire filled in.100 acres (65 acres already in possession, remaining under transfer of registration) Yes, Rs. 5 crores as RBI Bond (non-cumulative, 6 Years) in the name of the University as per the Act.
9.b	Buildings shown to house the University & their plinth are details (i) Permanent (ii) Temporary/Leased Property	: 11 buildings permanent (item 16) and located in the main campus. Nil
9.c	Whether Library available? If available, details	: Yes Details given under item 16(iii) in the questionnaire. Very well equipped, including automation in service offered.
9.d	Whether Classrooms & Laboratories available? If available, details	: Yes Class-room of various sizes, well equipped including ICT facilities, high quality auditorium also.
9.e	Whether teaching staff appointed? If yes, details to be enclosed	: Yes Details given under item 18 (appendix 16)
9.f	Whether technical & non-teaching staff appointed? If yes, details to be enclosed.	: Yes, Details given under item 19 (appendix 17)
10.a	Whether students already admitted?	: Yes
10.b	If yes, breakup details of Courses as against the number of students admitted in each course.	: Details given under item 17(appendix 15)

10.c	Any Off-Campus or Study Centre or admission Centre established outside State?	: NO
11.	Overall remarks / observations	<p>a) The University is well planned and organized. Although functioning only since April 17, 2003 when its Act was gazetted, it is based on the strong foundation of its institutions, viz., Nirma Institute of Technology and Nirma Institute of Management, which have been in existence for 7-8 years.</p> <p>b) Its Engineering and Management Programmes have been already accredited (2 for 5 years, 5 for 3 years in 2001-02) by National Board of Accreditation. Besides, the Institute of Technology has been given an Award of Excellence by Indian Society for Technical Education in 2002-03.</p> <p>c) The University has been attracting competent students/faculty for its programmes from all over Gujarat. The Management programmes attract students from many other States as well. This is a sign of good progress.</p> <p>d) The committed management, dedicated team of faculty/non-teaching staff under the leadership of Shri Karsanbhai K Patel (Industrialist & Philanthropist) President, Board of Governors and Prof. N V Vasani, Vice-Chancellor is their big asset, which has enabled rapid growth of the University and reaching its present high status.</p>

		e) Recognizing the excellent role played by the University, the Indian Science Congress Association has identified Nirma University of Science & Technology as the venue for the forthcoming session of the Indian Science Congress to be held in January, 2005.
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4. OVERALL ANALYSIS

The Inspection Committee has noted that the University has developed well in a very short time. It was only in the year 1994 that Nirma Institute of Technology was established by the Nirma Education and Research Foundation, and this was approved by AICTE for several UG Degree programmes and also affiliated by Gujarat University. This Institute was joined by two other institutions, viz., Nirma Management Institute (1996) and Nirma Institute of Diploma Studies (1997), both being autonomous institutions, the former being AICTE approved and latter by the State Government. These institutes have formed the nucleus of Nirma University which has greatly helped it to take off in the right direction.

The University has been managed well in terms of physical infrastructure and has the rapidly growing students strength, which is now in the range of 5000. One more institute, viz., Nirma Institute of Pharmacy has been added to this family since 2003, when the University status was conformed. All the four institutions are well equipped, well staffed and forward looking. They make use of state of the art educational aids in students laboratories/class rooms. They are giving considerable emphasis to industrial interaction, placement of students, alumni linkages etc. with highly satisfactory results already being demonstrated. Moreover, a wide range of programme options upto Doctorate level are now available at the university. As a result, talented /merited students are always keen to join the programmes at this university.

However, the University has a few differences between the Act and the UGC Regulations 2003, which were brought to the attention of the Vice-Chancellor and other functionaries. In particular, the Committee has emphasized the need to separate out the Nirma Institute of Diploma Studies (which is basically a polytechnic) from the University system. The University authorities have agreed to give due consideration to the suggestions of the Committee.

5. CONCLUDING REMARKS

It has been a great pleasure for the Inspection Committee to visit Nirma University and familiarize with its programmes and activities. In a short time, this University has developed into a fine institution and is already attracting attention and admiration of the society. Its physical infrastructure and educational facilities are easily comparable with those of well established/reputed Universities in the country. Besides the management of the university appears to be keen to go along with the expectations of UGC in maintaining the norms and standards necessary for higher education in India. In the light of this, UGC may give necessary encouragement to the University in its forward march to become a Centre of excellence in higher education. This University richly deserves to be recognized by UGC by including it under Section 2(f) of UGC Act, 1956. The Committee wishes the University all success in this endeavour.

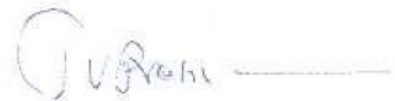


Prof. B S Sonde
(Convenor)



Prof. Kapil Kapoor
(Member)

New Delhi
May 19, 2004



Prof. J V Prabhakar Rao
(Member)



Dr. Dev Swarup
(Member Secretary)

ANNEXURE-VII

Compliance Report to UGC

D. P. Chhaya
Executive Registrar



NIRMA
UNIVERSITY

NU/AC/UGC/11-2939
Date: February 26, 2011

ole

To
Mrs. Shashi Bala Arora
Under Secretary
University Grants Commission
Bahadurshah Zafar Marg
New Delhi - 110 002

Sub: To send the compliance Report in respect of the observations / suggestions given by the UGC Expert Committee.

Madam,

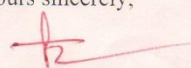
With reference to your letter bearing No. F.8-24/2010(CPP-I/PU) dated 17/2/2011, on the subject mentioned above, I am directed to state that in the report, there is no specific deficiencies which were pointed out in the report and were required to be complied with by the University. The University has received a copy of the letter along with the report addressed to the Principal Secretary & Commissioner of Department of Higher Education, Government of Gujarat and a copy to us. Thereafter, also we have not received any letter from the UGC with a direction to send compliance report within three months as shown in the above referred letter. However, a suggestion was made while the inspection that the diploma programme should be separated out from the university system.

Based on the suggestions, the University gave due consideration on this suggestion and it was observed that there are many universities where diploma programmes are also part of the university. Even in Gujarat, there is MS University of Baroda where the diploma programme is a part of the University.

In view of the above consideration, the University decided to continue with the diploma programme. The Nirma University is a non-affiliating University and all programmes are managed by the University like that of MS University of Baroda and therefore, it was thought proper to have the diploma programmes with the University."

Thanking you,

Yours sincerely,


(D. P. Chhaya)
Executive Registrar

Out ward No.	2939
Date	26/2/2011
Issue	
Sign.	H. H. H.

D:\omokh\Banshi\Executive Registrar\Letter to Under Secretary, UGC, reg. compliance report.doc

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ANNEXURE-VIII
NAAC – Accreditation Certificate



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वयत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

Certificate of Accreditation

*The Executive Committee of the
National Assessment and Accreditation Council
on the recommendation of the duly appointed
Peer Team is pleased to declare the
Nirma University of Science and Technology
Sarkhej-Gandhinagar Highway, Ahmedabad, Gujarat as*

Accredited

with CGPA of 2.93 on four point scale

at B grade

valid up to March 27, 2015

Date : March 28, 2010



HARSHVARDHAN
Director





राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद
विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान
NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL
An Autonomous Institution of the University Grants Commission

Quality Profile

Name of the Institution : Nirma University of Science and Technology
Place : Sarkhej-Gandhinagar Highway, Ahmedabad, Gujarat

Criteria	Weightage (W_i)	Criterion-Wise Grade Point Averages (Cr_i GPA)	$W_i \times Cr_i$ GPA
I. Curricular Aspects	150	2.73	410
II. Teaching-Learning and Evaluation	250	2.88	720
III. Research, Consultancy and Extension	200	2.05	410
IV. Infrastructure and Learning Resources	100	3.80	380
V. Student Support and Progression	100	3.70	370
VI. Governance and Leadership	150	3.23	485
VII. Innovative Practices	050	3.00	150
Total	$\sum_{i=1}^7 W_i = 1000$		$\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA}) = 2925$

$$\text{Institutional Score} = \frac{\sum_{i=1}^7 (W_i \times Cr_i \text{ GPA})}{\sum_{i=1}^7 W_i} = \frac{2925}{1000} = \boxed{2.93}$$

Grade =

Descriptor =

Date : March 28, 2010



H. H. H. H.
Director

- This certification is valid for a period of Five years with effect from March 28th 2010
- An institutional CGPA on four point scale in the range of 3.01 - 4.00 denotes A grade (Very Good), 2.01 - 3.00 denotes B grade (Good), 1.51 - 2.00 denotes C grade (Satisfactory)
- Scores rounded off to the nearest integer

ANNEXURE-IX
THE PEER TEAM REPORT ON INSTITUTIONAL ACCREDITATION

OF

**Nirma University of Science and Technology,
S.G Highway, Ahmedabad, Gujarat-382481**

Section I: GENERAL	Information			
1.1 Name & Address of the College :	Nirma University of Science and Technology Sarkhej-Gandhinagar Highway, Ahmedabad 382481, Gujarat, India			
1.2 Year of Establishment :	03-10-1995 (As affiliated College) 17-04-2003(UGC under section 2(f) of its Act, Dated 03/06/2004).A State Private University at Ahmedabad.			
1.3 Current Academic Activities at the University (Numbers):	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>Teaching Sanctioned -376, Filled – 353</td> </tr> <tr> <td>Non-teaching – 152, Filled – 139</td> </tr> <tr> <td>Technical – 120, Filled - 112</td> </tr> </table>	Teaching Sanctioned -376, Filled – 353	Non-teaching – 152, Filled – 139	Technical – 120, Filled - 112
Teaching Sanctioned -376, Filled – 353				
Non-teaching – 152, Filled – 139				
Technical – 120, Filled - 112				
<ul style="list-style-type: none"> • Faculties/ Schools: 				
<ul style="list-style-type: none"> • Departments/ Centres: 	Department <input style="width: 40px; text-align: center;" type="text" value="6"/>			
<ul style="list-style-type: none"> • Programmes/ Courses offered: 	PG <input style="width: 40px; text-align: center;" type="text" value="20"/> UG <input style="width: 40px; text-align: center;" type="text" value="11"/> Research <input style="width: 40px; text-align: center;" type="text" value="8"/> Others <input style="width: 40px; text-align: center;" type="text" value="7+1"/>			
<ul style="list-style-type: none"> • Permanent Faculty Members: 	<input style="width: 100%; text-align: center;" type="text" value="Female-136, Male- 217, Total - 353"/>			
<ul style="list-style-type: none"> • Permanent Support Staff: 	<input style="width: 100%; text-align: center;" type="text" value="Technical - 112 Non teaching - 139"/>			
<ul style="list-style-type: none"> • Students 	<input style="width: 100%; text-align: center;" type="text" value="5910"/>			
1.4. Three major features in the Institutional Context (As perceived by the Peer Team):	<ul style="list-style-type: none"> • An aesthetically designed and well maintained campus. ▪ ICT enabled teaching learning process and operations. ▪ Paucity of senior and Ph.D. qualified faculty; and externally funded research. 			
1.5 Dates of visit of the Peer Team	3 rd – 5 th February, 2010 (A detailed visit schedule is included):			
1.6.Composition of the Peer Team which	Chairman:			

undertook the on- site visit:

Prof R Natarajan, (Former Chairman, AICTE)
Mallechwaram, Bangalore- 560003

Member/s:

1. Prof. S. K Kulkarni
(Former Dean & Professor of
Pharmacology, Panjub University)
Director, Bombay College of Pharmacy,
Mumbai – 400 098
2. Prof. Sandeep Sancheti
Director, NIT, Surathkal
Karnataka
3. Prof. I. K. Bhat
Director, NIT, Hamirpur
Himachal Pradesh
4. Prof. Goutam Sanyal,
Former Dean (AA & Resource Generation)
Dean (Students Welfare)
Professor, Comp. Sc. & Engg.
NIT, Durgapur-713209, West Bengal
5. Prof. J. Nagaraju
Staff Scientist & Head
Laboratory of Molecular Genetics
Centre for DNA Fingerprinting and Diagnostic,
Hyderabad – 500076
6. Prof. Ramakrishna Vyas
Head, International Institute of Professional
Studies,
Devi Ahilya University, Indore
Madhya Pradesh

NAAC Coordinator:

Mr B S Madhukar, Deputy Adviser,
NAAC, Bangalore.

SECTION II: CRITERION WISE ANALYSIS

2.1 Curricular Aspects:

2.1.1 Curricular Design & Development:

- Academic Programmes are in line with institutional goals and objectives.
- Well laid out processes for curricular design

<p>2.1.2 Academic flexibility:</p> <p>2.1.3 Feedback on Curriculum</p> <p>2.1.4 Curriculum update</p> <p>2.1.5 Best Practices in Curricular aspects (If any):</p>	<p>and development.</p> <ul style="list-style-type: none"> • Limited provision of inter-disciplinary courses. • Lateral entry available for Diploma holders for admission in UG Courses. • Both on-line and off-line feedback are obtained, and recommendations are taken up for implementation wherever applicable. • Syllabus revisions are undertaken in most of the departments/courses. • In some cases, the spirit of the revisions is not reflected in the revised syllabi. • NPTEL courses have been procured and are being used. • CEED courses of IIT Mumbai are available.
<p>2.2 Teaching- Learning & Evaluation:</p> <p>2.2.1 Admission Process and Student Profile:</p> <p>2.2.2 Catering to the diverse needs:</p> <p>2.2.3 Teaching-Learning Processes:</p> <p>2.2.4 Teacher Quality:</p> <p>2.2.5 Evaluation Process and Reforms:</p>	<ul style="list-style-type: none"> • The University has a transparent admission process. • The engineering programme of this university are preferred by high ranking Gujarat domiciles. • The tutorial classes are conducted as required. • MBA programme in Family Business and entrepreneurship has been started in response to expressed need. • External registration opportunities are provided. • Conventional methods are employed e.g. Lectures, Tutorials, Projects, Seminars, Industry visits. • Paucity of senior and Ph.D-qualified faculty, and externally funded research. • Student evaluation of teachers is prevalent. • Transparent evaluation process exists.

<p>2.2.6 Best Practices in Teaching-learning and Evaluation (If any):</p>	<ul style="list-style-type: none"> • Remedial teaching and bridge courses are available • Faculty are deputed for QIP for enhancing higher qualifications.
<p>2.3 Research, Consultancy & Extension:</p> <p>2.3.1 Promotion of Research:</p> <p>2.3.2 Research and Publications Output:</p> <p>2.3.3 Consultancy:</p> <p>2.3.4 Extension Activities:</p> <p>2.3.5 Collaborations:</p> <p>2.3.6 Best Practices in Research, Consultancy and Extension (If any):</p>	<ul style="list-style-type: none"> • Considerable scope for improvement • Considerable scope for improvement in many departments • Very limited in many departments • Meager outreach activities • MoUs have been entered into with industries and foreign universities • Several activities have also been initiated under these MoUs <p style="text-align: center;">--</p>
<p>2.4 Infrastructure and Learning Resources:</p> <p>2.4.1 Physical Facilities for Learning:</p> <p>2.4.2 Maintenance of Infrastructure:</p> <p>2.4.3 Library as a Learning Resource:</p> <p>2.4.4 ICT as Learning Resources:</p>	<ul style="list-style-type: none"> • Well designed class rooms, labs and seminar halls • University has adequate power back-up • Good • RFID system for issue and return of books • Large number of hard copies of international journals and other data-bases • Feedback is sought from users and acted upon.

<p>2.4.5 Other Facilities:</p> <p>2.4.6 Best Practices in the development of Infrastructure and Learning resources (If any):</p>	<ul style="list-style-type: none"> • Extensively used • Transport, Canteen and Reprographic facilities • Good class rooms, laboratories and seminar rooms with LCD projection systems
<p>2.5 Student Support and Progression:</p> <p>2.5.1 Student Progression:</p> <p>2.5.2 Student Support:</p> <p>2.5.3 Student Activities:</p> <p>2.5.4 Best Practices in Student Support and Progression (If any):</p>	<ul style="list-style-type: none"> • Make up examinations are arranged • Drop out rate minimized through remedial teaching and counseling. • University provides scholarship to all M.Tech students from its resources. • Grievance redressal and sexual harassment committees exist • University provides facilities for extra-curricular activities (sports and cultural) • An interdisciplinary team of engineering students has won Awards in national robotics competitions and has represented India in international robotics competitions.
<p>2.6 Governance and Leadership:</p> <p>2.6.1 Institutional Vision and Leadership:</p> <p>2.6.2 Organizational Arrangements:</p> <p>2.6.3 Strategy development and deployment:</p> <p>2.6.4 Human Resource Management:</p>	<ul style="list-style-type: none"> • University Vision and Mission are well articulated and disseminated to the stakeholders • Effective middle level leadership is largely absent • Good systems and processes. • Strategic planning is largely absent in many departments • Faculty are provided financial assistance to participate in national and international

<p>2.6.5 Financial Management and Resource Mobilization:</p> <p>2.6.6 Best Practices in Governance and Leadership (If any):</p>	<p>conferences and continuing education programmes in other institutions.</p> <ul style="list-style-type: none"> • Departmental budget are prepared , taking inputs from all the faculty members. • Transparency in financial planning and management. • Well established systems and processes
<p>2.7 Innovative Practices:</p> <p>2.7.1 Internal Quality Assurance System:</p> <p>2.7.2 Inclusive practices:</p> <p>2.7.3 Stakeholder Relationships:</p>	<ul style="list-style-type: none"> • IQAC has been recently established at the university and departmental levels • Ramps have not been provided to cater to the needs of differently abled persons in a few buildings • Alumni association is active in several areas • Feedback from potential employers and alumni is sought and acted upon wherever applicable
<p>Section III: OVERALL ANALYSIS</p>	
<p>3.1 Institutional Strengths:</p>	<ul style="list-style-type: none"> • The VC provides effective Leadership for overall institutional developments • Aesthetically laid out campus • Excellent academic ambience for UG education • The UG engineering programmes are the preferred destination for Gujarat domiciles • Good placements for graduating students • Very good information availability, transparency and documentation of systems and processes • Effective use of ICT in Teaching - Learning process • A very good guest house and MDP hostels • Well designed hostels with adequate facilities and amenities • An excellent gymnasium which is well

<p>3.2 Institutional Weaknesses:</p>	<p>utilized by students</p>
<p>3.3 Institutional Challenges:</p>	<ul style="list-style-type: none"> • Lack of adequate faculty at the senior level with good research/Industry experience and with Ph.D. qualifications • Limited research, consultancy, sponsored research activities and research publications in most of the departments • Very little interdisciplinary activities • Number of GATE qualified candidates in PG courses is small.
<p>3.4 Institutional Opportunities:</p>	<ul style="list-style-type: none"> • Difficulty of attracting good quality faculty • Difficulty of securing research grants from national funding agencies and industry. • Self financing programmes may be introduced to cater to the interests of Indian diaspora, in particular Gujarati diaspora. • Being located in the neighborhood of several industries, university can offer user-oriented programmes , tailored to specific needs of the different industries.

Section IV: Recommendations for Quality Enhancement of the Institution

- A range of strategies should be evolved in order to attract competent faculty since they are the pre-requisites of quality and excellence in all academic activities like academic research, consultancy, and sponsored research.
- More Centers of excellence should be established in well defined thrust areas of national relevance, societal needs and international significance, similar to the proposed Nano-S&T Center.
- Since the University has a large number of industries in the vicinity, the potential synergy benefits should be exploited through well planned collaborative activities
- The University should benchmark itself against world class universities and replicate their best practices to achieve higher level quality and excellence
- The university should enhance its focus, especially in engineering to include in addition to undergraduate, post graduate education and research.
- The faculty members should be encouraged and motivated to be elected as fellows of relevant national academics and professional societies, which demand excellence in academics and professional activities.
- Scholarships should be provided to full-time Ph.D scholars through extramural grants of the faculty.

- Correction in the nomenclature of the B.Pharm. (Hons) degree:

The degree certificate of B.Pharm (Hons) needs to be corrected as it misrepresents duration of the course (five year integrated course) vs actual time spent by the student (one year).

Name of Peer team member

Signature with date

Prof R Natarajan(Chairman)

Prof. S. K Kulkarni

Prof Sandeep Sancheti

Prof I K Bhat

Prof Goutam Sanyal,

Prof Nagaraju

Prof Ramakrishna Vyas

Mr B S Madhukar

I have gone through the Report.

Signature of the Vice Chancellor with Seal



**Criteria-Wise
Analytical Report**



CRITERION I:

CURRICULAR ASPECTS

CRITERION I: CURRICULAR ASPECTS

1.1 Curriculum Design and Development

1.1.1 *How is the institutional vision and mission reflected in the academic programmes of the university?*

Vision

Shaping a better future for mankind by developing effective and socially responsible individuals and organizations.

Mission

Nirma University emphasizes on all round development of its students. It aims at not only producing good professionals, but also good and worthy citizens of a great country aiding in its overall progress and development.

It endeavours to treat every student as an individual, to recognize their potential and to ensure that they receive the best preparation and training for achieving their career ambitions and life goals.

The University has adopted the philosophy of Outcome Based Education (OBE) for all its programmes. The Programme Educational Outcomes (PEOs) and Programme Learning Outcomes (PLOs) of different programmes of the University are aligned with the Vision and Mission of the University. The PLOs focus on three categories:

- Development of Professional Knowledge and Skills
- Inculcation of Employability Skills
- Development of Character and Social Responsibility

Reflection of Vision in Academic Programmes:

- The Vision focuses on developing effective and socially responsible students. The students are empowered to achieve their personal and professional goals. At the same time, a sense of responsibility towards the society is induced through various formal and informal extension activities.
- Extension activities are rigorous, mandatory and continuous at the University and are structured in three different ways:
 - i) As a part of the Curriculum,
 - ii) Voluntary Extension Activities by the Students, and
 - iii) Voluntary Extension Activities through Student Associations

Reflection of Mission in Academic Programmes:

- The Mission purports to stress the all-round development of students. It is accomplished through core courses, enrichment courses and a host of co-curricular activities.
- Besides the core courses in a curriculum, numerous supplementary and enrichment courses are introduced in each programme to ensure the all-round development of students. Courses such as Critical Thinking, Ethics and Values, Yoga, etc. lead to the holistic development of the students, whereas the industry oriented courses make their transition from campus to corporate easy and without riders.
- Elective Courses are offered in different programmes to cater to the

individual needs of students. Accordingly, a list of department / institute / university elective courses is prepared and students are allowed to choose a set of courses to meet their career aspirations.

- In addition, skill building courses and workshops are organised from time to time to enhance the employability of students and to help them achieve their career goals.

1.1.2 ***Does the university follow a systematic process in the design and development of the curriculum? If yes, give details of the process (need assessment, feedback).***

The University has a systematic process of curriculum design and development that is followed by its constituent institutes. The process is characterised by high level of participation, discussion and critical inquiry. It has a feedback mechanism where both internal and external stakeholders partake. Additionally, it involves industry practitioners, who make recommendations about the real needs of the industry. The curriculum design and development process are divided into two categories:

- i) Development of a New Curriculum, and
- ii) Revision and Up-gradation of an Existing Curriculum.

Development of a New Curriculum:

- For the development of a new curriculum, a department or institute level committee is constituted. The committee starts with the search of norms and standards for the curriculum set by concerned regulatory authority. In addition, the committee also locates the model curriculum, if available, suggested by the UGC, AICTE, etc. It also benchmarks the programme against similar programmes, offered by national and international institutions. Based on the comparison and contrast of different curricula, it develops a draft curriculum. Then, the draft curriculum is shared with industry professionals individually and collectively and their feedback is sought. It is followed by a curriculum development workshop. The ideas generated in the curriculum development workshop are integrated in the draft curriculum.
- The next steps in the curriculum development process are formalised. As the first step of the formal process, the draft curriculum is translated into Teaching and Examination Scheme (Academic Regulations) of the programme. Consequently, it is presented in the Board of Studies (BoS) / Academic Area Committee (AAC). Sometimes a Joint Board of Studies is also constituted. The scheme is discussed and deliberated in the BoS. This statutory body has internal experts, external academic and industry experts. Based on the suggestions of the body, the teaching-learning scheme is revised and improved further. The recommendations of the BoS are sent to the Faculty. The Faculty is a statutory body, which consists of Heads of the BoSs, Internal Experts, External Academics and Industry Experts. External Academics and Industry Experts are renowned and accomplished professionals in their fields and are selected after careful scrutiny. The recommendations of the Faculty are presented in the Academic Council. The Academic Council consists of the Deans of the different faculties, selected members of the BoSs, external academics and industry experts. The Teaching and Examination Scheme is finally vetted in the Council and approved or it may be sent back to the Faculty for further improvement.

Improvement and Up-gradation of an Existing Curriculum:

- As it is evident from Figure 1.1, the process of improvement and up-gradation begins with feedback on an existing curriculum and its different courses. The feedback is sought from the students, alumni, recruiters and domain experts, using different fora and methods. In addition, instructors and educational administrators do benchmarking of curricula and courses and provide their feedback to concerned faculty and academic leaders. These pieces of feedback are considered in various department/area level meetings and plans for curricular improvements are worked out.
- Later, these ideas and action plans are discussed in the concerned BoS or the Academic Area Committee. The recommendations of the BoS are then sent to the Faculty where further deliberation and scrutiny of curricula and courses take place. Finally, the Faculty makes recommendations about improvements and up-gradation in the curriculum and syllabi to the Academic Council for its approval.

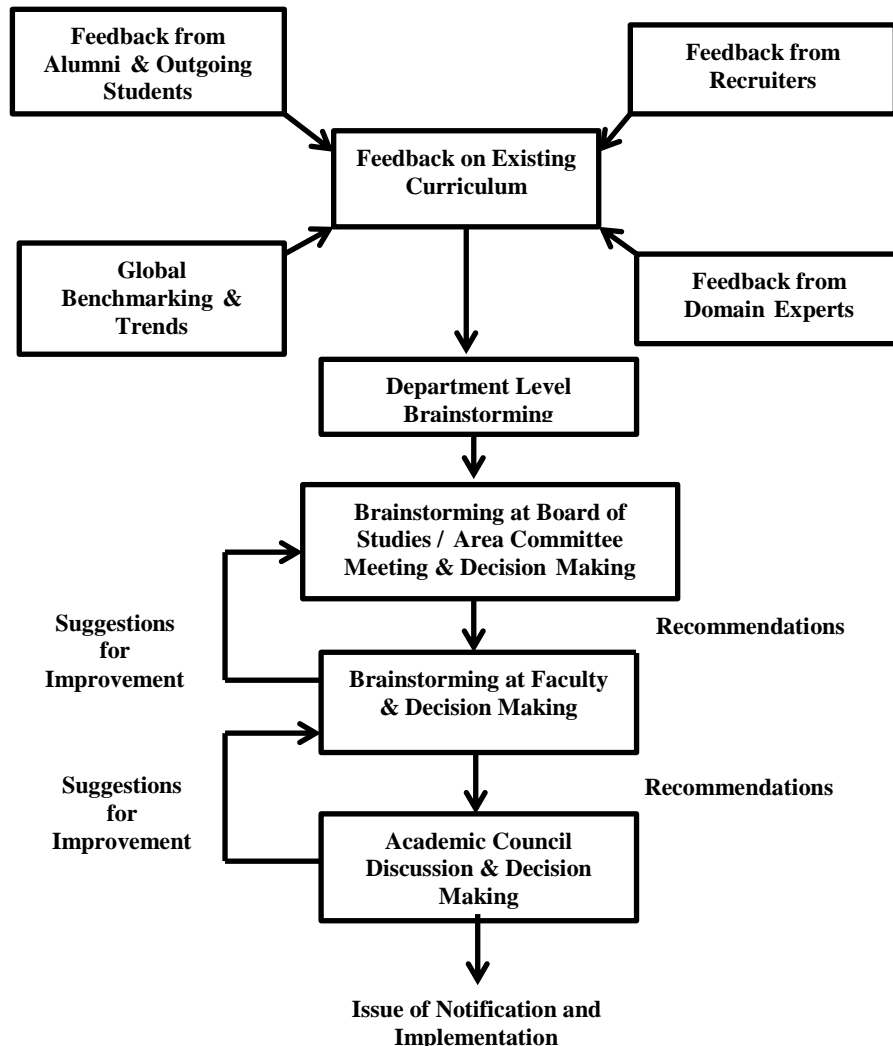


Figure 1.1 Curriculum Design and Development Process at Nirma University

1.1.3 ***How are the following aspects ensured through curriculum design and development: Employability, Innovation, Research:***

Overall, the curriculum architecture consists of Fundamental Courses, Core Courses, Enrichment Courses, Supplementary Courses and Advanced Courses. In addition, there are also elective courses. All these courses, put together, fulfil the needs of industries and the society.

Employability:

- Employability is ensured through a variety of fundamental, core, contemporary and enrichment courses.
- The appropriate weightage to laboratory work is provided in relevant programmes. In most of the Programmes, internship and projects are incorporated. Visits for the students are arranged to a variety of industries / organizations to make them aware of the current practices and the corporate world or the world of work. End-term projects provide experiential learning for each student. Lectures by industry experts are organized where the students get an insight into practical aspects of contents.
- Supplementary courses, such as Law for Engineers, Communication Skills, Critical Thinking, ICT Tools, Organizational Behaviour, Debating and Argumentative Skills, etc. make the student ready for the industry.
- The Industry-Institute Interaction Cell (III Cell) regularly organises career orientation workshops on careers in the industry, preparation of CVs, interview readiness, etc. Further, frequent interactions with alumni make the students aware of the expectations of industry and preparation required for getting a job.
- Employability and English proficiency tests are also conducted and students are given feedback about their performance. All these activities conduce to high employability.
- In order to have continuous dialogue with employers, representatives from the industry and R&D organizations are included as members of the Board of Studies/Academic Area Committee and in the Faculties of the University. In addition, some of the institutes of the University have their advisory bodies, consisting of industry and academic experts.

Innovation:

- The University fully realises that along with employability, it must promote entrepreneurship among students and ensure that some of its students are able to start a new venture every year. In each undergraduate programme, there is a compulsory course on 'Entrepreneurship' with a view to create awareness about the subject. The University has set up a Centre for Entrepreneurship to assist students to become entrepreneurs.
- In the curriculum, more emphasis is given to the development of HOTS (Higher Order Thinking Skills). Courses, such as Critical Thinking, Creativity and Innovation, etc. have been introduced in the curriculum.

Research:

- Research is emphasised more at the post-graduate level programmes. However, undergraduate research is also stressed in different curricula. The University has established Idea Lab, wherein the students test their ideas and

conduct research. In addition, the B.Tech. students conduct a semester long project in their 8th semester.

- To promote applied and basic research, the University has started Ph.D. (Full time/External) programmes in Engineering, Management, Pharmacy, Science and Law. All the Ph.D. programmes have course work, followed by rigorous research. The course work is aimed at providing a student with sufficient breadth and to carry out research. The main emphasis is on the research work leading to a thesis.
- The Institute of Technology offers a very unique master level programme titled M.Tech. by Research. This programme is aimed at those students who are interested in exposure to in-depth research in different disciplines. The programme emphasizes on multidisciplinary and rigorous learning and research work. Faculty members with vast research experiences are involved in guiding these students.
- In order to inculcate research skills amongst the students, a course on, 'Research Methodology' is introduced in various PG programmes.
- The Post-graduate students get opportunities to work with leading research institutes and industries on current research topics for their dissertation. Some of the students are involved in funded research projects being carried out by the faculty members.

1.1.4 ***To what extent does the university use the guidelines of the regulatory bodies for developing and/or restructuring the curricula? Has the university been instrumental in leading any curricular reform which has created an impact?***

The University follows the mandate of regulatory bodies for the development and/or restructuring the curriculum. At the same time, the curriculum of various programmes are benchmarked against the leading national institutes, like IITs, IIMs, NIPER, National Law School, etc.

- For engineering programmes, the University follows the norms and standards prescribed by the All India Council for Technical Education (AICTE). Similarly, for Law, Pharmacy and Architecture, the norms prescribed by Bar Council of India (BCI), Pharmacy Council of India (PCI), and Council of Architecture (CoA), respectively are followed.
- The instructions of the regulatory bodies for improvement in curricula are duly observed by the institutes of the University and curricula are revised accordingly. The regulatory bodies also do inspection of institutes from time to time.

As far as the curriculum reforms are concerned, the Institute of Law has been ranked first for its innovation in curriculum by *Flair Talk Magazine* in its July 2014 issue. The Institute has introduced innovative courses and has adopted an inter-disciplinary approach in the curricula of its different programmes.

1.1.5 ***Does the university interact with industry, research bodies and the civil society in the curriculum revision process? If so, how has the university benefitted through interactions with the stakeholders?***

- The constituent institutes of the University have advisory bodies, consisting of eminent industry and academic experts. These bodies on an average meet

twice in a year and make recommendations for the improvements in academic quality.

- In addition, various industry professionals, academics and alumni are part of Board of Studies / Academic Area Committees and the Faculties and they meet regularly to make recommendations for developing and improving courses and curricula. Their recommendations are finally scrutinised and finalised by the Academic Council. Academic Regulations are finally approved by the Board of Governors.
- Feedback is the fulcrum of improvement. Feedback, both formal and informal, from different stakeholders, especially from industry professionals, has helped different institutes to update their curricula and courses. Various courses are redesigned after feedback from them.
- Interaction with industries and research bodies has also helped in introduction of new courses emphasizing on advanced technologies, development of state of the art laboratories, cooperative teaching and expert talks, monitoring progress of PG and Ph.D. students, imparting practical training, etc.

1.1.6 Give details of how the university facilitates the introduction of new programmes of studies in its affiliated colleges.

Not applicable.

1.1.7 Does the University encourage its colleges to provide additional skill-oriented programmes relevant to regional needs?

The University has established the Centre for Continuing Education (CCE) to provide continuing education, additional skill-oriented programmes, training, etc. in various fields to its students.

The CCE identifies the needs of specific sectors and organises suitable training programmes for them. It conducts short and long duration programmes in the fields of Management, Engineering, Pharmacy, Science and Law.

1.2 Academic Flexibility

1.2.1 Furnish the inventory for the following: Programmes taught on campus, Overseas programmes offered on campus, Programmes available for colleges to choose from

List of Programmes Taught on Campus (Year 2014-15):

Sr. No.	Institute of Technology
1.	Ph.D. in Technology & Engineering (Full Time & External)
2.	M.Tech. in Chemical Engineering (Environmental Process Design)
3.	M.Tech. in Chemical Engineering (Energy System)
4.	M.Tech. in Civil Engineering (Computer Aided Structural Analysis & Design)
5.	M.Tech. in Computer Science & Engineering
6.	M.Tech. in Computer Science & Engineering (Information and Network Security)
7.	M.Tech. in Computer Science & Engineering (Network Technology)
8.	M.Tech. in Electrical Engineering (Power Electronics, Machines & Drives)
9.	M.Tech. in Electrical Engineering (Electrical Power Systems)

10.	M.Tech. in Electrical Engineering (Energy System)
11.	M.Tech. in Electronics & Communication Engineering (VLSI Design)
12.	M.Tech. in Electronics & Communication Engineering (Communication Engineering)
13.	M.Tech. in Electronics & Communication Engineering (Embedded Systems)
14.	M.Tech. in Mechanical Engineering (CAD / CAM)
15.	M.Tech. in Mechanical Engineering (Thermal Engineering)
16.	M.Tech. in Mechanical Engineering (Design Engineering)
17.	M.Tech. in Mechanical Engineering (Computer Integrated Manufacturing)
18.	M.Tech. in Mechanical Engineering (Energy System)
19.	M.Tech. in Instrumentation & Control Engineering (Control & Automation)
20.	M.Tech. by Research
21.	Master of Computer Application
22.	B.Tech. in Chemical Engineering
23.	B.Tech. in Computer Engineering
24.	B.Tech. in Civil Engineering
25.	B.Tech. in Electrical Engineering
26.	B.Tech. in Electronics & Communication Engineering
27.	B.Tech. in Instrumentation & Control Engineering
28.	B.Tech. in Information Technology
29.	B.Tech. in Mechanical Engineering
	Institute of Management
30.	Ph.D. in Management (External)
31.	Doctoral Programme in Management (Full-time)
32.	Master of Business Administration (Full-time)
33.	Master of Business Administration (Family Business & Entrepreneurship)
34.	Integrated Bachelor of Business Administration - Master of Business Administration
	Institute of Pharmacy
35.	Ph.D. in Pharmacy (Full Time & External)
36.	M.Pharm. in Pharmaceutical Technology & Bio-pharmaceutics
37.	M.Pharm. in Pharmaceutical Analysis
38.	M.Pharm. in Pharmacology
39.	M.Pharm. in Medicinal Chemistry
40.	M.Pharm. in Drug Discovery
41.	M.Pharm. in Clinical Pharmacy
42.	M.Pharm. in Regulatory Affairs & Quality Assurance
43.	M.Sc. in Cosmetic Technology (jointly offered with Institute of Science)
44.	B. Pharm.
	Institute of Science
45.	Ph.D. in Science (Full Time & External)
46.	M.Sc. in Bio Technology
47.	M.Sc. in Biochemistry
48.	M.Sc. in Microbiology
49.	M.Sc. in Cosmetic Technology (jointly offered with Institute of Pharmacy)
	Institute of Law
50.	Ph.D. in Law (External)
51.	LL.M. in Legal Pedagogy and Research
52.	LL.M. in Science & Technology Law
53.	LL.M. in Constitutional and Administrative Law
54.	LL.M. in Criminal & Security Law
55.	LL.M. in Corporate & Commercial Law

56.	B.A. LL.B.
57.	B.Com. LL.B.
	Institute of Architecture
58.	B.Arch.

List of Overseas Programmes Offered on Campus:

The University does not offer any Overseas Programmes on Campus.

List of Programmes Available for Colleges to Choose From:

The University offers a variety of interdisciplinary University elective courses. The students of constituent institutes can opt for such courses based on their requirements and likings.

- 1.2.2 *Give details on the following provisions with reference to academic flexibility: Core / Elective options, Enrichment courses, Courses offered in modular form, Credit accumulation and transfer facility, Lateral and vertical mobility within and across programmes, courses and disciplines*

Core/Elective Options:

Each curriculum consists of fundamental, core, contemporary, elective and enrichment courses. In general, there are two types of electives, i.e., department level and institute level. Most programmes offer series of such elective courses with a view to meet the individual needs of students. Elective courses help them realise their specific career goals. Elective courses are also based on the expertise of the faculty. They thus provide advanced and specific knowledge to the students.

Enrichment Courses:

In addition to core and elective courses, the constituent institutes offer enrichment and supplementary courses. The enrichment and supplementary courses aim at personality development and honing of soft skills. In addition, some supplementary and enrichment courses focus on the development of character and social responsibility among students. Moreover, there is provision of Audit Courses in different programmes in which a student can study the course but is not required to take exams.

Courses offered in Modular Form:

In general, a course can have two to four modules, which are closely integrated with one another. Modules help an instructor to divide the course into meaningful units and smoothen the teaching-learning process.

Credit Accumulation and Transfer Facility:

Not applicable.

Lateral and Vertical Mobility within and across Programmes, Courses and Disciplines:

There is no provision for lateral and vertical mobility within and across the programmes, courses and disciplines.

1.2.3 ***Does the university have an explicit policy and strategy for attracting international students?***

The University has a provision of admission for a 15% supernumerary seats of intake in each programme of PIO (Person of Indian Origin) and Foreign Students; of which one-third, i.e., 5% is reserved for the children of Indian workers in Gulf countries and South East Asia. One officer in the Academic Section is designated for admission of the students in this category.

The University sends communication regarding admissions in various programmes to various schools in different countries. It participates in various international education fairs in several countries, like the United Arab Emirates, Nigeria, Tanzania and the United States. Moreover, the University also contacts and interacts with Indian communities settled across different nations.

1.2.4 ***Have any courses been developed targeting international students? If so, how successful have they been? If 'no', explain the impediments.***

The University offers basic educational courses that are equally useful for both national and international students.

1.2.5 ***Does the university facilitate dual degree and twinning programmes? If yes, give details.***

The University does not offer any twinning programmes. However, it has a dual degree programme titled Integrated BBA-MBA programme. In this programme, the students have an option of exit after BBA.

In addition, the Institute of Law offers integrated programmes, like B.A. LL.B. and B.Com. LL.B. for the benefits of the students.

1.2.6 ***Does the university offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?***

The University is a self-financed university. Hence, all the programmes offered by it are self-financing programmes. The qualification and salary of the faculty are as per the UGC/State Government norms.

1.2.7 ***Does the university provide the flexibility of bringing together the conventional face-to-face mode and the distance mode of education and allow students to choose and combine the courses they are interested in? If 'yes,' give operational details.***

- The University is basically in face-to-face education mode. However, instructors encourage students to enrol themselves in numerous Massive Open Online Courses (MOOCs). On an experimental basis, the Institute of Management in its Integrated BBA-MBA programme has provisioned for the earning of two credit courses through MOOCs.
- The instructors use blended learning model to facilitate learning. In this model, the students are given resources available on the Internet. In addition, the ICT tools like Moodle, MonkeySurvey and blogs are used to complement and supplement traditional teaching-learning techniques.
- The Institute of Technology has a tie-up with IIT-Bombay for receiving short term training programme through video conferencing mode. Apart from in-house faculty and students, such courses are open to outside delegates also.

1.2.8 ***Has the university adopted the Choice Based Credit System (CBCS)? If yes, for how many programmes? What efforts have been made by the university to encourage the introduction of CBCS in its affiliated colleges?***

The University has adopted partial Choice Based Credit System (CBCS) in all the programmes of the study. Accordingly, the students can:

- Choose subjects from a wide range of elective courses (Department Electives and Institute Electives) offered by the institutions
- Undergo value added /supplementary /audit courses
- Choose any foreign language course out of a pool of foreign language courses
- Opt for MOOCs and NPTEL courses
- Go for an Idea Lab Projects

1.2.9 ***What percentage of programmes offered by the university follow: Annual system; Semester system; Trimester system***

- All the programmes of the University (except MBA and LL.M.) follow semester system.
- The MBA programmes follow trimester system and offer specializations in the areas of marketing, finance, operations, etc. The students also have an opportunity to pick up courses more than the minimum credit requirements and can have dual specialization.

1.2.10 ***How does the university promote inter-disciplinary programmes? Name a few programmes and comment on their outcome.***

The, University endeavours to promote inter-disciplinary programmes and has started several such programmes.

- At Masters Level, the Institute of Technology offers M.Tech. in Energy Systems (2013-14). This programme is collaboratively being offered by three departments, viz., Electrical, Mechanical and Chemical Engineering. It caters to the need of shifting from conventional to renewable energy sources and will be helpful to handle worldwide challenge of energy crisis.
- Likewise, the Institute of Pharmacy and the Institute of Science have commenced M.Sc. in Cosmetic Technology (2014-15). The Institute of Law has started LL.M. in Science, Technology and Law (2014-15). As these programmes have yet not completed their cycle, it is not possible to evaluate their outcomes.

1.3 Curriculum Enrichment

1.3.1 ***How often is the curriculum of the university reviewed and upgraded for making it socially relevant and/or job oriented/knowledge intensive and meeting the emerging needs of students and other stakeholders?***

- The curricula of various programmes are reviewed and updated through the respective Board of Studies/Academic Area Committee and Faculty. These bodies meet half yearly.
- In fact, the modification of existing courses is a continuous exercise and is usually done through suggestions/feedback received from various stakeholders.

1.3.2 *During the last four years, how many new programmes at UG and PG levels were introduced? Give details. Inter-disciplinary, Programmes in emerging areas*

New Programmes offered in Last Four Years:

New Post Graduate Programmes:

Institute of Technology	
Sr. No.	M. Tech. Programmes
1.	Instrumentation and Control (Control & Automation)
2.	Mechanical Engineering (Design Engineering)
3.	Mechanical Engineering (Computer Integrated Manufacturing)
4.	Electrical Engineering (Electrical Power Systems)
5.	Electronics and Communication Engineering (Embedded System)
6.	Computer Science & Engineering (Information & Network Security)
7.	M.Tech. Programme - By Research (For all branches)
8.	Mechanical Engineering (Energy System)
9.	Electrical Engineering (Energy System)
10.	Chemical Engineering (Energy System)
Institute of Pharmacy	
	M.Pharm. Programmes
11.	Regulatory Affairs and Quality Assurance
12.	Drug Discovery
13.	Pharmaceutical Bio Technology
14.	Clinical Pharmacy
Institute of Law	
15.	LL.M. in Business Law
16.	LL.M. in Legal Pedagogy and Research
17.	LL.M. in Science, Technology and Law
18.	LL.M. in Commerce and Corporate Law
19.	LL.M. in Constitutional and Administrative Law
20.	LL.M. in Criminal and Security Law
Institute of Science & Institute of Pharmacy	
21.	M.Sc. in Cosmetic Technology

New Integrated Programmes

Institute of Management	
1.	Integrated BBA-MBA Programme

New Under Graduate Programmes

Institute of Architecture	
1.	B.Arch.

Inter-disciplinary Programmes:

1. M.Tech. (Energy System)
2. M.Sc. in Cosmetic Technology
3. LL.M. in Science, Technology and Law

Programmes in Emerging Areas:

1. M.Tech. by Research
2. M.Pharm. in Regulatory Affairs and Quality Assurance
3. M.Pharm. Clinical Pharmacy
4. LL.M. in Legal Pedagogy and Research

1.3.3 ***What are the strategies adopted for the revision of the existing programmes? What percentage of courses underwent a syllabus revision?***

Feedback from different stakeholder, benchmarking and internal discussion are major strategies for the revision of the existing programmes. In year 2013, all programmes /courses underwent 100 % syllabus revision.

1.3.4 ***What are the value-added courses offered by the university and how does the university ensure that all students have access to them?***

The University offers a variety of value-added and socially relevant courses. Several such courses are part of regular curriculum. Thus, they are offered to all the students of respective programmes. For many value-added/enrichment courses, the students are provided a menu from which they select as per their requirement and choice.

The following is the list of value added coursed offered by the different institutes of the University:

Value-added Courses

- Yoga and Total Health
- Meditation
- Ethics & Values
- Pharmaceutical Jurisprudence and Ethics
- English and Communication Skills
- Foreign Language
- Written Analysis and Communications
- Creative Writing
- Critical Thinking
- Creativity
- Creativity & Innovation
- Debating and Argumentative Skills
- Personality Development and Business Etiquette
- Organizational Behaviour
- Business and Society
- Entrepreneurship
- Fundamental of Public Administration
- Performing Arts
- Movie Making
- Photography
- IT & Network Security
- ICT Tools
- Computer Applications for Law Students
- Selected Topics in Engineering
- Engineering Economics

- Law for Engineers
- Legal Research
- Legal Awareness and Para Legal Writing
- Drafting Skills I (Conveyancing)
- Drafting Skills II (Criminal Pleadings)
- Drafting Skills III (Civil Pleadings)
- Drafting Skills IV (Writ and PIL)
- Introduction to Chinese Legal System
- Introduction to European Legal System
- Introduction to American Legal System
- Moot Court Training
- Human Rights Practice
- Ancient Indian Intellectual Tradition and Modern World
- Nutrition and Health
- Neuro-endocrine Regulation of Behaviour
- Understanding Gastrointestinal Hormones and Gut Associated Cancer
- Molecular Mechanisms of Infertility
- Pathogenesis of Diabetes
- Genotoxicity Testing for Cancer Risk Assessment
- Applied Human Cytogenetics
- Carbon Catabolite Repression
- Immunological Memory
- Protein Stability
- Microbial Community Dynamics And Ecological Succession
- Antimicrobial Agents
- Fractional Credit Course – Short Course by the Eminent Expert
- Sports (Basketball, Chess, Cricket, Lawn Tennis)

1.3.5 ***Has the university introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies? Does the institution focus on multi skill development in its programmes? If yes, illustrate***

The various programmes of the University provide for multi skills development by offering courses as under:

Soft Skills:

Communication Skills, Interpersonal Skills, Personality Development, Industrial Organization and Supervisory Management, Entrepreneurship, Seminars.

Computer Skills:

Computer Applications, Computer Programming, Computer Aided Drawing & Design, etc.

Apart from the above, the Centre for Continuing Education (CCE) conducts short courses / training programmes for the students / faculty members and outside participants. A few such courses conducted are: Automotive Servicing, Refrigeration Mechanic, Mobile Handset Repairing, Hands on Experience of Computer Network Design, Ethical Hacking, Android Application Development, Web Application Development, etc.

1.4 Feedback System

1.4.1 *Does the university have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?*

After the completion of a course, the students are requested to give formal feedback, both qualitative and quantitative, about the course and the instructor. The collective responses of the students are analysed. Instructor-related feedback is given to the faculty concerned and he or she is suggested to improve, if so needed. Course-related feedback is used to improve the design of the course. It is also used to improve the syllabus of the course.

1.4.2 *Does the university elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods such as conducting webinars, workshops, online discussions, etc. and its impact.*

The constituent institutes take informal feedback on the curriculum from national and international experts. Such feedback is obtained through various means and ways. For example,

- i) By sending the syllabus to the experts through e-mail and asking for their suggestions,
- ii) Feedback is obtained from the national/international faculty members during their visit to the University,
- iii) Discussion during seminars/conferences/refresher courses/workshops, etc.

1.4.3 *Specify the mechanism through which affiliated institutions give feedback on curriculum enrichment and the extent to which it is made use of.*

Not applicable.

1.4.4 *What are the quality sustenance and quality enhancement measures undertaken by the university in ensuring the effective development of the curricula?*

Regular feedback on curricula from the stakeholders and its discussion during the statutory body meetings ensures the effective development of curriculum.

It is important to note that the University has organised a major exercise to adopt outcome-based education. It has initiated the following steps for the effective development of the curricula:

- Development of Programme Educational Outcomes (PEOs) for all programmes
- Development of Programme Learning Outcomes (PLOs) for all programmes
- Development of Graduate Attributes (GAs) for all programmes
- Documentation of Course Learning Outcomes (CLOs) for each course
- Development of rubrics for assessing the achievement of course learning outcomes in some cases
- Organisation of training programmes on outcome-based learning at the University level and in different institutes
- Continuous review and up gradation of syllabi of different courses in different programmes

Apart from the above, the Internal Quality Assurance Cell (IQAC) and Academic Development & Research Cell (ADR Cell) are instrumental in the regular revision of course structures, organizing curriculum development workshops, continuous monitoring, etc.

Any other information regarding Curricular Aspects which the university would like to include

- All under graduate programmes have been revised in 2013-14, using Outcome Based Education (OBE) philosophy. This is done with a view to develop global competencies among students and to follow global best practices. Especially, the Programme Learning Outcomes were developed for each programme. Additionally, some institutes developed graduate attributes for their programmes. As a corollary, course learning outcomes were developed for each course. Then, detailed course outlines were developed.
- Institutes have developed a course design and development policy that helps the instructors develop a course outline. Revised Bloom's Taxonomy is the basis for developing Programme Learning Outcomes and Course Learning Outcomes. Course Learning Outcomes determine the contents of the course and assessment. Sixty percent assessment weightage is assigned for continuous evaluation and Lab and Project Work (LPW). It is formative assessment and contributes to the learning of students. Thus, a link is established between assessment and learning. Further, 40% weightage is assigned to semester end examination that is summative assessment.
- Later, rubrics were developed for certain courses to measure the implementation of Course Learning Outcomes. Now, the next phase of implementation of outcome based learning is underway. The constituent institutes of the University are planning to work on assurance of learning.



CRITERION II:

**TEACHING-LEARNING
AND EVALUATION**

CRITERION II: TEACHING-LEARNING AND EVALUATION

2.1 Student Enrolment and Profile

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

- The University has a transparent process for admission to all the programmes at all its constituent institutes. Each programme is governed by its academic regulations. *Inter alia*, academic regulations have norms and standards for admission in each programme. The concerned officials follow admission regulations strictly and ensure transparency.
- For meticulously conducting the various procedures of admissions, an Admission Committee for each institute is formed. Further, wide publicity is ensured by placing advertisements in leading national and regional newspapers. Brochures of the programmes are prepared that consist of eligibility criteria and the process of admission. In general, admissions are done using national level entrance tests. When such tests are unavailable, the University conducts its own entrance tests.
- It is pertinent to mention that in B.Tech. and B.Arch. programmes, the University can admit only 50% students. The rest 50% students are admitted through Admission Committee for Professional Courses (ACPC), a committee formed by Government of Gujarat (GoG). Similarly, 85% students are admitted in B.Pharm. programme through ACPC.
- The procedure and criteria for admissions to various programmes are displayed on the website in advance. All relevant information, including merit list is made available from time to time on the website of the University. Transparency in the admission procedure is thus ensured.
- Different programmes may follow different norms of admissions, based on merit, performance in entrance tests and personal interviews. The formula for calculating the merit and the merit list are displayed on the website. Information pertaining to admissions are continuously updated on the website of the University.

2.1.2 *Explain in detail the process of admission put in place by the university. List the criteria for admission: (e.g.: (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common entrance test conducted by state agencies and national agencies (v) other criteria followed by the university (please specify).*

For admissions to all the programmes of the University, the students are selected on the basis of a host of criteria. The relevant details are summarized below:

- i) Merit (Academic performance only) – None
- ii) Merit cum Entrance Test – B.Tech. (50%), B.Pharm. (85%), B.Arch. (50%)
- iii) Merit, Entrance Test and Interview – BBA-MBA, MBA
- iv) Common Entrance Tests – B.A.LL.B., B.Com.LL.B., B.Tech. (50%), M.Tech., M.Pharm., B.Arch. (50%)
- v) Nirma University Test – M.Sc.

Please refer to Table 2.1 for eligibility and process of admission in various programmes.

Table 2.1: Eligibility and Process of Admission for Various Programmes

Programme	Eligibility	Process of Admission
B.Tech.	10+2 passed with Science Subjects (PCM) with % marks as prescribed by the State Government	<ul style="list-style-type: none"> • 50% of the total seats are filled in by the Admission Committee for Professional Courses (ACPC, GoG). • 35% of the total seats are filled by the Institute of Technology on the basis of JEE results from all over the country. • 15% of the total seats are for NRI/NRI sponsored candidates.
M.Tech.	UG Degree in the concerned engineering programme with % of marks as prescribed by AICTE	<ul style="list-style-type: none"> • Based on a National Level Entrance Test (GATE) • For Non-GATE students, a separate test is conducted by Institute of Technology
MCA	UG Degree in any discipline	<ul style="list-style-type: none"> • Based on a state level entrance test (GCET), 85% of seats are filled by the ACPC • 15% seats are for NRI/NRI sponsored candidates
MBA (Full-time)	UG Degree in any discipline with 50% of aggregate marks	<ul style="list-style-type: none"> • Based on Merit obtained through national level CAT, followed by Written Communication Test and Personal Interview
MBA (FB&E)	UG Degree in any discipline with 50% of aggregate marks	<ul style="list-style-type: none"> • Based on a national level entrance test conducted by the Institute of Management, followed by personal interview
BBA-MBA (Five year Integrated Programme)	10+2 with 60% aggregate marks with English as a compulsory subject	<ul style="list-style-type: none"> • Based on National level entrance test UGAT, followed by personal interview
B.Pharm.	10+2 with Science subjects (PCB) with % marks as prescribed by the State Government	<ul style="list-style-type: none"> • Based on a State Level Entrance Test (GUJCET), 85% of seats are filled by the ACPC • 15% seats are for NRI/NRI sponsored candidates
M.Pharm.	B.Pharm. with 50% marks	<ul style="list-style-type: none"> • Based on a National Level Entrance Test (GPAT) • For Non-GPAT students, a separate test is conducted by the Institute of Pharmacy
M.Sc.	B.Sc. in respective discipline with minimum 55% marks	<ul style="list-style-type: none"> • Based on a National Level Entrance Test is conducted

		by the Institute of Science
B.A. LL.B. (Hons.) B.Com. LL.B. (Hons.)	10+2 with minimum 50% marks	<ul style="list-style-type: none"> Based on a National Level Entrance Test (CLAT)
LL.M. (One year Programme in Legal Research and Pedagogy)	LL.B. with minimum 55% marks	<ul style="list-style-type: none"> Based on a national level entrance test (CLAT) For Non-CLAT candidates, based on an entrance test conducted by the Institute of Law
B.Arch.	At least 40 % marks in the National Aptitude Test in Architecture (NATA) and have passed the qualifying examination with Mathematics or Statistics or Business Mathematics as one of the subjects with minimum 50% marks	<ul style="list-style-type: none"> 50% seats to be filled in by the ACPC 35% seats to be filled on All India basis by Nirma University on the basis of the merit of NATA only 15% seats to be filled in under NRI/NRI sponsored on All India basis of the merit of NATA only
Ph.D. in Engineering / Science / Pharmacy / Law	<p>The candidate holding Master's degree or equivalent in the concerned field, excluding MCA, with 55% or equivalent grade is considered eligible for registration for the Degree of Doctor of Philosophy in the relevant programme.</p> <p>However, for the Faculty of Technology & Engineering, a First Class Bachelor's degree in concerned field OR MCA OR equivalent examination, like that of M.Sc.(IT), etc., as recognized and considered equivalent by the University, and work experience of 2 years' in R&D related work in research organization or institute is also be considered eligible.</p>	<ul style="list-style-type: none"> Based on the entrance test conducted by Nirma University, followed by an interview
Doctoral Programme in Management (External)	A Master's degree or equivalent with a minimum of 55% marks or equivalent grade recognized by the Nirma University. In addition, the candidate should have at least three years full-time teaching experience in management or related discipline or five years of relevant industrial work experience at	<ul style="list-style-type: none"> Based on the entrance test conducted by Nirma University, followed by an interview

	managerial level after completion of Master's Degree.	
Doctoral Programme in Management (DPM)	A Master's degree or equivalent with a minimum of 55% marks or equivalent	<ul style="list-style-type: none"> Based on the entrance test conducted by Nirma University, followed by an interview

2.1.3 ***Provide details of admission process in the affiliated colleges and the university's role in monitoring the same.***

Not Applicable.

2.1.4 ***Does the university have a mechanism to review its admission process and student profile annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?***

The University has a mechanism to review its admission process annually. Each constituent institute of the University has an Admission Committee that examines the profile of students and the admission process and then plans the admission process for the next year.

The review process has helped in understanding the expectations and feedback of students and parents. This also helps in the identification of shortfall in the admission process and in taking corrective measures for the subsequent year. Based on the feedback, the following changes have been made:

- At the Institute of Technology, the admission process for UG programmes is made online. Accordingly, form filling, payment of admission fees, and seat allotment is done online. This has resulted in an increase in the applications from not only in Gujarat, but also from the other states of the country.
- For admission at the Institute of Management, based on the review, a compulsory 'Written Test' was introduced. This helps in evaluating the prospective students on written communication skills. The 'Group Discussion' component was removed and the oral communication of the candidate is judged based on Personal Interview.

2.1.5 ***What are the strategies adopted to increase/improve access for students belonging to the following categories: (i) SC/ST (ii) OBC (iii) Women (iv) Persons with varied disabilities (v) Economically weaker sections (vi) Outstanding achievers in sports and other extracurricular activities.***

- For Admissions to all UG programmes at Institute of Technology (50% seats), Institute of Pharmacy (85% seats) and Institute of Architecture (50% seats), the admissions are given by the Admission Committee for Professional Courses (ACPC), formed by the Government of Gujarat. As per the set rules, the Committee gives due consideration in admission to: i) disadvantaged community, ii) differently abled people, and iii) economically weaker sections of the society.
- The University offers various types of scholarships to economically weaker students. These include (i) Scholarships based on Merit, (ii) Scholarships based on Merit cum Means, (iii) Interest waiver on Bank Loan, (iv) Needy Students' Fund, (v) Tuition Fee Waiver (TFW) Scheme (vi) Book Bank Facility, and (vii) Stipend to the meritorious Master's as well as full-time Ph.D. students.

2.1.6 **Number of students admitted in university departments in the last four academic years:**

The number of students admitted in different programmes is shown in Table 2.2.

Table 2.2: Students Admitted from Different Categories by Year

Categories	2010-11		2011-12		2012-13		2013-14	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	36	12	44	11	44	14	44	14
ST	47	20	21	03	25	09	24	06
OBC	208	40	210	45	212	38	228	52
General	1128	443	1112	510	1190	551	1309	681

2.1.7 **Has the university conducted any analysis of demand ratio for the various programmes of the university departments and affiliated colleges? If so, highlight the significant trends explaining the reasons for increase / decrease.**

The University conducts the analysis of demand ratio for the various programmes offered by its constituent institutes. The demand ratios of various programmes are shown in Table 2.3.

The trend for admissions in different programmes keeps on changing based on the future demands, government policies with respect to various sectors, etc. However, the programmes with high employability are always in demand.

Table 2.3: Demand Ratio in Different Programmes for Academic Session 2013-14

Programmes	Number of Applications Received	Number of Students Admitted	Demand Ratio
UG	11737	683	1:17
PG	6788	893	1:8
Integrated Masters	721	64	1:11
Ph.D.	401	65	1:6

2.1.8 **Were any programmes discontinued / staggered by the university in the last four years? If yes, please specify the reasons.**

Due to regulatory constraints and decrease in demand, a few programmes have been discontinued. The list of such programmes is given below:

- i) PG Diploma in Computer Applications
- ii) M.Tech. in Geomatics
- iii) M.Tech. in Chemical Process and Plant Design
- iv) MBA (Part time)
- v) B.Pharm. (Hon.) Programme
- vi) PBCPCP (Post B.Pharm. Certificate Programme in Clinical Pharmacy)
- vii) M.Pharm. in Phytopharmaceuticals and Natural Products
- viii) Two year LL.M. Programme
- ix) BBA LL.B. (Hons.) Programme
- x) Diploma Programmes

2.2 Catering to Student Diversity

2.2.1 *Does the university organize orientation / induction programme for freshers? If yes, give details such as the duration, issues covered, experts involved and mechanism for using the feedback in subsequent years.*

Yes, all the constituent institutes of the University organize orientation programmes for the incoming under-graduate as well as post-graduate students.

Duration of Orientation Programme:

- Generally, the Orientation Programme is organized for the duration of one week.

Issues covered during the Orientation Programme:

- During the Orientation Programme, the students are briefed about the campus, the University rules and regulations, the library and the computer facilities, student welfare activities, etc. In these programmes, the parents are also invited on the first day.
- Apart from the above, a variety of lectures on personal and interpersonal skills is arranged. The topics may include - Time Management, Positive Attitude, Self-Discipline, Communication Skills, Reading Habits, Expectations from Industries, etc.
- During the Orientation Programme, a 'Student Handbook' is given to all the students. They are required to go through it. An undertaking is obtained from the students that they have understood the programme requirements and the rules and regulations of the University.

Experts involved during the Orientation Programme:

- Besides the in-house faculty members, the experts from industries, research and spiritual organizations are also invited to deliver lectures.
- Experts from industry elaborate the importance of the subject for employability and the expectations of the profession from the students.
- Alumni members are also invited to interact with the freshers.

Feedback Mechanism:

- At the end of the Orientation Programme, the feedback is obtained from all students. The feedback is analysed and the necessary corrections are made in the subsequent orientation programmes.

2.2.2 *Does the university have a mechanism through which the "differential requirements of the student population" are analysed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?*

- It is pertinent to mention that, for B.Tech., B.Pharm. and B.Arch. Programmes, the admission is also done by the ACPC. The admission process goes on for a long time. Therefore, there is little time between admission and the commencement of classes. However, the University starts relevant interventions just after the commencement of classes.
- The University conducts Cambridge English Test to measure the English

proficiency level of students and then plans interventions for students with lower proficiency level.

- At Institute of Technology, the information of students having vernacular medium in 12th standard is gathered. These students are offered a course on 'English'.
- In most PG level programmes, an exclusive two-week orientation programme is arranged. During the orientation programme, a gap analysis is carried out and the necessary lectures on fundamentals are arranged to bridge the gap and to bring all the students to a common level.

2.2.3 Does the university offer bridge / remedial / add-on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise?

- The University offers bridge courses based on the needs of the students in certain cases.
- Pre-requisite courses are offered to the students of Diploma to Degree direct admission to Semester III in B.Tech. and B.Pharm. programmes.
- Remedial teaching is arranged for the students who fail to clear the course in the first attempt.
- Apart from these, Special Audit Courses are introduced in several programmes. Accordingly, any interested students can attend any course of any branch (not part of his teaching scheme). The students can go for Massive Online Open Courses (MOOCs) and NPTEL videos.
- Necessary provisions are made in the Time-Table to include bridge and remedial courses.

2.2.4 Has the university conducted any study on the academic growth of students from disadvantaged sections of society, economically disadvantaged, physically handicapped, slow learners, etc.? If yes, what are the main findings?

Being a private University, in most of the constituent institutes, the admissions are given on All India basis without earmarking any reservation. In fact, very limited number of students comes from disadvantaged sections of the society. For this small group of students, the University has conducted a study on their academic growth. The following are the main findings:

- The students hailing from vernacular medium are not initially comfortable. It takes time for them to switch over to English medium.
- The students hailing from rural area are not comfortable with the environment and the study compared to those of urban areas.
- The students belong to the economically disadvantaged section are generally slow learners.

2.2.5 How does the university identify and respond to the learning needs of advanced learners?

- The advanced learners are identified by their academic performance and class participation.
- For all programmes, the advanced learner students are encouraged to participate in competitive exams and events, model making, extra project works, participation in research works of the department, etc. Such students

are also involved in the event management activities to bring out their hidden talents.

- The students are encouraged to work on innovative and research-oriented projects, like Idea Lab with necessary funding from the University.
- Also, advanced learners are motivated to take part in national level competitions, like Robocon, SAE BAJA, Moot Court, Business Events, etc.
- Advanced learners get opportunities to solve more difficult and challenging assignments. They are encouraged to write papers based on their seminar/project work.
- Additional reading material is suggested to them.
- Moreover, there is a provision of Audit Courses for fast learners. Students are also encouraged to register for online courses (MOOCs) and NPTEL courses.
- The advanced learners lead the learning groups and help the slow learners.

2.3 Teaching-Learning Process

2.3.1 *How does the university plan and organise the teaching, learning and evaluation schedules (academic calendar, teaching plan, evaluation blue print, etc.)?*

The University has a well-established mechanism for teaching, learning and evaluation. Various aspects of teaching and evaluation are well planned and accordingly implemented.

Academic Calendar:

All institutions of the University have their academic calendars for different programmes and they are adhered to. The academic calendar is prepared much in advance after thorough deliberation at the institute level. This calendar is distributed among the students and staff on the first day of the academic session. It is reviewed after every three weeks. The Academic Calendar is prepared keeping in view the following:

- The minimum teaching phase requirements (commencement and end) (around 16 to 17 weeks for a semester and 10 weeks for a trimester)
- Designated time for academic and attendance reviews
- Class tests
- Laboratory practical examination
- Declaration of results of continuous evaluation
- Co-curricular/extra-curricular/other events
- Commencement of next academic session
- Holidays

Teaching Plan:

- The teaching plan is prepared based on the Teaching Scheme and Syllabus of the Courses. The timetable is prepared considering the teaching scheme, approved by various academic bodies of the University.
- The course outline is given in advance to the students so that they know about the scheduling of sessions and readings materials to be read before the conduct of sessions.
- In addition to the theory lectures, some of the courses have a provision for

laboratory work also. Moreover, term assignments are given in almost all courses. A structured system of tutorials exists in many subjects.

Evaluation Blue-Print:

- Each programme has its academic regulations, including teaching and examination schemes that are adhered to. The Teaching and Examination scheme provides a blueprint of the teaching plan and evaluation pattern.
- Before the commencement of the academic session, concerned Course Coordinators propose the evaluation scheme (*Inter se* weightage) of the courses. Approval of the evaluation scheme is sought from the respective Dean. The duly approved scheme is informed to the students well in advance.
- Course evaluation is performed under various components. These components are identified as Continuous Evaluation (CE) and Semester End Examination (SEE). The CE component includes Term Assignments (TA), Laboratory and Practical Work (LPW), Class Test/Quiz, etc. Appropriate weightage is assigned to all the components and evaluation is performed throughout the semester. The course evaluation process is explained to the students and displayed on the course website.

2.3.2 ***Does the university provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?***

Yes, the University provides course outlines and course schedules to the students prior to the commencement of the academic session.

- The institutes have a course design policy that helps the instructors develop a course outline. Once designed and developed, a course outline is adhered to and a change is made only in exceptional situations.
- Along with course outlines, study materials are also provided and students are expected to read them before coming to a session.
- For most of the courses, the course coordinator prepares a course web page/course blog for the course and all the enrolled students are invited to visit the same and interact. The webpage of the course/blog includes the course introduction, course outcomes, course structure, academic calendar, lesson planning, *inter se* weightage of evaluation, class-test schedule, hand-outs, assignments, other learning resources, and useful web links.
- The effectiveness of the course outline and the scheduling is ensured by the respective Faculty Advisor and Head of the Department. The informal feedback about the same is also obtained from the students after the semester.

2.3.3 ***Does the university face any challenges in completing the curriculum within the stipulated time frame and calendar? If yes, elaborate on the challenges encountered and the institutional measures to overcome these.***

No, the University does not face any challenges in completing the curriculum within the stipulated time frame and calendar dates.

- The academic calendar is disseminated to the students in advance and is adhered to. The University ensures that sufficient working and teaching days

are available to institutes.

- However, in a case of any lectures or practical slots are missed due to some unavoidable reasons, extra classes are arranged. In a rare situation, faculty members may swap their sessions. If a faculty member goes for leave, s/he is required to compensate for their missed classes by conducting extra lectures.

2.3.4 ***How learning is made student-centric? Give a list of participatory learning activities adopted by the faculty that contributes to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.***

The University lays great emphasis on student-centric learning rather than on teacher-centric learning.

Student-Centric Teaching Learning:

- Implementation of learner-centric teaching-learning process is made feasible by introducing Outcome Based Education (OBE) from the academic year 2013-14. Programme Educational Objectives (PEOs), Programme Learning Outcomes (PLOs) and Course Learning Outcomes (CLOs) are developed for every programme and courses, respectively.
- Apart from these, learning is made student-centric through an appropriate mix of various pedagogical techniques, like case studies, student presentations, class discussions, role-plays, exercises, simulations, etc. The classroom teaching is made interactive by adopting a variety of Class-room Assessment Techniques (CATs).
- Students are given the course outline and learning materials in advance and are expected to come to the classroom with sufficient preparation.
- There is a provision of continuous evaluation to the tune of 60%. It is basically formative evaluation and adds to the learning of students.

Participatory Learning Activities:

- A list of the participatory learning activities is given below:
 - ✓ Discussion
 - ✓ Student Presentation
 - ✓ Case Studies
 - ✓ Moot Court and Moot Trial
 - ✓ Simulation
 - ✓ Model Usage
 - ✓ Role Plays
 - ✓ Exercises
 - ✓ Syndicate Work
 - ✓ Group Problem Solving
 - ✓ Experimental Work
 - ✓ Project based Learning
 - ✓ Industry Visit
 - ✓ Spoken Tutorials
 - ✓ Blog
 - ✓ Course Forum

- Blended Learning is used to make the teaching-learning process more participative and interesting. Various authentic resources from the Internet are used and the students are encouraged to study and work on projects together.
- In addition, Massive Online Open Courses (MOOCs) are referred to the students. The students are motivated to learn through ICT tools, namely NPTEL videos, Spoken Tutorials, Virtual Labs, etc.
- Most courses have blogs. The students can post their queries on the blog to which, all the members of the group can respond.
- There is a provision for seminar as a course in most of the programmes.
- For holistic development, the students are encouraged to participate in various co-curricular and extra-curricular activities.
- The knowledge management of teaching-learning is done through the use of blogs / course websites and Moodle.

2.3.5 ***What is the university's policy on inviting experts / people of eminence to deliver lectures and/or organize seminars for students?***

The University has a policy of inviting experts, eminent speakers to deliver special lectures, seminar, public lecture, etc.

- The University invites outside experts / faculty in three different categories, namely
 - i) Expert for delivering guest lectures,
 - ii) Appointment of Adjunct Professor, and
 - iii) Visiting Faculty for 1-6 months duration
- Budgetary Allocations are made for inviting experts to deliver lectures and conduct seminars/workshops for the students.
- The University also encourages its constituent institutes to invite foreign academics to interact with the students. Eminent alumni members are also requested to interact with the students.
- Experienced retired Professors from premier educational institutes are invited as adjunct faculty. Their expertise is utilized in enhancing teaching and research activities of the department as well as for mentoring junior faculty members.
- Experts from industry/foreign institutions/research organisations are invited to share their professional experiences to the students.
- At the Institute of Law, leading law practitioners, advocates and luminaries from the legal firms constitute the team of visiting faculty members. The Institute also has Honorary Visiting Professors, consisting retired Supreme Court Judges, Chief Justices of various High Courts, eminent Professors and Senior Advocates.
- Professional experts and well known academicians are also invited to cover advanced topics in subject as a part of 'Cooperative Teaching'. In cooperative teaching, an expert conducts 5-6 hours of sessions depending on his convenience. This system also helps in developing expertise of in-house faculty members in certain areas. It helps in placement of students for practical training as well as for major project work. Online Interactive Tools are used to interact with faculty members of well-known foreign institutes according to need and demand.

- Apart from these, the University has a practice of arranging public lectures periodically where well-known speakers are invited to deliver lectures on the key areas of public interest.

2.3.6 ***Does the university formally encourage blended learning by using e-learning resources?***

The University encourages blended learning by using e-learning resources, like NPTEL Videos, public domain open courseware, e-Books, e-manuals, Virtual Labs, Moodle, Blogs, Course Websites, Webinars, MOOCs, e-Journals, and remote access to library e-resources through KOHA software.

2.3.7 ***What are the technologies and facilities such as virtual laboratories, e-learning, open educational resources and mobile education used by the faculty for effective teaching?***

- Virtual Laboratories (VLAB) are being used in certain courses, wherever available.
- Many e-learning resources and open educational resources, like NPTEL, MOOCs, Spoken Tutorials, instructional videos, and TED Talks are used extensively by the faculty members.
- The Institute of Technology has a tie-up with IIT-Bombay for receiving short term training programmes through video conferencing mode.
- In addition, Moodle is also being used by faculty for improving the teaching-learning process.

2.3.8 ***Is there any designated group among the faculty to monitor the trends and issues regarding developments in Open Source Community and integrate its benefits in the university's educational processes?***

The University has formed an Open Source Committee of faculty members to monitor the trends and issues regarding developments in the Open Source Community.

- Open source software is promoted in all departments of the University. The students of B.Tech. and M.Tech. programmes use Open Source Operating System *Linux* exclusively for their practical and project work. In PG programmes, open source tools are also covered under the Research Methodology Course. KOHA software is used in the University libraries.
- Apart from these, open source tools and technologies are also being covered as part of the supplementary course on 'ICT Tools and Network Security' in B.Tech. and M.Tech. programmes.
- Learning Management System (LMS), like Moodle has been customized as per the institute needs.

2.3.9 ***What steps has the university taken to orient traditional classrooms into 24x7 learning places?***

- The University has converted a traditional classroom into 24X7 learning place through availability of e-learning resources to the students. In order to create 24X7 learning environment, a dedicated blog is developed for each course and access is given to all concerned students. Thus, the students can interact with the faculty members and can get their guidance any time.

- Students and faculty members have 24X7 accesses to the library resources through Virtual Private Network (VPN) through remote access facility.

2.3.10 ***Are there provisions for the services of counsellors/mentors/advisors for each class or group of students for academic, personal and psycho-social guidance? If yes, give details of the process and the number of students who have benefited.***

- The University has made a provision of counselling services to all its students. In fact a systematic Mentoring Policy is prepared and circulated among the students and faculty. Systematic efforts are being made to help the students solve their academic as well as personal problems.
- The Head of the Department (HoD) or Section Head assign a group of 20-25 students to an individual faculty member. Preferably, the same faculty member should remain as the mentor for the same group during the groups' entire tenure at the University.
- During the preliminary round of mentoring, a faculty member seeks information about the respective students using the Mentoring Forms. The students are categorised into fast, medium and slow learners and they are given support by the faculty mentor accordingly.
- The next round of mentoring is arranged after in the middle of the semester. This enables to review the academic progress, attendance status, progress in TA/LPW, etc. The minutes of mentoring reports are submitted to the concerned HoD or Section Head. The HoD or Section Head takes necessary actions, wherever required and if needed, may inform the concerned Head of Institute (HoI).
- For the cases where improvement is not seen, case is reported individually to the higher authorities.
- For psycho-social guidance, the University has created a special position and a suitable person was working. After his retirement, the University tried to find a qualified, trained psychologist, but it could not find a suitable person. The efforts for appointing a new person are on.

2.3.11 ***Were any innovative teaching approaches/methods/practices adopted by the faculty during the last four years? If yes, did they improve learning? What were the methods used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?***

Yes, there are several innovative teaching methods adopted by the faculty members. Some of these methods are highlighted below:

Innovative Teaching Methods:

- Use of Course Blog / Websites for 24X7 Learning
- Use of Spoken Tutorials, Virtual Labs, NPTEL Videos
- Massive Online Courses are given to the students
- Demonstration of difficult concepts through computer aided tools, simulation, etc.
- Term paper/Poster Presentation/Project as innovative assignment
- Group learning activities, discussion, etc.

Impact of Innovative Teaching Methods:

In general, these methods have improved the overall teaching-learning process. It has helped the students in better understanding of the theoretical concepts, to improve their presentation skills, understanding the advanced topics. Study based on simulations/animations/videos brought the students closer to the real-time environment and brought effectiveness.

Methods to Evaluate the Impact of Innovative Teaching Methods:

- Continuous Evaluation of the students
- Performance of the students in Formal Examinations
- Discussion with the students during the lectures
- By way of Collecting Informal Feedback

2.3.12 ***How does the university create a culture of instilling and nurturing creativity and scientific temper among the learners?***

The University emphasizes on the overall development of its students and nurture creativity and scientific temperament among them by following ways:

- Introducing Idea Lab: The students can submit innovative ideas to the Idea Lab and can get funding for the same from the University after due approval.
- Apart from this, an elective course on ‘Creativity and Innovation’ is introduced in the MBA (Full Time) Programme and MBA (Family Business & Entrepreneurship) Programme. The BBA-MBA Integrated Programme has a course on ‘Logic and Critical Thinking’. Similarly, B.Tech. programmes have a supplementary course on ‘Creativity and Innovation’.
- There is a compulsory course on ‘Critical Thinking’ in all B.Tech., B.A. LL.B. and B. Com. LL.B. programmes.
- The students are motivated to demonstrate their creative and innovative aptitude through various project competitions, like SAE BAJA, ROBOCON, project based learning, etc.
- The University nurtures the creativity and scientific temperament among the learners by giving case studies, projects and challenging assignments to the students. Expert lectures on specific topics enhance the creativity of the students and their inclination towards doing quality research.
- There are several Students’ Associations in the University. Through these, the students regularly organize various activities, including creativity, research and innovation based activities.
- Institute wise Technical Symposiums are organized every year that enables the bright students to showcase their interpersonal, leadership, management and creativity skills.
- Apart from these, in the classroom, participatory pedagogy nurtures creativity and scientific temper amongst the students.

2.3.13 ***Does the university consider student projects mandatory in the learning programme? If yes, for how many programmes have they been made mandatory? Number of projects executed within the university. Names of external institutions associated with the university for student project work. Role of faculty in facilitating such projects.***

Yes, the University gives utmost importance to the Student Projects /Field Internship /Practical Training. In fact, in all the UG and PG programmes (100% programmes), the student projects are included in the course curriculum.

- In M.Tech./M.Pharm./M.Sc. Programmes, the students start working on projects from the 3rd semester, whereas in B.Tech. and B.Pharm. programmes, the students are required to do minor and major projects, respectively during the entire four years.
- In Institute of Law and Institute of Management, there are various internships and they are given credits.

Please refer to the Table 2.4 for Students' Projects Executed within the University.

Table 2.4: Number of Students' Projects Executed within the University

Year	Number of Students' Projects
2010	1522
2011	2129
2012	2028
2013	2233
2014	2096

Names of External Institutions:

An illustrative list of External Institutions associated with the University for Student Project is given below:

- ✓ Institute for Plasma Research (IPR)
- ✓ Indian Space Research Organisation (ISRO)
- ✓ Physical Research Laboratory (PRL)
- ✓ PERD Centre
- ✓ Accenture
- ✓ Aditya Birla
- ✓ Axis Bank
- ✓ Cushman & Wakefield
- ✓ Hindustan Coca Cola Beverages Pvt. Ltd.
- ✓ Indian Oil Corporation Ltd.
- ✓ ITC
- ✓ Kotak Mahindra Bank
- ✓ L&T Power
- ✓ LG Electronics
- ✓ Mott MacDonald
- ✓ Price Waterhouse Coopers
- ✓ Reliance Entertainment
- ✓ Reliance Retail Ltd.
- ✓ Taj Krishna
- ✓ Tata Consultancy Services Ltd.

- ✓ Toyota Kirloskar Motors
- ✓ TVS Motors
- ✓ Reserve Bank of India
- ✓ Intel
- ✓ Oracle
- ✓ Broadcom
- ✓ L&T Ltd.
- ✓ General Electric
- ✓ Alstom
- ✓ Siemens
- ✓ Godrej & Boyce
- ✓ Hitachi Hi-Rel
- ✓ E Infochips
- ✓ INOX
- ✓ Isgec Hitachi
- ✓ KHS Machinery
- ✓ ARM Embedded Systems
- ✓ ST Microelectronic
- ✓ Free Scale
- ✓ Samsung Electronics

Role of Faculty Members:

- Faculty members' role as a guide to the project is inevitable in every aspect of the project. The guide is responsible for technical and personal mentoring of the students.
- S/he is required to float the project definitions before the commencement of the semester. The students select these projects and contact their guides on a regular basis for discussion.
- Even if the student is pursuing the project in a firm, an internal guide is appointed. This guide is responsible for overall mentoring and maintaining the quality of the project. An internal guide contacts the industry guide and they both play the role of advisors in the student's project.

2.3.14 ***Does the university have a well-qualified pool of human resource to meet the requirements of the curriculum? If there is a shortfall, how is it supplemented?***

Yes, the University has a well-qualified pool of human resource to meet the requirements of the curriculum.

The University puts continuous efforts to fill the vacant positions. In case of shortage, it is supplemented by:

- Inviting Eminent Experts as Guest Faculty
- Also, there is a provision for appointing Professor of Emeritus, Adjunct Professor and Visiting Faculty.

2.3.15 ***How are the faculty enabled to prepare computer-aided teaching/ learning materials? What are the facilities available in the university for such efforts?***

- Faculty members are provided with laptop, internet connections through Wi-Fi and LAN as well as remote log-in to prepare computer aided teaching-learning materials.

- Classrooms are equipped with Video Projectors. There is a provision for Document Readers for displaying the textbook page directly on the screen using video projector. The campus is Wi-Fi enabled.
- In certain institutes, the faculty members have been assigned Teaching Assistants (TAs) who can help them in creating presentations, course websites, blogs etc. For courses involving simulations or test results computation, TAs can also assist faculty members in recording a computer simulation through several free tools available online.
- Faculty members are specially trained for “How to create Course Websites and Blogs”, Learning Management System (LMS) usage, etc.

2.3.16 ***Does the university have a mechanism for the evaluation of teachers by the students / alumni? If yes, how is the evaluation feedback used to improve the quality of the teaching-learning process?***

Yes, the University has a mechanism for the evaluation of teachers by the students.

- Formal as well as informal feedback system is practiced for the monitoring of course delivery. Towards the end of each semester, the structured feedback from the students is taken regarding the course/faculty. The online form is given to the students and their feedback is collected. This feedback is analysed and compiled, and informed to the respective faculty by the HOD/HOI.
- System for gathering the informal feedback during the semester for each course is also in place. Informal feedback is collected by the Faculty Advisor and the Head of Department.
- The HOD/HOI advises the faculty for the necessary corrective actions to be taken, if required.

2.4 Teacher Quality

2.4.1 ***How does the university plan and manage its human resources to meet the changing requirements of the curriculum?***

- In order to meet the changing requirements of the curriculum, the University has devised a systematic strategic plan which includes human resource development aspects.
- If there is a new curriculum, as per the requirements, new faculty members are recruited. There is also a provision for inviting outside experts as visiting faculty.
- The University gives recruitment advertisements in the leading national newspapers, arranges campus recruitments at different IITs.
- Under the Academic Development and Research Cell, the University has created a dedicated portfolio of Faculty Development Programmes (FDPs). Under this, various programmes, such as Induction Training Programmes, Orientation Programmes, Refresher Courses, Curriculum Workshops, and Research related trainings programmes are arranged from time to time. Also, faculty members are deputed outside the University for attending such programmes, including UGC refresher courses.

2.4.2 *Furnish details of the faculty*

The details of faculty members are provided in Table 2.5.

Table 2.5: Details of Faculty Members

Highest Qualification	Professors		Associate Professors		Assistant Professors		Total
Permanent Teachers							
	Male	Female	Male	Female	Male	Female	Total
Ph.D.	32	08	21	13	20	21	115
M.Phil.	--	--	--	--	02	01	003
PG	--	--	20	09	93	52	174
UG	--	--	--	--	--	01	001
Temporary Teachers							
Ph.D.	03	--	--	--	--	01	04
M.Phil.	--	--	--	--	--	01	01
PG	03	--	--	--	14	14	31
Part-time Teachers (Visiting Teachers)							
Ph.D.	--	--	--	--	04	--	04
M.Phil.	--	--	--	--	--	01	01
PG	--	--	--	--	28	14	42
UG	--	--	--	--	08	--	08

Additional 27 faculty members are issued appointment orders recently.

2.4.3 *Does the university encourage diversity in its faculty recruitment? Provide the following details (department / school-wise).*

The University encourages diversity in its faculty recruitment. The faculty members are from diverse background and from different parts of the country as shown in Table 2.6.

Table 2.6: Diversity of Faculty Members

Name of the Institute	% of Faculty from the same University	% of Faculty from other Universities within the State	% of Faculty from Universities outside the State	% of Faculty from other Countries
Institute of Technology	23.83	41.59	32.71	1.87
Institute of Management	5.41	48.65	43.24	2.70
Institute of Pharmacy	28.00	64.00	8.00	--
Institute of Science	11.11	33.33	55.56	--
Institute of Law	--	35.00	65.00	--
Institute of Architecture	--	75.00	--	25.00
Total	18.54	43.47	36.17	1.82

2.4.4 *How does the university ensure that qualified faculties are appointed for new programmes / emerging areas of study? How many faculty members were appointed to teach new programmes during the last four years?*

For any new programme, the University appoints faculty members as per the prescribed norms of the national regulatory body. Mostly, the new PG programmes

are started in emerging areas and the faculty positions are created as per the requirements /norms. For all such programmes, the faculty members are recruited by inviting applications as well as by considering bio-data of eminent experts in absentia. Also, the existing senior faculty members, who are competent to teach the new courses, are invited.

In last four years, the University has started two new UG programmes, namely, B. Arch. and BBA-MBA. The list of newly appointed faculty members is given in Table 2.7.

Table 2.7: Faculty Members Appointed for New Programmes

Institute	Programme	No. of Faculty
Institute of Architecture	B. Arch.	4+4*
Institute of Management	BBA-MBA	5+4*

* New faculty members are issued appointment orders recently.

2.4.5 ***How many Emeritus / Adjunct Faculty / Visiting Professors are on the rolls of the university?***

Adjunct Faculty:

04

Visiting Professors:

04

Research Chair Professors:

01

2.4.6 ***What policies/systems are in place to academically recharge and rejuvenate teachers (e.g., providing research grants, study leave, nomination to national/international conferences/ seminars, in-service training, organizing national/international conferences etc.)?***

The University management makes all possible efforts to academically recharge and rejuvenate the faculty members. Some of the means are listed below:

Research Grants:

The University provides research grants for a minor research project up to ₹ 1 lakh.

Study Leave:

Faculty members are provided study leave with full salary to undertake / pursue higher studies.

Nomination to Conferences/ Seminars /Training:

The University has structured guidelines for nominating faculty members for conferences/seminars/training programmes. Faculty members are deputed for UGC Refresher Courses, Summer/Winter Schools, HRD Programmes, etc.

Organizing Conferences / Faculty Development Programmes:

- The constituent institutes of the University regularly organize national

/international conferences / seminars. Faculty members are motivated to participate in all such events.

- The University has created a dedicated portfolio of Faculty Development Programmes (FDPs) under the supervision of a senior level professor. Under this, various programmes, like Induction Training, Orientation Programmes, Refresher Courses, Curriculum Workshops, and Research related trainings programmes are arranged from time to time.

2.4.7 ***How many faculty received awards / recognitions for excellence in teaching at the state, national and international level during the last four years?***

Many faculty members have received awards for excellence in teaching at state, national and international level. Details of such faculty members are given in Table 2.8.

Table 2.8: List of Faculty Members received Awards / Recognitions for Excellence in Teaching in Last Four Years

Sr. No.	Name of Faculty Member	Name of the Award /Recognition	Name of Organization	Year of Recognition
1.	Dr. R. N. Patel (Institute of Technology)	ISTE Best Engineering College Teacher in Gujarat State	Indian Society for Technical Education, New Delhi	2010
2.	Prof. Kamal Mehta (Institute of Technology)	Excellence in Teaching & Research	A body formed by Govt. of Chattisgarh	2010
3.	Dr. Sanjay S. Patel (Institute of Technology)	ISTE Best Engineering College Teacher in Gujarat State	Indian Society for Technical Education, New Delhi	2012
4.	Dr. Kamal Mehta (Institute of Technology)	Engineering Excellence Award 2012	Institution of Engineer Kolkata, State Level	2012
5.	Dr. A.P. Vyas (Institute of Technology)	ISTE Best Engineering College Teacher in Gujarat State	Indian Society for Technical Education, New Delhi	2013
6.	Dr. P.N. Tekwani (Institute of Technology)	ISTE Best Engineering College Teacher in Gujarat State	Indian Society for Technical Education, New Delhi	2014
7.	Prof. Nina Muncherji (Institute of Management)	Best Professor in Human Resource Management	22 nd Business School Affaire and Dewang Mehta Business School Awards	2014
8.	Prof. Khyati Desai (Institute of Management)	Best Professor in Entrepreneurship	22 nd Business School Affaire and Dewang Mehta Business School	2014

			Awards	
9.	Prof. A. C. Brahmhatt (Institute of Management)	Award for Best Professor in Marketing Management	Dainik Bhaskar	2013
10.	Prof. Anamika Sinha (Institute of Management)	Award for the Best Teacher in Human Resources Management	DNA Innovative B-School Excellence Awards	2012
11.	Prof. Harish Shrivastava (Institute of Management)	Best Teacher in General Management	Amar Ujala	2012
12.	Prof. Ashwini K. Awasthi (Institute of Management)	Best Professor in Marketing Management	20 th Business School Affaire and Dewang Mehta Business School Awards	2012
13.	Prof. Sameer Pingle (Institute of Management)	Best Teacher in Human Resources Management	Bloomberg UTV B-School Excellence Awards	2012
14.	Prof. C. Gopalkrishnan (Institute of Management)	Best Teacher in Entrepreneurship & Strategy	19 th Business School Affaire and Dewang Mehta Business School Awards	2011
15.	Prof. Nityesh Bhatt (Institute of Management)	Best Teacher in Information Technology	17 th Business School Affaire and Dewang Mehta Business School Awards	2009
16.	Prof. Manjunath Ghate (Institute of Pharmacy)	PharmInnova Award	DST and Troikaa (Best Thesis Guide Award)	2010-11
17.	Prof. Tejal Mehta (Institute of Pharmacy)	PharmInnova Award	DST and Troikaa (Best Thesis Guide Award)	2010-11
18.	Prof. Priti J. Mehta (Institute of Pharmacy)	PharmInnova Award	DST and Troikaa (Best Thesis Guide Award)	2011-12
19.	Prof. Anuradha Gajjar (Institute of Pharmacy)	PharmInnova Award	DST and Troikaa (Best Thesis Guide Award)	2012-13
20.	Dr. Bhoomika M. Patel (Institute of Pharmacy)	PharmInnova Award	DST and Troikaa (Best Thesis Guide Award)	2013-14

21.	Dr. Sanjeev Acharya (Institute of Pharmacy)	PharmInnova Award	DST and Troikaa (Best Thesis Guide Award)	2013-14
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2.4.8 ***How many faculty underwent staff development programmes during the last four years (add any other programme if necessary)?***

The University encourages faculty members to attend different kinds of staff development programmes. The summary of number of faculty members underwent such programmes is given in Table 2.9.

Table 2.9: List of Faculty Members underwent Staff Development Programmes during the Last Four Years

Staff Development Programmes	Number of Faculty Members
Refresher Courses	45
UGC – Faculty Improvement Programme	40
HRD Programmes	01
Orientation Programmes	95
Staff training conducted by the University	198
Staff training conducted by other institutions	31
Summer / Winter schools, workshops, etc.	948
Others (including industrial training)	126

2.4.9 ***What percentage of the faculty have been (i) Invited as resource persons in Workshops/Seminars/Conferences organized by external professional agencies? (ii) Participated in external Workshops/Seminars/Conferences recognized by national/international professional bodies? (iii) Presented papers in Workshops/Seminars/Conferences conducted or recognized by professional agencies? (iv) Teaching experience in other universities / national institutions and other institutions? (v) Industrial engagement? (vi) International experience in teaching?***

Percentage of the Faculty Members

- i) Invited as Resource Persons in Workshops / Seminars / Conferences organized by external professional agencies
12.77 %
- ii) Participated in external Workshops / Seminars / Conferences recognized by national / international professional bodies
38.30 %
- iii) Presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies
28.27 %
- iv) Teaching Experience in other universities / national institutions and other institutions
35.56 %

v) Industrial Engagement
20.36 %

vi) International Experience in teaching
0.61 %

2.4.10 ***How often does the university organize academic development programmes (e.g.: curriculum development, teaching-learning methods, examination reforms, content / knowledge management, etc.) for its faculty aimed at enriching the teaching-learning process?***

- The University has established an Academic Development and Research Cell (ADR Cell) to monitor the different processes of academic and research activities. The ADR Cell also looks after the Faculty Development Programmes in different areas including Curriculum Development, Pedagogy Techniques, Teaching-Learning Methods, Exam Reforms, Research, Intellectual Property Management, Quality Improvement, etc. The ADR Cell is vibrant and regularly organizes various Academic Development Programmes.
- It is noteworthy to mention that, in last one year, the ADR Cell has organized series of workshops on ‘Curriculum Reforms’, ‘Outcome Based Education’, etc. Apart from these, exclusive ‘Examination Reforms Committee’ has been formed to cater to the dynamic requirements related to the examination aspects that handle Unfair Means Cases, examination reforms and related issues.
- The University also organises Orientation and Refresher Programmes to help faculty strengthen the teaching learning process.

2.4.11 ***Does the university have a mechanism to encourage: (i) Mobility of faculty between universities for teaching? (ii) Faculty exchange programmes with national and international bodies? If yes, how have these schemes helped in enriching the quality of the faculty?***

Mechanism for Faculty Mobility between Universities for Teaching:

- The University has a structured mechanism for allowing faculty members to visit other institutes / universities / research organizations for delivering lectures / seminars/training, etc.
- Based on the invitation received by the faculty members, they apply for permission and leave to the concerned higher authority.
- Faculty members are issued an official order to visit such institutes.

Benefits of Faculty Mobility between Universities:

- It helps in developing networking with the other universities and national and international bodies.
- The experience gained by the faculty members brings new perspective in their teaching.

2.5 Evaluation Process and Reforms

2.5.1 *How does the university ensure that all the stakeholders are aware of the evaluation processes that are in place?*

- The evaluation procedure is transparent and efforts are made to disseminate the same to all the stakeholders. During the orientation programme, the evaluation process is explained in detail to the students and the parents. Also, all the students are provided 'Student Handbook', which includes all the rules and regulation of examination/evaluation.
- The parents are encouraged to understand the grading system of the University and urged to track academic performance of their wards. At the end of the orientation programme, an undertaking is obtained from the students that they have understood the evaluation system of the University.
- The Course Evaluation Process is also displayed on the Course Website /Course Blog /Course Conduct Module.
- The recruiters are explained the evaluation process through placement brochure. If they have any queries, those are addressed to.
- The Evaluation System is described at the back of the grade sheet.

2.5.2 *What are the important examination reforms initiated by the university and to what extent have they been implemented in the university departments and affiliated colleges? Cite a few examples which have positively impacted the examination management system.*

- There is a continuous review of the examination system. In the academic year 2012, a major exercise was initiated for examination reforms. As a result, instead of having three categories, i.e., Mid Semester Examinations, LPW/PW and Semester End Examinations, the examination system was changed to only two components, namely Continuous Evaluations, the weightage of which is given up to 60% and the Semester End Examination, which is being conducted by the University in majority of the institutes and the weightage of this examination is 40%.
- Under Continuous Evaluation Scheme, complete academic freedom is given to the teachers/faculty members under the guidance of the Academic Coordinators of the courses and the Deans of the Faculties.
- So far the weightage of components decided under the continuous evaluation which is to be decided by the Dean, the complete freedom is given to the Institute concerned.
- In the continuous evaluation system, the following components are incorporated:
 - ✓ Class Test
 - ✓ Seminars / Workshops
 - ✓ Quizzes
 - ✓ Assignments
 - ✓ Mini Project Work, etc.
- The continuous evaluation is transparent and it is finalized based on the constant dialogues between the students and the teachers.
- Recently, the University has decided to show the end-semester examination

answer sheet to the students with a view to promote transparency and fairness.

- The University has adopted complete transparency in the assessment techniques. Continuous evaluation during the semester is a regular feature. There is a shift from Lower Order Thinking Skills (LOTS) to Higher Order Thinking Skills (HOTS). Hence, more weightage is given to analytical and application based questions. Memory recall questions are the least preferred in the question papers.
- Importantly, the question papers are reviewed by a committee and subsequently put in the BoS / AAC.
- Plagiarism is considered as a strict offence. Hence, the University has purchased the *Turnitin* software. All faculty members are given the licensed copy of the same to check the plagiarism in project reports /thesis, etc.
- Open Book Examination, Rubrics based Evaluation; Online Tests, using Moodle, Assignment Based Class Tests, etc. are some of the examination reforms initiated by the University.

2.5.3 ***What is the average time taken by the university for declaration of examination results? In case of delay, what measures have been taken to address them? Indicate the mode / media adopted by the university for the publication of examination results (e.g., website, SMS, email, etc.).***

- Final examination results are declared within two working weeks after the completion of the Semester End Examination (SEE). It can take maximum 30 days after completion of semester end-examination. If the declaration of results is not done within the said 30 days, the University officials have to inform the reasons for the delay to the President of the University.
- The results of Continuous Evaluation are declared before the conduct of SEE. Till date, there is no delay observed in the declaration of results.
- The result is displayed on the notice boards. The students can see their results on the University website. Sometimes, the students are also intimated about the declaration of results through an e-mail.

2.5.4 ***How does the university ensure transparency in the evaluation process? What are the rigorous features introduced by the university to ensure confidentiality?***

The University has a very detailed Manual for Conduct of Examinations for systematic conduct of examination. Apart from this, the following measures are taken to ensure transparency in the evaluation process:

- There are two types of Evaluation: continuous evaluation and end-semester evaluation. The assessed works of continuous examination are shown to the student. If students have any grievance, it is directly handled by the instructor. Recently, a provision is made to show the answer sheet of the end semester examination to the students.
- For each subject / course of semester end examination, the Paper Setters submit two sets of the question papers and out of these two sets, the Dean and the Executive Registrar select any one and the same is used for the purpose of the respective examination.
- In order to deal with the cases of examination malpractice, a separate

‘Examination Reforms Committee’ is appointed by the Director General. A provision is made for grade verification, in case of any grievance related to the marks / grade obtained by the student in semester end examination.

- For the smooth and fair conduction of the semester end examinations, along with the senior supervisors, observers are appointed by the University. Generally, the observers are senior faculty members of the institute other than the institute where said examination is scheduled.
- In order to check the quality of the question papers, all the question papers are reviewed by a separate committee and the reports are presented in the Board of Study meetings.

2.5.5 ***Does the university have an integrated examination platform for the following processes? Pre-examination processes – Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc. Examination process – Examination material management, logistics, etc. Post-examination process – Attendance capture, OMR-based exam result, auto processing, generic result processing, certification, etc.***

- The University tries to ensure complete transparency in the evaluation process. It has a systematic Manual for Conduct of Examinations. The Manual has prescribed four major processes: Pre-examination process, During Examination process, Post examination process and finally Post declaration of results process. Each process has various steps.
- For the entire examination process, customized software is used for generation of a list of students, attendance sheet, generation of results and grade report, etc.

2.5.6 ***Has the university introduced any reforms in its Ph.D. evaluation process?***

The University has adopted all the rules of Ph.D. examination suggested by the UGC. Some of the reforms are listed below:

- It is made mandatory for the research scholar to publish two research papers in peer reviewed journals before the submission of the thesis.
- The supervisor needs to suggest panel of 8 examiners to the Director General and he selects any two examiners. If there is a difference of opinion about the quality of Ph.D. work, then it is referred to a third examiner.
- It is mandatory for the Ph.D. student and the supervisor to declare that the Ph.D. work is original.
- The plagiarism is to be checked through *Turnitin* Software.
- The thesis is to be sent to the Inflibnet for future reference.

2.5.7 ***Has the university created any provision for including the name of the college in the degree certificate?***

Not applicable.

2.5.8 ***What is the mechanism for redressal of grievances with reference to examinations?***

The highlights of grievance redressal mechanism with reference to examinations are described below:

- The evaluation process is totally transparent. For all programmes, the continuous evaluation works are shown to the students. In case of any doubt/

error, the same can be discussed with the faculty member, and is explained / attended immediately.

- The answer sheets of Semester End Examinations are also shown to the students. The University declares the result of reassessment / grade verification within stipulated time period.

2.5.9 *What efforts have been made by the university to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved the process and functioning of the examination division/section.*

In order to streamline the operations at the Office of the Controller of Examinations (Deputy Registrar – Examination) at University, the following efforts are made:

- A comprehensive examination manual, prescribing the different steps of Pre Examination Process, During Examination Process, Post Examination Process and Post Examination Result Declaration Process is prepared.
- The task of conducting continuous evaluation is delegated to the various constituent institutes of the University. Accordingly, an examination coordinator is appointed in every institute for the smooth execution of evaluation. Further, department wise Examination Coordinators are appointed to facilitate the institute level Examination Coordinators.
- At the institute level, it is the responsibility of the Institute Examination Coordinator to ensure the smooth conduction of the Semester End Examinations.
- The detailed timetable of semester end examination is prepared by the Deputy Registrar-Examination in coordination with the institute level Examination Coordinator. In addition, department level Examination Coordinators facilitate in providing the list of Junior and Senior Supervisors.
- The question papers are printed on the day of examination and within the University premises.
- Institute wise all answer sheets are assessed at Central Assessment Centre.

2.6 Student Performance and Learning Outcomes

2.6.1 *Has the university articulated its Graduate Attributes? If so, how does it facilitate and monitor its implementation and outcome?*

- The University has articulated Graduate Attributes (GAs) on the basis of graduate attributes of different programmes. In fact, the University has implemented the concept of ‘Outcome Based Education (OBE) from the academic year 2013-14. This helps in streamlining and to keep checks on the academic delivery mechanism and the assessment processes.
- The OBE is implemented at the institute level under the guidance of Academic Development & Research Cell (ADR Cell).
- The following attributes are identified for all University students:
 - ✓ Professionalism
 - ✓ Social Responsibility
 - ✓ Ethics
 - ✓ Communication
 - ✓ Critical Thinking

2.6.2 ***Does the university have clearly stated learning outcomes for its academic programmes? If yes, give details on how the students and staff are made aware of these?***

- The University has clearly stated the Programme Educational Objectives (PEOs), Programme Learning Outcomes (PLOs) and Graduate Attributes (GAs) for different programmes.
- Later, Course Learning Outcomes for each course were developed.
- The Faculty members are made aware of the OBE philosophy and practices through various workshops, conducted by the ADR Cell.
- The students are informed about the same during the Orientation Programmes and also by the faculty members in the classroom. The PLOs are also displayed on the Website of the institutes. In addition, they are also mentioned in admission prospectuses.

2.6.3 ***How are the university's teaching, learning and assessment strategies structured to facilitate the achievement of the intended learning outcomes?***

- The University has articulated PEOs, PLOs and GAs for all the programmes. They are mapped to the different courses. It is ensured that all courses of a programme, holistically cover all PLOs.
- The CLOs determine course content and assessment strategies.
- Based on the CLOs, rubrics are designed and evaluation is carried out accordingly. However, different institutions are at the different stages of development of course rubrics.
- The above measures ensure the implementation of Outcome Based Education. Thus, the teaching, learning and assessment strategies are structured in such a way so that they facilitate the achievement of the intended learning outcomes.

2.6.4 ***How does the university collect and analyse data on student learning outcomes and use it to overcome the barriers to learning?***

The learning outcomes for each course are mentioned clearly in the course outline. Depending on the learning outcome to be assessed, an appropriate evaluation technique is selected. Based on the analyses of students' performance, the areas of improvement are identified. This information is then used to incorporate changes in the content, pedagogy, etc. and to remove the impediments to learning. In some cases, tutorials, counselling and mentoring of students are conducted to facilitate their learning.

2.6.5 ***What are the new technologies deployed by the university in enhancing student learning and evaluation and how does it seek to meet fresh/ future challenges?***

The University extensively uses the ICT for enhancing the student learning and evaluation. In order to implement active, collaborative, creative, integrative and evaluative learning, some of the initiatives taken by the University are highlighted below:

- Course blog /course website having lesson planning, syllabus, hand-outs, self-learning material links, *inter se* weightage and other teaching related information
- Moodle is currently being used as a tool for conducting online tests,

feedback, etc.

- MonkeySurvey is used for conducting student surveys
- The University motivates the students for self-learning through the webinars and MOOC courses, use of Virtual Labs and NPTEL videos
- Online submission of practical work, tutorial, etc. are encouraged
- Extensive usage of videos in classrooms
- Usage of Spoken Tutorials (an initiative of IIT Mumbai) to learn various Open Source Software Tools, like Linux, LaTeX, SciLab, Python, PHP, MySQL, etc.



CRITERION III:

**RESEARCH,
CONSULTANCY AND
EXTENSION**

CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**3.1 Promotion of Research****3.1.1 *Does the university have a Research Committee to monitor and address issues related to research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.***

Yes, the University constantly monitors research activities and their progress. The research activities are discussed in various committees at the University level. The University has organized several training programmes to promote research culture among the faculty, like research orientation, workshop on awareness about plagiarism, etc.

The University has formed three committees to monitor and promote research activities as listed underneath:

- Faculty of Doctoral Studies and Research (FDSR)
- Academic Development and Research (ADR) Cell
- Research Committee at the Institute Level

Faculty of Doctoral Studies and Research (FDSR):

The Faculty of Doctoral Studies and Research promotes and monitors research activities at the doctoral level. It is responsible for framing academic regulations and policies for different doctoral programmes.

Under the guidance of the FDSR, there are many Research Progress Committees (RPCs). They monitor the research activities of individual Ph.D. students. A separate RPC for each Ph.D. scholar is constituted with two experts from outside the Institute. The RPC members review the research progress made by the research scholar regularly at an interval of six months. The RPC makes specific recommendations for improving the quality of doctoral research.

Composition of FDSR:

Chairman: Director General

Members:

- Dean, Faculty of Doctoral Studies & Research
- Deans of all Faculties
- Three members renowned for research in specialised fields nominated by the Director General
- Three recognised Ph.D. teachers belonging to different faculties nominated by the Director General
- One member nominated from Academic Council

Academic Development and Research (ADR) Cell:

The Academic Development & Research (ADR) Cell has been constituted in order to maintain high quality standards in teaching and research, consistent with the Vision and Mission of the University. The ADR Cell also manages various research activities, including training and promotion of research and management of research grants, publications, patents, etc. Moreover, the Cell monitors and

guides the institutes to raise the standards on an ongoing basis in the academic activities, particularly with reference to all aspects of the teaching-learning process and research at the under-graduate, post-graduate and doctoral levels.

Composition of the ADR Cell:

Chairman: Vice President / Director General

Members:

- Chief Operating Officer
- Director, Academic Development & Research Cell
- Executive Registrar
- Heads of all the constituent Institutes of the University
- Two experts from Academic/Profession nominated by the Director General /Vice President
- One Senior Faculty Member from each Institution

Research Committee at the Institute Level:

Each institute has constituted a Research Committee. The Committee scrutinizes the research proposal for minor research projects to be submitted to the University and the project proposals sent to external funding agencies. Normally, the Director of the concerned Institute is the Chairman of the Research committee at the Institute level and senior faculty are the members of the committee.

Recommendations Implemented:

A few recommendations implemented are:

- Recognition of research centres to carry out doctoral research under the umbrella of Nirma University.
- Research Policy was prepared for promoting research, ensuring quality and ethics in research, integrating teaching with research and incentivising research activities.
- Development of research culture by organising research-oriented training programmes for faculty and organising different workshops on scientific writing, IPR, Patent and plagiarism.
- Increase in the amount of seed money grant for a minor research projects from ₹ 25,000/- to ₹ 1, 00,000/-.
- Encouragement of interdisciplinary projects. It was deliberated in the Coordination Committee to encourage interdisciplinary projects at all the constituent institutes. Several projects have been submitted to the funding agencies.

Impact:

- The faculty members have submitted several research projects to various funding agencies.
- Increase in the number of publications in high impact factor journals and filing of patents
- Increase in the number of minor research projects funded by Nirma University
- Recognition of various organizations as Ph.D. research centres of Nirma University

3.1.2 ***What is the policy of the university to promote research in its affiliated /constituent colleges?***

The University has formulated a research policy to promote research culture in its constituent institutes. This policy provides a broad framework to guide research and to ensure the integrity of scholarly inquiry at the University. The objectives of the policy are as follows:

- i) To promote Research, Innovation and Intellectual Capital
- ii) To ensure Integrity, Quality and Ethics in research
- iii) To integrate Teaching and Research through translational and instructional research
- iv) To incentivise the generation of Intellectual Capital

The detailed Research Policy will be provided to the peer team at the time of visit as Annexure 3.1.2.

3.1.3 ***What are the proactive mechanisms adopted by the university to facilitate the smooth implementation of research schemes/projects?***

Advancing Funds for Sanctioned Projects:

Funds are made available on time for minor research projects sanctioned by Nirma University. There is also a provision of advance funds for research on case to case basis.

Providing Seed Money:

The seed money is provided to the faculty members in the form of minor research projects. The maximum amount of a grant for the minor research project is ₹ 1, 00,000/-. The junior faculty members are encouraged to apply for seed money projects. All seed money project proposals are scrutinized in the Research Committee constituted at the institute level.

Simplification of Procedures Related to Sanctions / Purchases to be made by the Investigators:

The Principal Investigator (PI) is provided free hand for the procurement of sanctioned instruments and consumables for the project. The consumables for the projects are bought in line with the University purchase policy as per special provisions made under delegation of power.

Autonomy to the Principal Investigator/Coordinator for Utilizing Overhead Charges:

The overhead charges belong to the University. As per the University rule, there is a 30% overhead charge. The University has decided to waive it off as per the requirements of a funding agency.

Timely Release of Grants:

The University and the institutes have streamlined the process of release of funds on time.

Separate bank account for a project is opened as per the specification of funding agencies or the University creates a separate budget head for the same. Once the account is created, as per requirements of the PI, the grant is released timely in line

with the purchase policy of the University.

Timely Auditing:

The process of auditing is streamlined and done on time.

Submission of Utilization Certificate to the Funding Authorities:

The utilization certificates of all the projects are submitted on time to the funding agencies.

3.1.4 ***How is interdisciplinary research promoted?***

Several steps were taken to encourage and promote interdisciplinary research at the University level. The University also encourages the faculty members to submit interdisciplinary minor research projects.

Between/Among Different Departments /Schools of the University:

The University has taken steps to strengthen interdisciplinary research and preference is given to the interdisciplinary minor research projects. A workshop was organized for the faculty members of the Institutes of Pharmacy and Science to share the common areas of research interest and to start research work as well as to apply for funding from various agencies. The University has submitted two projects to the schemes of 'Centre with the Potential of Excellence' to the UGC, involving Institutes of Pharmacy, Science and Technology.

Collaboration with National/International Institutes/Industries:

Collaborations in research are highly desirable. They bring diverse experience, insights, perspectives and expertise from diverse backgrounds. The researchers in the University are involved in the collaborative research in various forms. There is a gamut of activities ranging from the classic partnership between two faculty members at academic institutions to utilization of the infrastructure, from guiding doctoral students to joint paper publication.

Memorandum of Understanding (MoU) helps in creating a seamless opportunity to explore collaborative and reciprocal activities between the concerned parties. Nirma University, in spite of being young, understands the power of working with peer institutions so as to multiply the strength of the University in all aspects. Thus, the University has signed various MoUs with various bodies - nationally and internationally. The University encourages Ph.D. students to take up interdisciplinary projects. There are instances where the University approves the Ph.D. guides from different disciplines. The University has collaborated with various national and international research organizations.

The details about collaborative research publications, Joint Ph.D. guidance and national and international interdisciplinary projects undertaken by the faculty will be provided to the peer team at the time of visit as Annexure 3.1.4.

3.1.5 ***Give details of workshops/training programmes/ sensitization programmes conducted by the university to promote a research culture on campus.***

Several steps are taken to promote research culture among the faculty. The following are the examples of such programmes conducted to promote research

culture on the campus:

- Plagiarism: Problems and Challenges conducted on September 30, 2014 by Academic Development and Research Cell
- Research Orientation Programme conducted during December 15-20, 2014 by Academic Development and Research Cell.
- ISTE Approved Two Weeks STTP on “Dynamics of Scientific Writing in Pharmaceutical Research” conducted during June 30 to July 12, 2014 by the Institute of Pharmacy.
- A Workshop on “Scientific Temperament Development” was conducted by Dr. Vidyut Joshi, during January 1-2, 2014
- A half day Workshop on “Research Proposal Preparation” was conducted at Institute of Management on August 23, 2014. Dr. Parthasarathy, Professor, CEPT University conducted the programme. Fifty eight faculty members participated in the programme.
- All India Conference of Doctoral Research in Management - “Anvesh” conducted during April 11-12, 2014
- Workshop on “Scientific Temperament Development” February 15, 2014 by the Institute of Science.
- Research Workshop-Part I conducted on August 30, 2013 by the Institute of Law
- Research Workshop-Part II conducted on September 12, 2013 by the Institute of Law.
- Research Workshop-Part III conducted on September 13, 2013 by the Institute of Law.
- ISTE Approved Two Weeks STTP on, “Emerging Technologies in Pharmaceutical Research” conducted during June 24 to July 6, 2013.
- Plagiarism Workshop conducted on September 30, 2013 by the Institute of Law.
- Educational Institutes and Intellectual Property Regime conducted during September 18-20, 2013 by the Institute of Law.
- All India Conference of Doctoral Research in Management- “Anvesh” conducted during April 12-13, 2013
- Orientation Programme for Ph.D. students- “Anusandhan”, December 12-14, 2013, by the Institute of Pharmacy
- All India Conference of Doctoral Research in Management- “Anvesh” conducted during April 6-7, 2012
- A two week workshop on, “Introduction on Research Methodology” in collaboration with IIT Bombay and MHRD, New Delhi as National Education Mission through ICT from June 25, to July 4, 2012.
- Research Methodology Workshop conducted during May 7-8, 2011 at the Institute of Law.
- All India Conference of Doctoral Research in Management- “Anvesh” conducted during April 1-2, 2011
- All India Conference of Doctoral Research in Management- “Anvesh” conducted during April 2-3, 2010
- LL.M. with specialization in Legal Pedagogy and Research is offered by the Institute of Law.

3.1.6 ***How does the university facilitate researchers of eminence to visit the campus as adjunct professors? What is the impact of such efforts on the research activities of the university?***

The University facilitates the researchers of eminence to visit the campus to deliver lectures, organize training programmes, discuss with faculty members, etc. The University has a policy of inviting researchers of eminence to visit the campus as Adjunct Professor, Emeritus Professor and Visiting Professor. They conduct various workshops for the faculty to prepare them for conducting research and develop research culture. They also counsel the faculty members on one to one basis. The University facilitates eminent professors to visit the campus for Public Lectures, National and International Conferences, Convocations, Guest Lectures, and Cooperative Teaching.

The researchers of eminence as adjunct professors have enriched research, by way of research guidance to the young faculty colleagues. For instance, Dr. Vidyut Joshi, Emeritus Professor, conducted a series of workshops in the Institutes of Technology, Pharmacy, Law and Science to motivate the faculty for research and developing research culture.

Impact:

- Increased number of research projects submitted to the different funding agencies
- Awareness about research ethics
- Increase in the number of inter institute collaboration projects

The details of Researchers of Eminence visited will be provided to the peer team at the time of visit as Annexure 3.1.6.

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

Please refer to Table 3.1 for the details of percentage budget earmarked for research activities.

Table 3.1: Percentage of Budget for Research Expenditure

Year	% of Budget for Research Expenditure
2009-10	4.76
2010-11	5.19
2011-12	4.66
2012-13	4.53
2013-14	6.50
2014-15	6.20*

Note: Percentage is based on the actual recurring and non-recurring expenditure incurred for the year 2009-10 to 2013-14.

*Percentage is based on the budget provided for recurring and non-recurring expenditure incurred for the year 2014-15.

Details of Heads of Expenditure:

1. Students' Projects
2. Fellowship to the Ph.D. Students
3. Stipend to the PG Students
4. Library Periodicals under PG
5. Minor Research Projects
6. Research Expenses
7. Laboratory Equipment (Including Doctorate Research)
8. Books (PG)
9. Software (PG)
10. Computers (PG)

The details of financial allocation and actual utilization are shown in Table 3.2.

Table 3.2: Details of Financial Allocation and Actual Utilization for Research

Year	Budget Allocated (in ₹)	Budget Utilized (in ₹)
2009-10	42,248,964/-	31,221,839/-
2010-11	56,712,191/-	34,194,891/-
2011-12	37,110,061/-	27,607,788/-
2012-13	53,080,675/-	42,623,295/-
2013-14	61,690,711/-	51,982,229/-
2014-15 ***	70,162,859/-	41,389,810/-

***Above Figures are for expenditure incurred based on the un-audited expenses for recurring and non-recurring expenditure for the year 2014-15.

3.1.8 *In its budget, does the university earmark fund for promoting research in its affiliated colleges? If yes, provide details.*

Not Applicable

3.1.9 *Does the university encourage research by awarding Postdoctoral Fellowships/Research Associateships? If yes, provide details like number of students registered, funding by the university and other sources.*

The University is considering the award of Research Associateship and is finalizing the policy for Postdoctoral fellowship.

3.1.10 *What percentages of faculty have utilized the sabbatical leave for pursuit of higher research in premier institutions within the country and abroad? How does the university monitor the output of these scholars?*

The University has the policy to support its faculty members in the pursuit of expanding their knowledge and skills through research.

- The permanent, full time teachers of the University, who have completed seven years of service as Assistant Professor, Associate Professor or Professor, are granted sabbatical leave to undertake study or research or other academic pursuits with the objective of increasing their proficiency and usefulness to the University and higher education system.
- As the University is only ten years old, till date, no faculty member has

availed sabbatical leave to pursue higher studies/research in premier institutions within the country and abroad.

3.1.11 ***Provide details of national and international conferences organized by the university highlighting the names of eminent scientists/scholars who participated in these events.***

All the institutes are empowered to organize national and international conferences, workshops, short-term training programmes, etc. Each constituent institute of the University has organized several national and international conferences. The experts from academia and industry from India and abroad are invited to participate in the conferences, seminars, symposiums, training programmes, etc.

The constituent institutes of the University have organized approximately 30 international/national conferences and more than 140 Seminars/Workshops during the assessment period. The details about national and international conferences and the names of eminent scientists/scholars who participated in these events will be provided to the peer team at the time of visit as Annexure 3.1.11.

3.2 Resource Mobilization for Research projects

3.2.1 ***What are the financial provisions made in the university budget for supporting students' research projects?***

- The University has made the provision of providing a stipend of ₹ 8,000/- per month to the meritorious post-graduate students of each institute. The number of fellowships available with each institute and amount of fellowship vary.
- The University has a provision to provide a stipend of ₹14, 000/- per month to the full time Ph.D. students for the first two years as Junior Research Fellowship and ₹15, 000/- in the last year as Senior Research Fellowship.
- The financial assistance given to post-graduate and Ph.D. students is shown in Table 3.3.

Table 3.3: Details of Financial Assistance to PG and Ph.D. Students

Year	Amount Spent (in ₹)	Budget Allocated (in ₹)
2009-10	6,330,371/-	8,668,539/-
2010-11	10,196,224/-	14,798,600/-
2011-12	14,692,687/-	19,730,770/-
2012-13	14,981,357/-	20,741,790/-
2013-14	20,185,576/-	24,589,619/-
2014-15***	20,761,160/-	29,060,000/-

Note: Above are the amounts spent for recurring and non-recurring expenditure incurred for the year 2009-10 to 2013-14.

***Above Figures are for the expenditure incurred based on the un-audited expenses for recurring and non-recurring expenditure for the year 2014-15.

The details about financial provisions will be provided to the peer team at the time of visit as Annexure 3.2.1.

3.2.2 *Has the university taken any special efforts to encourage its faculty to file for patents? If so, how many have been registered and accepted?*

Yes, the University has devised a policy for filing the patents. While initiating the patent filing process, the faculty members send application to the Academic Development and Research (ADR) Cell. The ADR Cell then scrutinizes the application and forwards it to the university level Intellectual Property Management Advisory Committee, which manages the filing of patents. A Patent Attorney is the member of the Committee. The University encourages the filing of patents by faculty and student by providing complete financial assistance. The ADR Cell also provides administrative support for filing the patent.

Several special lectures and short-term training programmes were organized for creating the awareness about patents among the faculty and students.

Patent Details:

- No. of Patents Published - 06
- No. of Provisional Patents - 02
- No. of Patents Filed and Under Review - 13

The details of patents will be provided to the peer team at the time of visit as Annexure 3.2.2.

3.2.3 *Provide the following details of ongoing research projects of faculty:*

- Total number of research projects undertaken by the faculty members of the University is 76. The research projects were received from state, national and international funding agencies.

No of Minor and Major Projects : 76
Total Amount : ₹ 645.55 Lacs

- The major research projects are obtained from the different national and international funding agencies, like Department of Science and Technology (DST), Department of Biotechnology (DBT), Gujarat Biotechnology Mission (GSBTM), Gujarat Council for Science and Technology (GUJCOST), Indian Space Research Organization (ISRO), etc. The details of ongoing minor and major research projects are given in Table 3.4.

Table 3.4: Description of Minor and Major Research Projects

Sr. No.	Year	Name of the Projects	Funding Agencies	Grant in Lacs
Major Research Projects Funded by External Agencies				
1.	2011	Satellite Derived Rainfall and River Discharge and its Seasonal to Inter-Annual Variations from Altimeter-Radiometer Data	SAC, ISRO	18.00
2.	2012	Calibration and Validation of RISAT-1 SAR Sensor	SAC, ISRO	17.00

		and RISAT-1 derived Soil Moisture		
3.	2012	Identification of Compounds from Ginger, Cinnamon and Gooseberry Extracts having the potential to prevent Protein Aggregation and Characterization of their Mechanism of Action	DBT	47.00
4.	2012	Understanding the Nature of Liver-Stage Specific CD8+T cells generated following infectious sporozoite challenge that ensure long-lived protection against Plasmodia Infection	DBT	44.00
5.	2012	Exploring the colonization of non-rhizobia and understanding the fate of rhizobacteria during rhizobial infection in mung bean	DBT	26.89
6.	2013	Design and Development of Spatio-Temporal Data Mining Tech and Software Framework for Earth Observation Data	SAC, ISRO	10.80
7.	2013	Radiation Hardened by Design (RHBD) Standard Cell Library Development	SAC, ISRO	21.36
8.	2013	Reduction of E-Factor in Dyes and Pigment Industries (Environmental Pollution Control)	Green Environment Services	7.50
9.	2013	Understanding the immersed friction stir welding of aluminium alloys	SERB-DST	13.00
10.	2013	Parallelization and optimization of SST-1 codes	IPR	7.60
11.	2013	Identification of CD8+T cell – specific to liver-stage antigens of Plasmodium berghei to understand antimalarial protective immunity	GSBTM	19.75
12.	2014	Developing Adaptive NeuroFuzzy Interface System (ANFIS) based CAD tool for designing a corrugated horn antenna	SAC, ISRO	11.04
13.	2014	Study the behaviour of precast beam-column junction under progressive collapse scenario – an experimental and analytical investigation	SERB - DST	20.50
14.	2014	Development of Passive damping Surface Coating for Advanced Materials based Structural Systems using PZT(Piezo) Powder	SAC, ISRO	8.90
15.	2014	Isolation of bioactive compound from fruit juice of <i>Emblica officinalis</i> and investigation into the molecular mechanism of action	DST	23.0
16.	2014	Liquid Phase combinatorial synthesis of benzimidazole library for antitubercular activity	DST	34.0
17.	2014	FIST grant	DST	55.00
18.	2014	Idiopathic mental retardation and dysmorphism: Karyotypic and UPD Analysis	GSBTM	15.27
19.	2014	Generation of thermostable variants of a mesophilic amylase by directed evolution and their characterization	GSBTM	15.95
20.	2014	Biochemical basis of repression of MPS phenotype in rhizobia	GSBTM	13.30
21.	2014	Molecular basis of succinate mediated (catabolite) repression of mineral phosphate solubilization in nitrogen fixing <i>Klebsiella pneumoniae</i>	DST	28.88
22.	2015	Glutathione Appended Polymer Nanoconstructs of Asiatic acid for efficacious Neuroprotective agents	DBT	45.56
23.	2015	Social Auditing under the Juvenile Justice (Care and Protection of children) Act, 2000	Social Justice and Empowerment Department, Government of	10.00

			Gujarat	
Major Research Projects Funded Principally Approved (Final Funding Amount yet to be Decided by the Funding Agencies)				
24.	2015	Epidemiology of anemia in pre-school tribal children of eastern Gujarat with reference to etiology, pathophysiology and nutritional impact	Indian Council of Medical Research	-
25.	2015	Investigation into histone de-acetylases (HDACs) and their downstream targets in cardiac-cachexia	Indian Council of Medical Research	-
26.	2015	Exploring the effect of histone deacetylases (HDAC) in cancer-cachexia and their downstream targets	Science & Engineering Research Board	-
Total				514.30
Minor Research Projects Funded by External Agencies				
27.	2011	Experimental Investigations on Pump as Turbine (PAT) for Micro Hydropower Plants	GUJCOST	4.80
28.	2012	Use of Marine Sand in Concrete Construction	Adani Infrastructure Limited	2.50
29.	2012	Process Development for Hydrogen Production through Solar Thermal Energy	GUJCOST	4.00
30.	2012	Determination and Predictions of Properties of Biodiesel and its Blends	GUJCOST	3.30
31.	2013	New Testing Methods at Design Level for Improvement in Performance of VLSI in Nanometer Region	GUJCOST	4.35
32.	2013	Design of ADC for Biomedical Applications	GUJCOST	4.50
33.	2013	In-silico designing, synthesis and pharmacological screening of Dipeptidyl peptidase-4 (DPP-4) inhibitors as novel antidiabetic agents	GUJCOST	5.00
34.	2013	Comparative study of the nature of innate immunity generated in response to attenuated (yspz) vs. infectious sporozite in plasmodia infection	GUJCOST	4.85
35.	2013	Evaluation of Boric Acid induced male reproductive toxicity and ascertaining reversals potential of hydro-alcoholic extracts of Eclipta Alba	GUJCOST	2.00
36.	2014	Characterization of Shock Table	GUJCOST	7.40
37.	2014	Experimental Investigation of life cycle analysis and combustion characteristic of CI Engine operating on Esterified Oil and its blends with Bio Additives	GUJCOST	8.10
38.	2014	Precision Agriculture Support System using Wireless Sensor and Actuator Network	GUJCOST	4.50
39.	2014	Low Temperature Synthesis and Characterization of Magnetic Nanoparticles	GUJCOST	4.95
40.	2014	Design of a Hybrid System for Seamless Communication Across DVB-RCS and LTE Networks	GUJCOST	3.00
41.	2014	Spectrum Sensing Techniques in Cognitive Radio	GUJCOST	3.00
42.	2014	Object Detection and Surveillance System	GUJCOST	4.00
43.	2014	DNA Sequencing and Assembly using GPU	GUJCOST	4.00
44.	2014	Design and Development of Automated and Reliable Service Provisioning Cloud Architecture for Engineering Educational Domain	GUJCOST	3.00
45.	2014	Development of self-emulsifying drug delivery	GUJCOST	3.60

		systems for poorly soluble antihypertensive drug		
46.	2014	Isolation and characterization of marker from polyherbal formulation	GUJCOST	5.00
47.	2014	Investigation into the prevalence of pre-diabetic status in school going children in Gujarati population and evaluation of its association with various risk factors	GUJCOST	3.50
48.	2014	Computer aided drug design and pharmacological evaluation of cyclooxygenase-2 (COX-2) inhibitors: An Efficient conversion of Non-steroidal Anti-inflammatory drugs to potent and highly selective COX-2 inhibitors	GUJCOST	3.50
49.	2014	Development and Optimization of Formulations containing Glycine max (Soyabean), Moringa oleifera and Phoenix dactylifera for the Treatment of Malnutrition	GUJCOST	5.00
50.	2014	Investigating the role of histone deacetylase (HDAC) inhibitors in diabetes and colon cancer, and development of site specific drug delivery systems	GUJCOST	4.00
51.	2014	Downs syndrome In Gujarat: Molecular Probing In Origin	GUJCOST	6.00
Total				107.85
Minor Research Projects Funded by Nirma University (NU)				
52.	2013	Design and Development of Crack Monitoring System for Concrete Elements	NU	0.97
53.	2013	Degradation of Dye effluent using Ozone	NU	1.00
54.	2013	Colour Removal from Dyes wastewater using pervoskites based on absorbent	NU	1.00
55.	2013	Unmanned Aerial Vehicle	NU	1.00
56.	2013	Development and Implementation of Control Algorithms for Autonomous Quad-copter Unmanned Aerial Vehicle (UAV)	NU	1.00
57.	2013	Standardization of Polyherbal Formulation	NU	0.90
58.	2013	Design Synthesis and Pharmacological Evaluation of Substituted Quinoline Derivatives as Anticancer Agent	NU	0.60
59.	2013	Formulation, development and evaluation of controlled drug delivery of analgesics via novel routes	NU	0.80
60.	2013	Design, Synthesis and Pharmacological Evaluation of Novel Heterocyclic Derivatives as Anti-Diabetic Agents	NU	0.60
61.	2013	Development of Lipid Drug Delivery System for Bioavailability Improvement of the Poorly Water Soluble Antihypertensive Drug	NU	0.90
62.	2014	Synthesis of Starch Based Polymer/ Copolymers for Drug Delivery Application	NU	1.00
63.	2014	Design & Development of Low Cost ICT based Portable Telemedicine System	NU	0.63
64.	2014	Studies on Exploring Novel Excipients for Drug Delivery in Oral Cavity	NU	1.80
65.	2014	Trend Analysis and Inclusion of HOTS in Engineering Education	NU	1.00
66.	2014	Determination and Prediction of Properties of Biodiesel and blends of Biodiesel	NU	1.00
67.	2014	Multimedia Communication using Free Space	NU	0.70

Optical Communication				
68.	2014	Wireless Interface for Humidity and Temperature Monitoring	NU	1.00
69.	2014	Formulation, Design and Development of Sublingual Film of an Antihypertensive Drug	NU	0.90
70.	2014	Standardization and Evaluation of a Polyherbal Formulation for Metabolic Disorder	NU	0.80
71.	2014	Development of Oryzanol Formulation and Its Pharmacological Evaluation for Neurodegenerative Disorders	NU	1.00
72.	2014	A Study on Issues in Implementation of The Maintenance and Welfare of Parents and Senior Citizens Act 2007	NU	1.00
73.	2015	Problem based learning in legal education	NU	0.80
74.	2015	Participatory Gender Audit of Nirma University	NU	1.00
75.	2015	Evaluation of law relating maternal health : A comparative study of Rural and Urban areas of Ahmedabad	NU	1.00
76.	2015	Comparative study on emerging laws on admiralty claims and jurisdiction in Gujarat and Maharashtra.	NU	1.00
Total				23.4
Grand Total				645.55

3.2.4 ***Does the university have any projects sponsored by the industry/corporate houses? If yes, give details such as the name of the project, funding agency and grants received.***

Yes, the University has a few projects in form of consultancy from the industry and corporate houses. The details of such projects are given in Table 3.5:

Table 3.5: Sponsored Projects Received from the Industry

Funding Agency	Amount (in ₹)
Adani Infrastructure	2.50 Lacs
Green Environment Services Co-op. Soc. Ltd. - CETP, Vatva	7.50 Lacs
Confederation of Indian Industries (CII)	5.04 Lacs

3.2.5 ***How many departments of the university have been recognized for their research activities by national / international agencies (UGC-SAP, CAS; Department with Potential for Excellence; DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthroughs achieved by this recognition***

The Institute of Pharmacy has received fund for improvement of infrastructure in Science and Technology from Department of Science and Technology (DST-FIST) in November 2014 worth of ₹ 55.00 Lacs.

Nirma University has been accorded recognition as ‘Scientific & Industrial Research Organization (SIRO)’ by the Department of Scientific & Industrial Research (DSIR), Department of Science & Technology, Government of India, with effect from May 30, 2014. The University is eligible to apply for research

grants at various agencies and to avail exemption in customs duty, central excise duty on purchases related to research.

Both these recognitions have been recently received and hence there is no significant outcome or breakthrough achieved by this recognition.

Recently, the University has applied for the scheme of 'Centre for Excellence' to Gujarat Government and 'Centre with Potential for Excellence' to the UGC.

Being a statutory private university, the University is not covered under UGC Act 12(B), hence not eligible for funding from the UGC.

3.2.6 ***List details of: a) research projects completed and grants received during the last four years (funded by National/International agencies), b) Inter-institutional Collaborative Projects and Grants Received (All India Coloration, International)***

a. Research projects completed and grants received during the last four years:

Externally Funded Major Research Projects:

Completed : 11
Amount : ₹ 126.24 Lacs

Externally Funded Minor Research Projects:

Completed : 17
Total Amount : ₹ 20.68 Lacs

Nirma University Funded Minor Research Projects:

Completed : 44
Total Amount : ₹ 28.86 Lacs

b. Inter-institutional Collaborative Projects and Grants Received:

National Collaborations:

No. of Projects: 12
Amount received : ₹ 144.93 Lacs

International Collaborations:

No. of Projects: 3
Amount received: ₹ 20.60 Lacs

Details of the grants received during the last four years (funded by National/International agencies) will be provided to the peer team at the time of visit as Annexure 3.2.6.

3.3 Research Facilities

3.3.1 ***What efforts have been made by the university to improve its infrastructure requirements to facilitate research? What strategies have been evolved to meet the needs of researchers in emerging disciplines?***

- The University has made several efforts to improve infrastructure

requirements to facilitate research. The University encourages the faculty members to apply for projects for funding to Government and non-Governmental funding agencies. It has identified many such funding agencies and encourages the faculty to apply to them. ADR Cell organizes the workshops on research orientation to improve the research culture.

- The University has encouraged the faculty members to apply under the FIST scheme. Recently, the Institute of Pharmacy received ₹ 55 Lacs from DST. Being a private University, additional 50% money will be borne by the University.
- Post-graduate and Research Centre of the Institute of Technology, research laboratories of the Institute of Science and Post-graduate wing of the Institute of Pharmacy have dedicated infrastructure for research and development activities.
- Separate Animal house, Nirma Wealth Herbal Garden and insectarium have been developed to support research activities.
- Nirma University has been accorded recognition as ‘Scientific & Industrial Research Organization (SIRO)’ by the Department of Scientific & Industrial Research (DSIR), Department of Science & Technology, Government of India with effect from May 30, 2014.
- Residential facilities are provided to the full-time Post-graduate and Ph.D. students of the University. The laboratories are available for researchers, as and when required by the students.
- Research facilities are also made available by recognized Ph.D. centres to the PG and Ph.D. students and the faculty.
- Remote login facilities are available to all the researchers to use library resources 24X7.
- The researchers get hands-on training on ‘Citation Management Tools’ that helps them in managing the citations.
- The University has initiated the process for developing Central Instrumentation facility for all the institutes.

Strategies for Promotion of Research:

Some of the initiatives taken by the University to meet the needs of researchers in emerging disciplines:

- Up-gradation of Laboratories
- Setting up of new Laboratories
- Improvement in the Library resources
- Encouraging the faculty members to carry out collaborative research in emerging fields

3.3.2 Does the university have an Information Resource Centre to cater to the needs of researchers? If yes, provide details of the facility.

- Yes. Information Resource Centres are the integral part of Library Resource Centres of the University that are catering to the needs of researchers by providing them with a variety of information resources and services that are useful for conducting research and literature search.
- The library has excellent online and offline databases. Online Databases of highly reputed publication houses enable researchers with best review

resources.

- The University has made efforts to upgrade the databases for research with access to 14 online periodical databases, which include more than 13,000 e-journals of reputed publication houses.
- Each institute library has a website. It includes Document Delivery Services (DDS), Inter Library Loan (ILL) facility through DELNET as well as local networks. The library supports through scanning, printing and photocopying.
- The researchers are intimated about the new arrivals of books and periodicals through emails or by displaying that information on notice boards. Reading lists and bibliography compilations are provided to the researchers on request. The librarians provide orientation towards the better utilization of Library Resource Centres.
- 24X7 internet facility with Wi-Fi (256 Mbps) is available to the researchers on the campus. Further, remote login facility is provided to the researchers for access to library resources after institute hours towards the support of research activities.

3.3.3 *Does the university have a University Science Instrumentation Centre (USIC)? If yes, have the facilities been made available to research scholars? What is the funding allotted to USIC?*

The University is in the process of setting up a Central Instrumentation Laboratory.

3.3.4 *Does the university provide residential facilities (with computer and internet facilities) for research scholars, post-doctoral fellows, research associates, summer fellows of various academies and visiting scientists?*

- Yes. Full time Ph.D. programme is a residential programme and it is mandatory for all the Ph.D. students to stay in the hostel (both boys and girls). Wi-Fi and computer facilities are available on the campus to all the researchers and remote login facility is given to all the students staying outside the campus. All the facilities available at each institute are open for all the researchers of the University.
- The guest house facility is available for academicians and visiting scientists.

3.3.5 *Does the university have a specialized research center/workstation on campus and off campus to address the special challenges of research programmes?*

- Yes. The University has recognized several research centres, namely SAC-ISRO, Ahmedabad, Institute for Plasma Research, Physical Research Laboratory, R&D Division of Cadila Pharma, PERD Centre, etc. for conducting research leading to Ph.D. degree. The University has signed MoUs with these research organizations and the research facilities available with them are made available to our researchers.
- The research laboratories are open 24X7 and as and when required by the researchers.

3.3.6 ***Does the university have centres of national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.***

- Yes. The University has recognized several research centres. The research centres, like SAC-ISRO, Ahmedabad, Institute for Plasma Research, Physical Research Laboratory are recognized by national and international agencies to address the special challenges of research programmes.
- The Institute of Pharmacy has received DST-FIST grant for the modernization of research facilities.
- The Institute of Pharmacy has collaboration with the CII, which has recognized it as a Centre for Excellence in Nanotechnology project. Two full time Ph.D. students are working under this collaboration.

3.4 Research Publications and Awards

3.4.1 ***Does the university publish any research journal(s)? If yes, indicate the composition of the editorial board, editorial policies and state whether it/they is/are listed in any international database.***

Yes, a total of seven journals are published by the constituent institutes of the University and the details are as follows:

1. Nirma University Journal of Business and Management Studies
2. Nirma University Journal of Engineering and Technology
3. Nirma University Law Journal
4. Nirma University Journal of Pharmaceutical Sciences
5. Journal of Centre for Social Justice
6. Journal of Centre for Law and Governance
7. Journal of Centre for Law and Corporate Governance

The details of editorial boards and policies will be provided to the peer team at the time of visit as Annexures 3.4.1a and 3.4.1b.

3.4.2 ***Publications by the faculty***

The faculty members of Nirma University have published many papers in national and international journals. The total number of papers published during the assessment period is 876, out of which 636 papers were published in international journals.

- Number of papers published in Peer Reviewed Journals: 876
- Books with ISBN with details of Publishers:127
- Chapters in Books : 82
- Highest Faculty Citation Index: 528
- Highest h-index: 12
- Highest Impact Factor (International Journal Papers): 28.054
- Average Impact Factor (International Journal Papers): 2.2
- Highest Impact Factor (National Journal Papers): 3.593
- Average Impact Factor (National Journal Papers): 1.10

Note: In calculating the average impact factor, only those papers are considered for which valid impact factors are available.

The details of publications (Annexure 3.4.2a), details of books published (Annexure 3.4.2b), details of book chapters (Annexure 3.4.2c), details of H index (Annexure 3.4.2d), details of Citation and Impact factor (Annexure 3.4.2e) will be provided to the peer team at the time of visit.

3.4.3 Give details of faculty serving on the editorial boards of national and international Journals

A total of 24 faculty members of the constituent institutes are serving as editorial board members of approximately 75 national and international journals.

The details of editorial board members will be provided to the peer team at the time of visit as Annexure 3.4.3.

3.4.4 Provide details of research awards received by the faculty and students.

Total, 89 faculty members and 73 students have received awards and recognitions in the assessment period. The summary is given in Table 3.6.

Table 3.6: Details of Awards / Recognition received by the Faculty and Students

Name of the Institute	Number of Awards		Particulars
	Faculty	Students	
Institute of Technology	46	14	Contribution in teaching and research by the faculty and participation in various competitions by the students
Institute of Management	13	07	Contribution in teaching and research by the faculty and best performance by participation in various B-School competitions by the students
Institute of Pharmacy	20	25	Best papers in conferences, best papers in journals, best thesis award by the faculty and awards in various events by the students
Institute of Science	03	21	Contribution in teaching and research by the faculty and awards in various events by the students
Institute of Law	06	06	Best research paper and expertise in various areas by the faculty and best performance in Moot Court competitions
Institute of Architecture	01	--	Contribution in teaching and research by the faculty.

The details of research awards received by the faculty and students will be provided to the Peer Team at the time of visit as Annexure 3.4.4.

3.4.5 Indicate the average number of successful M.Phil. and Ph.D scholars guided per faculty during the last four years. Does the university participate in Shodhganga by depositing the Ph.D theses with INFLIBNET for electronic dissemination?

Average number of successful Ph.D. students guided by the faculty members is different for each institute. The details of total number of Ph.D. guides and total numbers of Ph.D. students graduated are given Table 3.7.

Table 3.7: Details of Doctoral Students and Guides

Institute	Ph.D. Programme Started	No. of Ph.D. Guides	Total No. of Ph.D. Students Graduated in Last Five Years	Average No. of Successful Ph.D. Students Guided per Faculty
Institute of Technology	2005	29	20	0.69
Institute of Management	2004	17	5	0.29
Institute of Pharmacy	2005	16	30	1.88
Institute of Science	2005	11	16	1.45
Institute of Law	2011	02	--	--
Total	--	75	71	0.95

The University participates in *Shodhganga* by depositing the Ph.D. theses with INFLIBNET for electronic dissemination through open access.

3.4.6 ***What is the official policy of the university to check malpractices and plagiarism in research? Mention the number of plagiarism cases reported and action taken.***

The University has structured 'Code of Ethics for Research' as well as rules for checking malpractices and plagiarism in research.

The faculty and research scholars in the institutes are expected to maintain the highest standards of academic integrity. Several steps are taken to check the malpractice or plagiarism as described below:

- The plagiarism software *Turnitin* is made accessible to all the faculty and students to check plagiarism.
- All the research projects are scrutinized at the institute level by a research committee before sending them to the funding agency.
- The student and the guide give undertaking in the post-graduate and Ph.D. thesis regarding no malpractice and plagiarism.
- Introduction of general ethics and professional ethics courses in undergraduate and post-graduate level programmes.
- Research Methodology is a compulsory course in the doctoral programme.
- The students and the researchers are oriented towards issues related to plagiarism and malpractice during Orientation Programmes for the post-graduate and Ph.D. students. Separate workshops/seminars are also conducted on awareness regarding plagiarism, IPR, etc.
- A research orientation programme was conducted for the faculty members for understanding the issues of plagiarism and malpractice in research.

One case of plagiarism was found and the degree was not awarded to the student.

3.4.7 *Does the university promote interdisciplinary research? If yes, how many interdepartmental / interdisciplinary research projects have been undertaken and mention the number of departments involved in such endeavours?*

Yes. Inter institute projects were undertaken by the faculty members of Institutes of Technology, Pharmacy and Science. The University has also submitted two project proposals to the UGC under the scheme of 'Centre with Potential of Excellence in Particular Area (CPEPA)'. Under these projects different institutes and departments are involved.

3.4.8 *Has the university instituted any research awards? If yes, list the awards.*

The publications of the faculty member are recognised by the institute by giving the certificate and prize. This award function is done during the foundation day celebrations organized normally in the months of September and October.

The University has implemented Research Policy and has initiated the process of research awards.

3.4.9 *What are the incentives given to the faculty for receiving state, national and international recognition for research contributions?*

- To attend international/national conferences, financial assistance is given to the faculty members. In case of international conferences, financial assistance up to ₹ 1 Lac is given. Duty leave is given for attending the meetings, conferences. etc.
- Membership of professional bodies is reimbursed to the faculty members up to ₹10,000/-.
- The faculty are offered higher scale and promotions on the basis of their research outcome which ultimately encourages them for research activities.
- The faculty members receiving the state, national and international recognition are felicitated during the foundation day celebrations.

3.5 Consultancy

3.5.1 *What is the official policy of the university for structured consultancy? List a few important consultancies undertaken by the university during the last four years.*

- The University actively encourages its faculty to undertake consultancy work with a view to strengthen teaching and to serve the industry.
- There is a policy for undertaking of consultancy assignments and the faculty members are given incentive in the ratio of 70%, while 30% is the Institute's share. The consultancy services include testing, consultancy projects and training for the industry.
- It motivates them to find and implement consultancy assignments. Generally, consultancy assignments come to an institute and the Director identifies a right person or a team to execute the assignment.
- A separate position of University Head (Corporate Relations) has been created to constantly engage the industry, to determine its requirements and to find the matching University resources (e.g., required expertise). In some cases, he mobilises consultancy assignments.
- The Centre for Continuing Education was established in the year 2012 to

assess the specific training needs of the industry and to respond to them speedily. The Centre is headed by a Director. The Centre conducts various training programmes for the students, industry and public in general.

- Testing is also a part of consultancy at the University. The Institutes of Technology and Pharmacy take up several testing assignments.

A list of a few important consultancies undertaken by the University is given below:

- A study on Municipal Finance for the Gujarat State 3rd Finance Corporation
- Design of Passive Filters for Hitachi Hi-Rel Power Electronics Pvt. Ltd.
- Property determination of waste lube oil and diesel samples for JMC Projects Limited, Ahmedabad (A Unit of Adani Ltd.)
- Finite Element Analysis (Sintex Pvt. Ltd., Kalol)
- Assessment of Fire Building (Guganram Textile Ltd.)
- Pharmacokinetic and Pharmacodynamic Evaluation of Antihyperlipidemic Activity of some Synthesized Compounds
- Microwave Synthesis of small organic heterocycles as potential drug candidates
- Pharmacological evaluation of Ayurvedic proprietary formulation (rheumacure capsule) in animal model of rheumatoid arthritis and type 2 diabetes
- Estimation of EvOH and DMSO from copolymer
- Standardization of Oils of Shorea Robusta and Shilajit
- Environmental Audit (EA) approved by Gujarat state Pollution control board
- Coastal Zone Regulation for Gujarat Ecology Commission

3.5.2 ***Does the university have a university-industry cell? If yes, what is its scope and range of activities?***

- The University has an Industry Institute Interaction (III) Cell. In the past, a grant was received from the AICTE to strengthen the Industry-Institute Partnership Cell under the IIP scheme. University Head (Corporate Relations), at a professor level, is appointed to plan and coordinate university-industry activities in the different institutes of the University. Besides, University Level Advisory Committee has the role to monitor the industry-institution related activities.
- Each institute of the University has an Industry-Institute Interaction Cell or a Placement Cell. The Manager (Corporate Relations) is responsible for the Industry Institute relationship in each Institute. Competent professionals manage them. The function of the Cell is to encourage consultancy, testing, training, placement, internship and other activities. This Cell also facilitates the students to choose an appropriate career option. Senior faculty work as coordinators or chairs in the Cells and the Directors are also involved in the industry-institute interaction activities.
- Each Cell has various student committees that work for placement and internship. These committees act as a bridge between the student community and the Cell on the one hand and work to enhance the

placement and internships of the students on the other. The Placement Cell arranges mock interviews for identifying the strengths and weaknesses of the students. Sometimes, it arranges to conduct aptitude tests.

- The Placement Cell, in general, also coordinates internships. A few students are able to get a final placement offer during their internships. The internship also provides the students with a real experience of organisational experience. The Cell facilitates the placements by printing placement brochures. The Placement Cell helps in arranging industrial visits. In some institutes, Corporate Relations professionals manage alumni relations as alumni represent the industry and act as a liaison between the institute and the industry.
- Apart from the above, special sessions and workshops are organized where professionals are invited to train the students for the development of soft and professional skills. Finally, Corporate Relations professionals visit industries in different cities to strengthen the university-industry interface.

3.5.3 ***What is the mode of publicizing the expertise of the university for consultancy services? Which are the departments from whom consultancy has been sought?***

The Institute of Management has instituted a special scheme called Strategic Alliance Partners Scheme (SAPS) as a part of building sustained relationship with corporates. Under this scheme, any partnering business unit can nominate up to 10 participants (totally), without any charge, to one or more Open-house Programmes of institute during a year on non-residential basis. This partnership is also expected to result into consultancy work.

The list of consultancy is sought from various government agencies, private agencies, Industries, NGOs, etc. Some of them are listed below:

- Troika Pharmaceuticals Ltd.
- Nonotherapeutics Pvt. Ltd.
- Green Chemical Pvt. Ltd.
- Raj Shah Pharmacy
- Ayur Labs
- Zydus Research Centre
- Gujarat Economical Commission
- Gujarat Water Supply and Sewerage Board
- Department of Education, Government of Gujarat
- Gujarat State Pollution Control Board
- Gujarat Social Infrastructure Development Society (GoG)
- Gujarat State Finance Commission
- DCW Limited, Dhrangadhra
- J. B. Chemicals, Ankleshwar and Panoli
- Concord Biotech Limited, Dholka
- Zydus Infrastructure Ltd, Ahmedabad
- Torrent Pharmaceuticals, Mehsana
- Common Effluent Treatment Plant, Rajkot
- Common Effluent Treatment Plant, Kalol
- Gujarat Mineral Development Corporation, Ahmedabad
- Meghmani Organics Ltd., Ahmedabad

- ABG Energy Ltd., Bhuj
- Neochem Technologies, Ahmedabad
- Gujarat Fluorochemicals, Vagra, Bharuch
- Reliance Gas Transportation Infrastructure Limited, Bharuch
- Essar Oil Ltd., Jamnagar
- Kesar Chemicals, Ahmedabad
- Bombardier Transportation Ltd., Baroda
- Adi Chemicals, Ahmedabad
- Navratan Chemicals, Ahmedabad
- M G Textile Mill, Ahmedabad
- Century Pharmaceuticals, Dahod
- Siddhi Consultant, Ankleshwar
- SRF Limited, Dahej
- HNG Float Glass Limited, Halol
- Petropath Fluids India Pvt. Ltd., Ahmedabad
- Posy Pharmachem, Ahmedabad
- Unimark Remedies Ltd., Ahmedabad
- IFFCO, Kalol
- Inspiron Engineering Pvt. Ltd.
- L&T Vadodara
- Duke Plasto Techniques Pvt. Ltd., Palanpur
- Hitachi Hi-Rel Power Electronics Pvt. Ltd., Gandhinagar
- Sintex Ltd., Kalol
- Polybond, Ahmedabad
- IHI Corporation, Bombay
- Blue Star Ltd.
- ONGC, Ahmedabad
- Mott Macdonald, Ahmedabad
- Agni Fiber Board Pvt. Ltd., Ahmedabad
- Specific Ceramic Ltd., Ahmedabad
- Jalaram Ceramic Ltd.

3.5.4 ***How does the university utilize the expertise of its faculty with regard to consultancy services?***

The faculty of the University have wide ranging expertise, covering several areas. The University uses their expertise based on the requirements of a consultancy assignment, past consultancy engagement, domain knowledge, and consultancy skills. Faculty members of Institute of Technology are Environmental Auditors for Gujarat Government Pollution Control Board.

The University utilizes the expertise of faculty members with regard to consultancy as follows:

1. Organising the Training Programmes and Workshops
2. Undertaking Consultancy
3. Undertaking Testing Projects
4. Environmental Audits for GPCB
5. Management Development Programmes

3.5.5 *List the broad areas of consultancy services provided by the university and the revenue generated during the last four years.*

The faculty members of different institutes are engaged in the research of different fields of specialisations. For some of their research work, they collaborate with external agencies and corporate through consultancy. The broad areas of consultancy and testing are provided below:

- Public Finance
- Measurement of Human Development Index
- Organisational Climate
- Aptitude Testing
- Environmental Law
- Phytochemical Evaluation of Herbal Formulation
- Characterization of various Dosage Forms using Texture Analyser
- Impurity Profiling of APIs and Formulations
- Development and Validation of Stability indicating Assay Methods for APIs and Formulations
- Phytochemical Screening of Medicinal Plants
- Pharmacological Evaluation, Acute and Subacute Toxicity Studies of Medicinal Plants and Formulations
- Pharmacokinetic and Pharmacodynamic Evaluation of Antihyperlipidemic Activity of some Synthesized Compounds
- Fingerprinting of Herbal Extracts by TLC and HPTLC Techniques
- New Drug Delivery System/Sustained Release/Extended Release Formulation
- Membrane Permeability of Peptide based Drug Delivery Systems
- Juvenile Justice
- Legislative Drafting of Bills, Rules and Regulation
- Legal Analysis of Environmental Impact
- Maritime Law
- Energy Conservation and Management, Thermal System Modelling
- Non-Conventional Machining, Welding Processes
- Numerical and Experimental Heat Transfer, Computational Fluid Dynamics
- Metal Forming Analysis, Sheet Metal Forming
- Closed Loop Supply Chain, Production Planning and Inventory Management
- Fracture Mechanics, Composites
- Environment Audit & Adequacy of Industries as Government Authorized Auditor
- Structural Analysis & Design
- Material Testing
- Structural Assessment
- Rehabilitation and Retrofitting
- Control & Automation
- Power Electronics, Power System, Electrical Machine Design, Analysis & Testing
- DSP and its Applications

- Embedded Systems
- Electronics System Design
- RF and Antenna Design

The total revenue generated through consultancy in last four years has crossed ₹305 Lacs.

3.6 Extension Activities and Institutional Social Responsibility(ISR)

3.6.1 *How does the university sensitize its faculty and students on its Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience during the last four years.*

The University's Vision and Mission emphasize shaping the better future for the mankind by developing effective and socially responsible individuals. The University aims to produce not only good professionals but also good and worthy citizens of the country. It is committed to work in this direction by sensitizing the faculty and students for social extension activities. These extension activities help them develop social awareness, leadership, team building and problem solving.

- Developing effective and socially responsible citizens is a part of the Mission of the University. Therefore, it lays stress on a host of extension activities. The Extension activities at the University can be categorised into three ways:
 - i) As a part of the Curriculum
 - ii) Voluntary Extension Activities conducted by the University
 - iii) Voluntary Extension Activities through Student Associations
- A course on Social Extension Activities is introduced in the curriculum of under-graduate and post-graduate students to sensitize them for social responsibilities.
- Among others, the Students' Welfare Board of the University concentrates on social extension activities. It is headed by an Honorary Dean (Students Welfare). It has two regular employees, i.e., Chief Coordinator and Coordinator. In addition, it has Students Welfare Coordinators from different institutes. The Students' Welfare Board meets from time to time and plans for extension, NSS and NCC activities.
- Extension includes the components of community service, technology education, legal aid and healthcare support, etc. One of the biggest advantages of having different institutes under the aegis of the University is that it can provide a variety of services to the community. For example, the extension activities range from offering legal services to jail inmates to providing computer literacy as well as health and hygiene awareness among village children.
- Managing Social Projects is a compulsory course in the MBA programme. It involves field work in NGOs by students and doing problem solving for them. It has produced significant results in the functioning of the NGOs.
- The Institute of Technology conducted a host of extension activities. Under the guidance of *Avbodh Foundation*, some students prepared the toys (mainly using waste and low cost material). These toys effectively demonstrated the principles of Science. The toys were donated for the

NirmaVolun Teaching to support education in villages.

- Twenty five students from the Department of Civil Engineering, Institute of Technology visited Hirmani Old Age Home that houses about 100 elderly persons. The students spent 3 days during August 16-18, 2014. The time spent consisted of playing games, serving them food, performing an entertainment programme, etc. Some students of Electronics Engineering worked for INTACH (Indian National Trust for Art and Cultural Heritage). They arranged the quiz for the students of Class 7th to 10th on the Heritage of India. The main aim was to spread awareness about the glorious heritage of India and the need to preserve it.
- A group of students of Mechanical Engineering Department did door to door collection of old newspapers, plastic waste, etc. in the various areas of Ahmedabad. They sold the collected things to generate some fund, which was utilised to buy stationery and books for the poor students.
- MAD (Make a Difference) is working for the education of the orphan-house children. Some Electronics and Mechanical Engineering students are associated with this group.
- *NU Hope* is founded by the Alumni of Institute of Technology. The foundation is working for the enhancing the education quality in the slum area of the city. Some active members from the Institute have developed the learning videos of the Khan Academy in Gujarati Language. Some students are engaged in the deployment of these videos in the Government/Municipal Schools of the city.
- The Institute of Pharmacy is involved in many extension activities with students for healthcare awareness on rural and urban areas. These activities are planned in collaborations with the student associations (Nirma University Pharmacy Student Association, NIPSA) to involve students actively in events, like Blood Donation Camp, Old Age Home Visit, Nutrition, Sanitation and Vaccination Awareness Camp for rural areas, Plantation Drive, Eye & Stem Cell Donation Camp.
- The students of the Institute of Science participated in social extension activities, like Participation in Walkathon organized by the International Centre for Entrepreneurship and Career Development for raising awareness about the problems faced by the people with disabilities. The other activities include, participation in celebration of Down Syndrome day on occasion of 'World Down Syndrome Day', participation in World Autism Day celebration by the B.M. Institute-Ahmedabad, blood donation camp, organ donation camp, poster competition on DOT guidelines for Cell-phone use, etc.

3.6.2 ***How does the university promote university-neighbourhood network and student engagement, contributing to the holistic development of students and sustained community development?***

The University promotes social extension activities through Students' Welfare Board. It is headed by a Senior level person, who is assisted by a Coordinator. In addition, each institute has a Co-coordinator for Students' Welfare Board. The University holds the meetings of Students' Welfare Board from time to time to promote social extension activities.

The University encourages its students to work in its neighbourhoods villages, like Chharodi, Tragad and Gota. Some of the important extension activities are listed below:

- A Health Awareness Camp was organized at the Tragad Primary School on October 05, 2013 by the faculty and students of the Institute of Pharmacy. Further, a General Awareness Camp was organized at Chharodi Primary School on March 08, 2014 by the faculty and the students of the Institute of Pharmacy. The student volunteers prepared posters and explained the importance of good habits, healthy food, cleanliness, diseases, like Malaria and Tuberculosis.
- The *NirmaVolun* Teaching Movement (NVM) was started from September, 2013. Under this activity, the students from various departments started teaching in Miroli village in coordination with All India Rural Empowerment Programme (AIREP) group. Every Saturday, the students and faculty members visit the village.
- **Saral:** It is an initiative at the Institute of Management towards spreading of knowledge and education among the children of construction labourers. Most of the children have never been exposed to any formal learning. *Saral* has been relentlessly pursuing this goal. The children are taught basic things about life, general knowledge about their environment, discipline and other etiquettes in a very playful manner. Innovative games, entertaining videos and other entertaining methods are used to ensure that the children do not lose interest in the learning process.
- **Sankalp:** It is an initiative taken up by the students of the Institute of Management to educate the mess staff. It has organized cultural activities and sports events to encourage and motivate them. The mess workers were encouraged to practice Pranayam, Meditation and Yoga on a continuous basis. They were also made aware about the consequences of consuming tobacco and alcohol.
- **Yuva Unstoppable:** It is a non-profit organization, which provides a platform to give two hours a week to enlighten the lives of underprivileged children. It provides educated young manpower to the NGOs, ranging from orphanages, handicapped children homes, to municipality schools. A group of students of the Institute of Management has joined with Yuva Unstoppable. The Yuva-ites help with education, hygiene and extra-curricular activities. They are involved in conducting random acts of kindness, viz., celebrating friendship day, distribution of clothes, soaps, etc. on the campus amidst construction workers and mess workers of the University Campus.
- The Institute of Law Chapter of Saral Foundation is involved in distributing uniforms, educational expenses, shoes, etc.

3.6.3 ***How does the university promote the participation of the students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International programmes?***

- The University promotes the participation of the students and faculty members in extension activities through the following mechanisms:
 - i) Students' Welfare Board

- ii) Mandatory Course in the Curriculum
 - iii) Institute Level Extension Activities
 - iv) NSS
 - v) NCC
 - vi) Extension Activities by the Student Associations
- The University holds special lectures for the students to encourage their participation in the NCC and NSS activities. There are representatives of students and faculty in the University level Students' Welfare Board and they actively participate in decision making. Besides, several events, like Walkathon, Run for Unity on the occasion of Sardar Patel Birthday, Swami Vivekanand Birth Anniversary, Cancer Walk, Communal Harmony Day, and Flag Day Celebration were organized to motivate the students for extension activities.
 - Being a self-financed private University, initially, the University was conducting the extension activities through its own resources. Now the University is getting support from the NSS. In January 2014, the NSS granted 500 seats to the University for conducting social service. In the current year, the University has conducted extension activities on its own as well as under the auspices of the NSS.
 - In October, 2013, the University also started the NCC activities. 50 seats were allotted to the University for women students.

3.6.4 ***Give details of social surveys, research or extension work, if any, undertaken by the university to ensure social justice and empower the underprivileged and the most vulnerable sections of society?***

- A survey on infrastructure, health, education, income and community was carried out at Miroli Village. It was the part of the *NirmaVolun* Teaching Movement (NVM) activity.
- The Institute of Management offers a compulsory field course called 'Managing Social Projects'. In 2013, the students worked on a live, action research project for Government of Gujarat to contribute significantly to the development of HD indices and community initiatives in 45 villages of Bhiloda and Himmatnagar talukas of Sabarkantha District under a project titled 'Social Enterprise for the Human Upliftment (SEHU)'.
- The University conducted a survey on adult literacy in Jaspur, Lilapur and Jamiyatpura villages in 2014.
- The Institute of Law as a part of Public Interest Lawyering has identified few villages in order to motivate the litigant to resort to the techniques of alternate dispute resolution.
- A series of mediation session took place amidst existing litigating parties in a Kherana Taluka Court and as a result of this; all the existing litigations were solved through mediation which was carried out by senior students and the faculty members of the Institute of Law. This created an impact and the Institute of Law received an appreciation certificate from the District Legal Service Authority, Surendranagar to make Kherana village as Litigation Free Village.

3.6.5 ***Does the university have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?***

- There is a mechanism to track student's involvement in various social movements, which promote citizenship roles. There is a Coordinator (Students' Welfare) in each institute who tracks student participation in different extension activities and citizen roles. Various clubs and student associations also encourage students to engage in extension activities and perform citizen roles.
- Students' Welfare activities are integrated at the University level and adequate monitoring is done.
- The student involvement is closely monitored by the University for NGO internship course. The University identifies a potential list of NGOs where the students undertake their social work. At the end of the duration, a report is submitted by the students duly endorsed by an NGO and the actual role of the student in the activity.

3.6.6 ***Bearing in mind the objectives and expected outcomes of the extension activities organized by the university, how did they complement students' academic learning experience? Specify the values inculcated and skills learnt.***

- Extension activities complement academic learning in many ways. The students learn about social realities and how they can change them. They also become other-centred and help the needy. They realise that they are a part of society and they need to give it back.
- The values inculcated among the students are: other-centeredness, humility and empathy. Other skills learned are: action orientation, teamwork, communication, conflict resolution, and problem solving. They work as individuals and in teams. Thus, they acquire both cognitive and people skills.

3.6.7 ***How does the university ensure the involvement of the community in its outreach activities and contribute to community development? Give details of the initiatives of the university which have encouraged community participation in its activities.***

In the NSS Advisory Committee, the University has included members of the NGOs and opinion leaders of neighbourhoods. As the members were inducted recently, their contribution is in a nascent stage.

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

Details of awards received by various institutes for extension activities and/contributions to social/ community development are provided in Table 3.8.

Table 3.8 Certificates received by the University for selected Extension Activities

Year	Description	Name of the Organization
2011	Sherdil Gujarat Award to Nirma University	Ahmedabad Red Cross Blood Donation Programme

2011	Certificate of Appreciation for voluntary efforts and support towards Blood Donation Programme	Prathama Blood Centre, Advanced Transfusion Medicine Research Foundation
2012	Certificate of Appreciation for voluntary efforts and support towards Blood Donation Programme	Prathama Blood Centre, Advanced Transfusion Medicine Research Foundation
2013	Certificate of Appreciation for Thalassemia Screening Programme	Prathama Blood Centre, Advanced Transfusion Medicine Research Foundation
2013	Volunteer Hero Award Category- I Volunteer Awards 2013	Make A Difference (MAD)
2014	Certificate of Appreciation for efforts towards making Litigation free village Kherana	Government authority of Kherana Village
2014	Certificate of Appreciation for voluntary Blood Donation Camp	Ahmedabad Red Cross Blood Programme

3.7 Collaboration

3.7.1 *How has the university's collaboration with other agencies impacted the visibility, identity and diversity of activities on campus? To what extent has the university benefitted academically and financially because of collaborations?*

The University has collaborated with various reputed agencies for research and related activities. The collaborating institutions are listed below:

- University of Southern California, USA
- Florida Atlantic University, USA
- Royal Melbourne Institute of Technology, Australia
- Columbia University
- Saxion University of Applied Sciences, Netherlands
- University of Plovdiv, Bulgaria
- Space Applications Centre, Indian Space Research Organisation, Ahmedabad
- Physical Research Laboratory, Ahmedabad
- Institute of Plasma Research, Gandhinagar
- Directorate of Forensic Science, Ahmedabad
- Piramal Pharmaceutical Development Services Pvt. Ltd., Ahmedabad
- Ayurlab Herbals Pvt. Ltd., Anand
- Centre of Excellence in Nanotechnology, CII (Confederation of Indian Industry)
- B.V.Patel Pharmaceutical Education & Research Development (PERD) Centre
- Cadila Research Centre, Dholka
- INTAS Pharmaceuticals Limited, Biotechnology Division, Ahmedabad
- Gujarat Industrial Development Corporation
- Indian Institute of Technology, Delhi
- Indian Institute of Technology, Mumbai
- Indian Institute of Technology, Gandhinagar
- Ahmedabad Textile Industry's Research Association
- IBM Technologies

- Infosys
- Tata Consultancy Services
- Dr. Fixit Institute of Structural Protection and Rehabilitation (DFI-SPR)
- InspirOn Engineering Pvt. Ltd.
- NHRDN
- Emerald
- AUREUS ANALYTICS
- Knowledge Commission of Gujarat & Government of Gujarat, Gandhinagar
- Aryavarta Space Organization
- Forensic Science University
- Gujarat State Legal Service Authority

The University is benefitted for post-graduate student projects, internship, utilization of instrument facilities, research activities, etc. through collaborations. Some of the collaborating agencies have also provided funds for research projects.

3.7.2 *Mention specific examples of how these linkages are promoted.*

The University has entered the MoUs with the above mentioned institutions. Meetings are organised between the senior officials of the University and the institutions. In these meetings, the areas of mutual interests are explored. For example, the University officials explore the ways to help scholars from the institutions in their doctoral education. On the other hand, the officials of the institutions explore the possibilities to provide research grants, provide internship to the students and conduct training programmes.

For example, Space Applications Centre has provided several research grants to the University. In addition, it also takes a certain number of M.Tech. students for internship. Similarly, Cadila Pharma has organised training programmes at the Institute of Management. In the same vein, the University has made some changes in the regulations of the Faculty of Doctoral Studies and Research to help senior scholars of Institute for Plasma Research get admission in the doctoral programme.

Curriculum Development: Representatives of collaborating institutions are represented in statutory bodies, like Faculty of Doctoral Studies and Research and Academic Council. They help the University in curriculum development.

Internship: Various collaborating institutions, such as Institute for Plasma Research and PERD Institute, provide internships to the University students and develop technical and professional skills among them.

Faculty Exchange and Development: Experts from collaborating institutions deliver lectures in different courses. Sometimes, a few faculty members are sent to them for their development.

Research: Some collaborating institutions provide research grants to the University. At times, their researchers and our faculty members work on joint projects.

Consultancy: Some collaborating institutions, like Cadila and Institute for Plasma Research give training assignments to the University.

Student Placement: As collaborating institutions are research organisations, their manpower needs are limited. However, a few students are absorbed by them through the final assessment process.

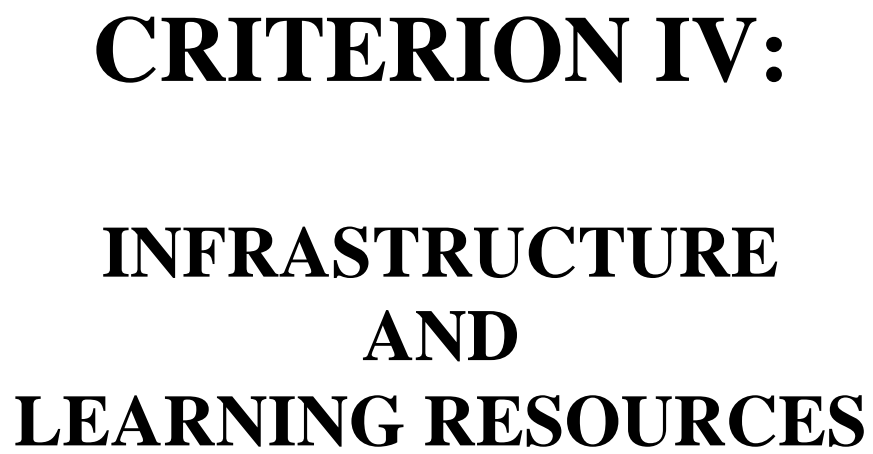
3.7.3 ***Has the university signed any MoUs with institutions of national/international importance / other universities / industries / corporate houses, etc.? If yes, how have they enhanced the research and development activities of the university?***

Yes.

- The Institute of Technology has signed a MoU with InspirOn Engineers for creating computer facility by providing high end server which can handle CAD software.
- The Institute of Management signed a MoU with Graduate School of Management, California State University, USA. Faculty of this University visited the Institute. The institute signed a MoU with the Confederation of Indian Industry (CII), creating a Chapter for the Institute to be a part of a nation-wide network of young Indians.
- The Institute of Management has signed a MoU for academic collaboration with Coggin College of Business, University of North Florida, USA & Hof University of Applied Sciences, Germany.
- The Institute of Pharmacy has signed a MoUs with various research organizations, i.e., Cadila Pharmaceuticals Ltd. Dholka, Piramal Pharma Ltd. Ahmedabad, B.V. Patel PERD Centre, Intas Pharmaceuticals Ltd., which resulted in research activities.
- The Institute of Law has tie ups with many NGOs, Advocates, MyLaw.Net, Forensic Science University and Gujarat State Legal Service Authority.

3.7.4 ***Have the university-industry interactions resulted in the establishment /creation of highly specialized laboratories/facilities?***

The Institute of Management has written certain management cases for teaching purposes.



CRITERION IV:

**INFRASTRUCTURE
AND
LEARNING RESOURCES**

CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES

4.1 Physical Facilities

4.1.1 *How does the university plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization?*

From the very beginning, the University management has cherished a dream of creating a campus environment where different units of the infrastructure, e.g., buildings, landscape, play grounds, utilities, etc. should blend together to generate a lively and peaceful atmosphere appropriate for a place of learning. Accordingly, since inception, the University had followed a systematic process of planning, creating, maintaining and utilizing its physical infrastructure.

Planning of Physical Infrastructure:

The University ensures that all the constituent institutes meet with the standards of physical infrastructure prescribed by the respective regulatory bodies, such as AICTE, Pharmacy Council of India, Bar Council of India, Council of Architecture, etc. Basically, the University has two kinds of infrastructure requirements, namely

- i) Common Infrastructure
- ii) Institute / Department Specific Infrastructure

i) Common Infrastructure:

At the University level, there is a Coordination Committee, headed by Director General/Vice President for planning/reviewing the needs of common infrastructure. The Chief Operating Officer, Director (Academic & General Administration), Executive Registrar and all the Heads of the Institutes are the members of the said Committee. The Committee meets regularly and reviews the proposals related to the development of common facilities, including buildings, labs, hostels, sports facilities, furniture, basic amenities, etc.

ii) Institute / Department Specific Infrastructure:

The infrastructure requirements for the departments are first discussed during the Department Meetings, where all faculty members give their suggestions. Subsequently all such requirements along with the institute specific needs are discussed at the meeting of Heads of the Departments. The concerned Institute Head presides over this meeting and finalizes all the requirements. All these requirements are then submitted to the University for allocation of the budget.

Optimum Utilization of Physical Infrastructure:

The University has taken several measures for the optimum utilization of its physical infrastructure. Some of them are listed below:

- A shift system is followed for optimum utilization of classrooms, laboratories and transport system.
- Some of the common laboratories are used by different departments / institutes on a sharing basis through proper planning.
- The University ensures that certain infrastructure facilities, such as auditoriums, seminar halls, conference rooms, computer labs, etc. are shared amongst all the constituent institutes depending upon their requirements. The sharing of these resources is ensured through proper

planning and co-ordination. In fact, there is an indent system for sharing several common facilities.

- All the Institutes are required to plan their annual academic activities well in advance in order to utilize the academic infrastructure efficiently.
- The class and laboratory periods are scheduled in such a way that these facilities are fully utilized.
- All the sports facilities of the University are commonly shared by the students of the institutes under the University through proper planning and co-ordination.
- Lunch break for various programmes are adjusted in such a way that the mess facilities could be utilised smoothly without overcrowding.

Salient Features of Physical Infrastructure:

The University has a sprawling, lush-green campus, spread over an area of 110 acres. There are separate buildings with wide open spaces in between, planned for each institute. Apart from these, there is a separate University office, institute wise libraries, a gymnasium, hostels (separate for boys and girls), a guest house, a bank, a student store, canteens / dining halls, food courts, etc. All these, while contributing to the enhancement of the teaching-learning process, add beauty and delight to the students, faculty, corporate visitors and parents.

The glimpses of the University physical infrastructure are given below:

- The Institute of Technology has three blocks, a workshop and a separate Post-Graduate and Research building.
- There are separate blocks for the Institute of Management, Institute of Pharmacy, Institute of Science, Institute of Law and Institute of Architecture.
- All the blocks have spacious and well ventilated classrooms, air-conditioned seminar halls, computer centres, state-of-art laboratories, air-conditioned libraries with rich resources (both print and electronic), conference and board rooms. The class-rooms of the Institute of Management and Institute of Law are air-conditioned.
- There are two modern air-conditioned auditoriums for conducting various extra- and co-curricular activities. In addition, the faculty rooms and the administrative offices are available in all the blocks.
- The University has two canteen buildings, two food courts, three hostels and a guest house with thirty two air-conditioned guest rooms.
- In addition to a modern sophisticated gymnasium, the facility for indoor and outdoor games is also available. The University houses modern sports facilities, which include a cricket stadium, a football stadium and a synthetic grand sports complex. A bank and a student store are also there on the campus.
- A central D.G. room having three generators, two of capacity 500 KVA each and one of capacity 250 KVA is set up for uninterrupted power supply.
- Adequate water supply ensures the availability of clean, potable water in each building.
- There is a well-functioning transport facility for the convenience of the faculty, staff and students.

4.1.2 ***Does the university have a policy for the creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.***

Yes, the creation and enhancement of infrastructure to promote excellence in the teaching-learning process is a primary concern of the University. In fact, the development of new infrastructure and augmentation of existing infrastructure is a continuous process at the University.

Some of the initiatives taken by the University in last four years for the creation and enhancement of infrastructure are given below:

- Development of infrastructure for the newly started Institute of Architecture
- Construction of a Post-Graduate and Research Building
- Construction of additional air conditioned classrooms in D-Block
- Addition of classrooms in the Institute of Management
- Modernisation of laboratories of the Institute of Science
- Up gradation of library facilities
- Up gradation of IT infrastructure, including Wi-Fi and Internet speed from 128 Mbps to 256 Mbps
- Up gradation of hostel rooms
- Development of Sports Ground, Cricket Stadium and Synthetic Sports Complex
- Construction of Sewage Treatment Plant
- Modernisation of Campus Lighting System
- Modernisation of Campus Irrigation System
- Remodelling of the University Main Gate
- Replacement of old computers with the latest configuration computers and purchase of modern software and equipment for laboratories
- Purchase of modern equipment for the laboratories
- Installation of Incinerator Facility

A big project of constructing a multi-storied building comprising class-rooms, faculty rooms, cafeteria, auditorium, student facilities, etc. has been initiated.

4.1.3 ***How does the university create a conducive physical ambience for the faculty in terms of adequate research laboratories, computing facilities and allied services?***

The University provides conducive physical amenities and infrastructure facilities to the faculty members, which ultimately promote excellence in the teaching-learning process. Some of the salient features are listed below:

- The classrooms are equipped with ICT facilities to facilitate the effective teaching-learning process.
- All the institutes are equipped with the state-of-the-art teaching laboratories and necessary research laboratories.
- The constituent institutes of the University work seamlessly and efficiently through highly effective connectivity via internet and intranet. The internet bandwidth is 256 Mbps. The entire campus of the University is Wi-Fi

enabled.

- The University has procured various licensed software for simulation and computation.
- The library resources are available to the faculty members during library timings, whereas the electronic contents are available round the clock through remote login facility.
- All the faculty members are provided with a laptop having Wi-Fi connection. The staff members are provided personal computers.
- The University gives reimbursement towards purchase of books, subscription of research journals, home internet usage charges, etc. to the faculty members.
- All the faculty members are provided with well-furnished cabins with all basic facilities.

4.1.4 ***Has the university provided all departments with facilities like office room, common room and separate rest rooms for women students and staff?***

Yes, the University has provided all basic infrastructure facilities to all the constituent institutes. These include:

- A separate Administration Office with sufficient staff for each institute. The office includes fully-furnished separate rooms for Student Section, Exam Section, Administration Section and Director's Office.
- All buildings have separate wash rooms for male/female students and faculty on each floor of each block.
- All the institutes have common rooms facility for women students.

4.1.5 ***How does the university ensure that the infrastructure facilities are disabled-friendly?***

Most blocks have low rise buildings, consisting of only ground and first floor. Ramps are provided at the various locations of these blocks. Folding wheel-chairs are available in every block. Lifts are available in multi-storied hostel building.

4.1.6 ***How does the university cater to the requirements of residential students? Give details of: Capacity of the hostels and occupancy (to be given separately for men and women), Recreational facilities in hostel/s like gymnasium, yoga centre, etc., Broadband connectivity / Wi-Fi facility in hostels.***

The University provides residential facilities to post-graduate and doctoral students on a twin sharing basis. There are three hostels on the University campus. The details of hostel capacity and occupancy are given in Table 4.1.

Table 4.1: Details of Hostel Capacity and Occupancy

Hostel Type	No. of Hostels	Capacity	Occupancy
Boys	2	530	526
Girls	1	284	284

Hostel Facilities:

- The hostel rooms are spacious and well furnished with balconies.
- The hostel rooms are connected with 256 Mbps dedicated Optic Fibre Lease Line, which enables round the clock high speed internet

connectivity.

- All the hostel rooms are connected through a LAN which enables the students to make use of e-resources of the library round the clock.
- There is one common room shared between two floors at every hostel. The common rooms are equipped with Television sets. One of the common rooms in every hostel is equipped with in-door games (sports facilities), such as Table Tennis, Chess Boards and Carom Boards.
- There is a gymnasium attached to the hostels where the students are trained and encouraged to use it.
- The mess attached to the hostels also provides Tea/Coffee and snacks.
- There is a common Yoga Hall, centrally located in the middle of the three hostel blocks.
- The University has made arrangements to provide medical facilities on the campus by appointing a full time Doctor.
- A Bank, a tuck shop and a book shop are also there in the University campus.

4.1.7 ***Does the university offer medical facilities for its students and teaching and non-teaching staff living on campus?***

Yes, the University offers medical facilities for its students and staff living on the campus. The details are provided below:

Medical Facilities within the Campus:

- The University has made arrangements to provide medical facilities on the campus by appointing a full time Doctor, who is available daily from 11.30 a.m. to 6.30 p.m. on the campus.
- The Health Centre provides treatment as outpatient for all primary diseases and has all the basic facilities. A doctor is available on call during any emergency.
- Ambulance facility is also available on call.

Reimbursement on Medical Facilities to the Faculty and Staff:

- Outdoor Patients: The faculty and staff, who opt for cash-reimbursement, are given ₹300/- per month as per the government rules. Actual reimbursement is given in case of treatment taken from health centres / hospitals identified by the University.
- Indoor Patients: The University has its own medical insurance policy with reimbursement up to ₹5 Lacs in case of hospitalization of the faculty/staff or their dependant.

4.1.8 ***What special facilities are available on campus to promote students' interest in sports and cultural events/activities?***

At the University level, there is Students' Welfare Board for encouraging sports and extracurricular activities. A very senior level person is appointed as Head – Students' Welfare Board in addition to a full-time Chief Coordinator – Students' Welfare Board. Each constituent institute of the University has its Students' Activity Committee and a Coordinator looks after all the related activities.

Facilities to Promote Sports and Cultural Activities:

The following facilities are there on the campus for sports and cultural events:

- A gymnasium equipped with a walker, twister, bicep press, chest press, leg extension, shoulder press/peck deck/fly chest press, rowing seated/back press, multi hip, T-bar for back, lower abdominal, formus press, seated leg curl, lower crunches and upper crunches, free weights/sport press, lower chest press, abs kings, shuck press, thighs and cart press, chin/dip assists.
- A modern Synthetic Sports Ground with facilities for Lawn Tennis, Volley Ball and Basket Ball courts.
- A well maintained Football Ground and a Cricket Stadium.
- A Badminton Court and facilities for other in-door games, such as Table-Tennis, Carom Boards, Chess, etc.
- The University coaches students in sports, such as Volleyball, Cricket and Basketball.
- To encourage participation of students in cultural activities, the University has taken various initiatives, such as formation of various Clubs/Committees which ensures to take up various activities throughout the year.
- The University organizes events, like Annual Cultural Festival, RaasGarba, Independence Day and Republic Day Celebration.
- The auditoriums and seminar halls of the institutes are made available to the students whenever there is a requirement for conducting the cultural and literary programmes.
- The students are encouraged to participate in regional, state and national level cultural, sports and literary programmes.

4.2 Library as a Learning Resource

4.2.1 ***Does the library have an Advisory Committee? Specify the composition of the committee. What significant initiatives have been taken by the committee to render the library student/user friendly?***

Yes, the University has formed a Library Council as an Advisory Committee at the University level. This Council has been constituted for the purpose of smooth functioning, improvement and coordination amongst all the libraries and the management. Similarly, all the constituent institutes have Library Committees for smooth functioning and for regularly reviewing the growth of the libraries.

The composition of the Library Council and Library Committee are given in Tables 4.2 and Table 4.3, respectively.

Table 4.2: Composition of Library Council

University Level Library Council	
Director General	Chairman
Deans of all Faculty	Members
Heads of all the Institutes	
Executive Registrar	
Two Heads of Departments from the Institute of Technology nominated by the Head of the Institute	

Two Heads of Area Committees of the Institute of Management, nominated by the Head of the Institute	
One senior faculty member from the Institutes of Pharmacy, Science, Law and Architecture, nominated by the Head of the Institute	
One student representative each from Post-graduate Programmes, viz. MBA, MCA, M.Tech., M.Pharm., LL.M., nominated by the Head of the Institute	
Chief Librarian	Member Secretary

Table 4.3: Composition of Institute Level Library Committee

Institute Level Library Committee	
Head of the Institute concerned	Chairman
Chief Librarian	Members
Heads of the Departments / Area Committees	
Deputy Registrar of the Institute concerned	
One Faculty Member from each Department/Area to be nominated by the HoD/Chairman of the Area Committee concerned	
One final year student representative each from UG Programme, to be nominated by the respective HoD/Chairman of the Area Committee concerned	
Librarian of the Institute concerned	Member Secretary

Functions of the Library Council / Committee:

- The Library Council/Committee plays a vital role in policy decisions related to (i) Library Vision and Strategy, (ii) Collection, Development and Utilization of the Resources, (iii) Preservation and Archiving of Print & Electronic Resources, including information generated by different institutes of the University, (iv) Purchase of Resources, (v) Library Automation, (vi) Building and Space Provision
- Proposing Library Budget
- To deliberate on Library Services and Activities

Significant Initiatives taken by the Library Council:

- Remote Log-in facility for accessing online resources is being provided to all the faculty members and the students of the University, thus making online resources available 24X7 to the users.
- Library membership has been extended to Corporate Houses, Organizations and the Alumni.
- Open Source Web Based Library Management System KOHA has been implemented in all libraries.
- Implementation of various library policies, including Library Material Purchase Policy, Book Bank Policy, Electronic Resource Access Policy, Remote Login Usage Policy and Weeding Out Policy.
- Building and maintaining Knowledge Repository, using DSpace Software for preserving and archiving Electronic Thesis Dissertations (ETDs), faculty publications and institutional publications.

Significant Initiatives taken by the Library Committees:

- Library book loan limit is increased for UG and PG students of the Institute of Technology and the Institute of Pharmacy.
- Extension of the Institute of Technology library.
- Provision to send information about 'Must Read Books' to the boys' and girls' hostels.
- Topical displays in the Institute of Management library.
- Conduct of Library Orientation during Faculty and Student Induction/ Orientation Programmes.
- Conduct of Information Literacy Programmes.

4.2.2 **Provide details of the following: Library Area, Seating Capacity, Working Hours, Layout of the Library, and Display of Floor Plan**

The University has six constituent institutes and all of them have separate libraries. All these libraries are electronically connected. The faculty members / students can visit any library and can take benefit of the resources. The details of library area, seating capacity and working hours are provided in Table 4.4.

Table 4.4. Details of Library Area, Seating Capacity and Working Hours

Name of the Institute	Library & Reading Area	Seating Capacity	Working Hours
Institute of Technology	929.27 sq.mt.	326	8.45 a.m. to 6.15 p.m. (Mon - Fri) 8.45 a.m. to 1.15 p.m. (Sat)
Institute of Management	603.94 sq.mt.	221	8.45 a.m. to 10.00 p.m. (Mon - Sat) 9.00 a.m. to 5.00 p.m. (Sunday)
Institute of Pharmacy	256.60 sq.mt.	133	8.45 a.m. to 6.15 p.m. (Mon - Fri) 8.45 a.m. to 1.15 p.m. (Sat)
Institute of Science	115.95 sq.mt.	46	8.45 a.m. to 6.15 p.m. (Mon - Fri) 8.45 a.m. to 1.15 p.m. (Sat)
Institute of Law	575.94 sq.mt.	246	8.45 a.m. to 8.00 p.m. (Mon - Fri) 8.45 a.m. to 4.00p.m. (Sat)
Institute of Architecture	180.29 sq.mt.	40	8.45 a.m. to 6.15 p.m. (Mon - Fri) 8.45 a.m. to 4.00p.m. (Sat)
Total	2661.99 sq. mt.	1012	--

Note: Depending upon the requirement, the library hours are extended.

Layout of the Library:

All the libraries of the University are well-planned in terms of layouts. In general, the library is divided into different sections, like Lending Section, Reference Section, Circulation Counter, Check Counter, Open Public Access Catalogue Section, Staff Area, Reading Area, Periodical Section, Photocopy Section, Digital Lab, Bound Volumes Ares, etc.

The layouts of all the libraries will be provided to the peer team at the time of visit as Annexure – 4.2.2.

Display of Floor Plan:

- Adequate sign boards are available in all the libraries.
- Proper signboards are available in each row of the book shelves and the

books are arranged according to specific number system. The libraries are following Dewey Decimal Classification System.

- All the libraries are designed such that differently-abled users can access the resources easily.
- Adequate numbers of fire alarms are available in each building of the University.

4.2.3 ***Give details of the library holdings: a) Print (books, back volumes and theses), b) Average Number of Books Added during the Last Three Years, c) Non Print (Microfiche, AV), d) e-Books and e-Journals, e) Special Collections, f) Book Banks, g) Question Bank***

a) Print (books, back volumes and theses):

The total print collection including all the libraries comprises books, periodicals, standards, bound volumes and other print materials. The print collection includes 1,05,722 books, 662 print periodicals, 1,949 Indian Standards; 13,008 bound volumes and 111 theses, etc.

b) Average Number of Books Added during the Last Three Years:

2,752 books

c) Non Print (Microfiche, AV):

Non print collection comprising of audio cassettes, video cassettes, Audis CD, CDs/DVDs, VCDs, etc. It includes 422 audio cassettes, 633 video cassettes, 5,549 CDs/DVDs/VCDs, etc.

d) e-Books and e-Journals:

The Library has an excellent digital library system in place with access to 14 online periodical databases, which include more than 12,900 e-journals, like:

- ✓ ASCE (American Society of Civil Engineers)
- ✓ IEL (IEEE/IET Electronic Library) Online
- ✓ ACM (Association of Computing Machinery) Digital Library
- ✓ Elsevier's Science Direct
- ✓ EBSCO Business Source Complete
- ✓ EBSCO Academic Search Premier
- ✓ JSTOR
- ✓ Emerald
- ✓ Oxford University Press e-bundle
- ✓ Bentham Science
- ✓ Annual Reviews
- ✓ Portland Press
- ✓ Nature Weekly along-with News
- ✓ Hein Online – Academic Legal Journals
- ✓ 617 Springer e-books

e) Special Collections:

The University libraries have a collection of 12,700 reference books.

The Institute of Technology library has a collection of video lecture series from NPTEL (National Programme on Technology Enhanced Learning).

There are total 170 complete video courses, each of forty hours duration in five engineering branches and core science courses. These lectures can be accessed from anywhere on the University campus through the library home page.

Moreover, the libraries have excellent online and offline databases.

The online databases include:

- ✓ ISI Emerging Market
- ✓ Indiatat.com
- ✓ CMIE - Industry Outlook
- ✓ CMIE - State of India
- ✓ CMIE - Economic Outlook
- ✓ Manupatra
- ✓ Westlaw
- ✓ LexisNexis
- ✓ Corporate Law Advisor
- ✓ ORIL - Oxford Report on International Law
- ✓ Press Display-Newspaper Direct
- ✓ Kluwer Arbitration Law
- ✓ SSC Online
- ✓ EPW Times Series

The off line databases include:

- ✓ ACE Equity
- ✓ ACE Mutual Funds
- ✓ AIR High Courts (1975-2013)
- ✓ AIR Privy Council (1930-1950)
- ✓ AIR Supreme Court (1950-2013)
- ✓ Annual Survey of Indian Law (1965-2009)
- ✓ Criminal law Journal (1965-2013)
- ✓ Journal of Indian Law Institute (1958-2012)
- ✓ SCC (1950-2013)
- ✓ The Patents and Trademarks Cases (1981-2013)
- ✓ Gujarat Law Reporter (1960-2013)

f) Book Banks:

The libraries provide a book bank facility to the students of the Institute of Technology, Institute of Pharmacy and Institute of Law. The main purpose of this service is to help the needy students. The book bank has a separate collection of approximately 4,058 books other than the library books.

g) Question Banks:

The libraries have started to provide digital access of previous years' question papers to the users through Google apps – Google Site.

4.2.4 ***What tools does the library deploy to provide access to the collection? OPAC, Electronic Resource Management Package for e-Journals, Federated Searching Tools to Search Articles in Multiple Databases, Library Website***

OPAC:

Online Public Access Catalogue (OPAC) is available on the Internet for inquiring

the status of the library resources.

Electronic Resource Management Package for e-Journals:

Not available. However, the libraries have arranged similar kind of automated set-up with user-friendly portal providing a single point access to e-resources and other digital materials.

Federated Searching Tools to Search Articles in Multiple Databases:

Not available.

Library Website:

Each library of the constituent Institutes of the University has a website. The library portal facilitates access to digital resources, like journals, magazines, videos, CDs, etc. The library homepage provides a single window to all the resources and services of the University library. The following are the facilities available through the library homepage:

- Search/ browse the library resources within the library
- Check the status of the material borrowed by users and due dates of return
- Know the recent arrivals, corporate and alumni library membership
- Bulletin Board (Weekly Updated and Useful Links)
- Access to e-resources (journals, theses, databases and multimedia products)
- Download Library Membership Form, Book Suggestion Form, Library Orientation Details
- Ask the Librarian (Virtual Reference Service)
- In-house/remote access to e-publications

4.2.5 *To what extent is ICT deployed in the library? Give details with regard to: Library Automation, Total Number of Computers for General Access, Total Numbers of Printers for General Access, Internet Bandwidth Speed, Institutional Repository, Content Management System for e-Learning, Participation in Resource Sharing Networks/Consortia (like INFLIBNET)*

Library Automation:

- All the libraries of the University are fully computerized with user-friendly library web-based and Open Source Software KOHA.
- The system consists of modules on book acquisition, circulation, periodicals, OPAC, Web OPAC, etc.
- KOHA facilitates automated circulation (issue and return) of the books and location and availability information of the books stocked in the library.
- Online Public Access Catalogue (OPAC) is available on the Internet for inquiring the status of the resources.
- Bar-coding System is in use to computerize the bibliographic details of the resources. RFID system is in use at several places.

Total Number of Computers for General Access:

The library has separate OPAC Area and Digital Lab Area. Total 51 computers are available for OPAC and digital resource access.

Total Numbers of Printers for General Access:

Though there are no dedicated printers for general access, the students can get required and important print-outs from Students' Section/Photocopy Centre.

Internet Bandwidth Speed:

256 Mbps

Institutional Repository:

An institutional repository has been built by using open source software called DSpace. Theses, dissertations, faculty publications, institute publications, etc. are archived on DSpace. It can be accessed through the library's intranet homepage.

Content Management System for e-Learning:

The library has started to provide digital access of previous year's exam papers, content pages of print periodicals and newspaper clippings to the users through Google apps – Google Site.

Participation in Resource Sharing Networks/Consortia (like INFLIBNET):

The Library is a member of: (i) DELNET (Developing Library Networking), (ii) AICTE-INDEST Consortium, and (iii) INFLIBNET.

4.2.6 *Provide details (per month) with regard to: Average number of walk-ins, Average number of books issued/returned, Ratio of library books to students enrolled, Average number of books added during the last four years, Average number of login to OPAC, Average number of login to e-resources, Average number of e-resources downloaded/printed, Number of IT (Information Technology) literacy trainings organized*

- Average number of walk-ins – 22,383
- Average number of books issued/returned – 15,834
- Ratio of library books to students enrolled – 15:1
- Average number of books added during the last four years – 3,447
- Average number of login to OPAC – 16,884
- Average number of e-resources downloaded/printed – 18,663
- Number of IT (Information Technology) literacy trainings organized – 46

4.2.7 *Give details of specialized services provided by the library with regard to: Manuscripts, Reference, Reprography/Scanning, Inter-library Loan Service, Information Deployment and Notification, OPACS, Internet Access, Downloads, Printouts, Reading List/ Bibliography Compilation, In-House / Remote Access to e-Resources, User Orientation, Assistance in Searching Databases, INFLIBNET/IUC Facilities*

Manuscripts:

The library resource centres of the University are relatively young and hence do not have any manuscripts.

Reference:

The library has 12,700 reference books, 11,563 bound volumes, 1,949 standards, 583 print periodicals and 111 theses in reference section. Reference service helps the users make the full use of library resources and services.

Reprography/Scanning:

All the University libraries provide reprographic facility to the students and faculty members. Scanning facility is available on request. Photocopying service is provided to the users on payment basis for reference materials.

Inter-library Loan Service:

Inter-library service is available through DELNET and also from the local libraries of Ahmedabad city.

Information Deployment and Notification:

- Information related to new arrivals and new implementations are sent through emails to all the users and also displayed on the library notice board.
- Providing classes on Information Literacy Competencies to the students of Institute of Pharmacy and Institute of Management.
- The users are provided with the information related to book issue/return/due through automatic email service through library automation software.
- Providing current content alerts of periodicals using RSS feeds / GoogleApps.

OPACS:

Online Public Access Catalogue (OPAC) is available on the Internet/internet (on/off the campus) for inquiring the status of the library resources.

Internet Access:

Internet facility is available to all the users. Specific sections are allocated in the libraries for accessing online library resources. The students can either bring their laptops and can access the information through Wi-Fi.

Downloads:

Article downloading facility is also available in the libraries. The students can access all online journals on/off the campus and can also download the articles as per their requirements.

Printouts:

Printout facility is available on request.

Reading List/ Bibliography Compilation:

The library provides information and a list of books on the request of users.

In-House/ Remote Access to e-Resources:

The Library is providing remote login facility to its users for accessing online and digital resources at their homes.

User Orientation:

Library Orientation Programmes are organized in the beginning of the semester for better awareness and effective use of library resources and services. The librarians actively participate in the induction training programmes organized for newly recruited faculty members and make presentations about the library

facilities, resources and services.

Assistance in Searching Databases:

The library also provides one-to-one training to the users, desiring to learn more about searching the online journals and also to know more about the features in specific database and resources.

INFLIBNET/IUC Facilities:

The University has signed a MoU with INFLIBNET for submitting Ph.D. theses to *Sodhganga* project. The University has subscription of Associate University Membership towards UGC INFONET Digital Library Consortium.

4.2.8 ***Provide details of the annual library budget and the amount spent for purchasing new books and journals.***

The details of the annual library budget and the amount spent for purchasing new books and journals are provided in Table 4.5.

Table 4.5: Details of the Annual Library Budget for the Year 2013-14

For New Books		For Journals	
Amount Allocated	Amount Spent	Amount Allocated	Amount Spent
₹ 51,00,000/-	₹ 43,34,740/-	₹ 2,01,25,000/-	₹1,91,12,012/-

4.2.9 ***What initiatives has the university taken to make the library a ‘happening place’ on campus?***

The following initiatives are taken by the University to make the library a ‘happening place’ on the campus:

- The library circulates the list of new arrivals (books and issues of journals) in the first week of every month to the faculty members through emails. For students, the same list is displayed on the notice board and library homepage. After receiving the new resources into the library, auto mails are generated by the Library Management Software and circulated to the members who have recommended those resources.
- The students’ requirements towards the resources, which are not available in the library holding, are being fulfilled through the Inter Library Loan facility and Library Networking.
- Topical display is arranged on different themes.
- The library has started a Bulletin Board. Every week the details of one book, periodical, blog, article, website and quote of general as well as subject interest are sent to the users.
- The students are being provided with ambient environment that supports reading and preparation for various competitive examinations.
- The librarians organize User Education Programmes, like Orientation Programmes, Information Literacy Programmes, IT related orientations, etc.
- The library staff members are courteous and proactive. They always help the users as per their requirements.
- The libraries in the campus organize several activities, including book exhibitions, quiz competitions, TED Talks, etc.

- Sumantra Club run by faculty coordinator and student representatives in Institute of Management.
- Various books on competitive exams, spirituality, personal improvement, general knowledge, Gujarati, Hindi and English literature, etc. have been added to the library collection on the suggestion of the students.

4.2.10 ***What are the strategies used by the library to collect feedback from its users? How is the feedback analysed and used for the improvement of the library services?***

Strategies used by the Library to Collect Feedback:

The libraries take feedback from the users on a regular basis. The libraries have conducted online Library Feedback Survey through GoogleApps. Similarly, the suggestions are also obtained from the faculty and staff members informally.

Analysis of Library Feedback:

The feedback of the students is then analysed, important points are noted and discussed during Library Council / Library Committee meetings. Based on the discussion/suggestions, necessary changes are made in the library.

Many suggestions are implemented in the library, including increasing the number of textbooks and periodicals, providing remote-login facility, library space extension, reference books and general magazines loan to the students and faculty members, added many books and periodicals on students' suggestions, extended library timings, etc.

4.2.11 ***List the efforts made towards the infrastructural development of the library in the last four years.***

In the last four years, the following additional infrastructure related to the library has been created:

- A new library has been developed for the Institute of Architecture.
- Additional furniture in terms of tables, chairs, racks have been added.
- 18 new computer systems have been added in different libraries.
- 125 numbers of licenses of ESET Antivirus software have been procured.
- New CCTV cameras, barcode scanners and additional computer accessories have been added in the libraries.
- More area added in the Institute of Technology and the Institute of Pharmacy libraries.

4.3 IT Infrastructure

4.3.1 ***Does the university have a comprehensive IT policy with regard to: IT Service Management, Information Security, Network Security, Risk Management, Software Asset Management, Open Source Resources, Green Computing***

Yes, the University has a comprehensive IT policy regarding all IT infrastructure, service, security and management. The comprehensive policy will be provided to the peer team at the time of visit as Annexure – 4.3.1.

4.3.2 ***Give details of the university's computing facilities i.e., hardware and software.*****Number of Systems with Individual Configurations:**

Table 4.6 provides institute-wise list of the computers in the University.

Table 4.6: Institute-wise List of Computers

Name of the Institute	System Configuration in Lab & Office Area									
	P-III	P-IV	P-Dual Core	P-Core2Duo	Q2D	I3	I5	I7	Laptops	Servers
Institute of Technology	3	278	150	505	2	473	3	1	226	27
Institute of Management	-	27	1	28	-	22	-	-	28	3
Institute of Pharmacy	-	50	10	14	-	13	-	-	26	-
Institute of Science	-	4	6	7	-	3	-	-	9	-
Institute of Law	-	1	1	68	-	30	-	-	32	1
Institute of Architecture	-	-	-	-	-	-	7	16	-	-
University	-	20	4	7	-	1	1	-	3	3
Total	3	380	172	629	2	542	11	17	324	34

Computer-Student Ratio:

1:4

Dedicated Computing Facilities:

The computing facilities are centrally managed with various dedicated and high performance servers, so as to meet the growing demands of data processing within the campus. The servers are maintained, using the UPS facilities to avoid sudden disruption in services. There is a central computing facility.

LAN Facility:

The campus is connected through a Gigabit fibre optic LAN. The computing resources include more than 60 high-end servers with terabyte storage. These servers are connected via 218 Layers, 3 Ethernet Switches and 73 Wi-Fi access points across the campus.

Proprietary Software:

The University has a large number of licensed software to incorporate the latest tools and technologies in the industry along with the teaching methodologies. A comprehensive list of the software will be provided to the peer team at the time of visit as Annexure – 4.3.2.

Number of Nodes/ Computers with Internet Facility:

Every computer/node is connected to a LAN, using a hard wired connection to Wi-Fi facility. Each request for accessing the Internet facility goes through a firewall configured on a proxy server. The firewall monitors various security issues related to website access.

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

With the growing demand for processing of large volume of data, the future vision of the University is to have a specialized high performance computing environment for supporting the existing systems. The efforts will be made to develop various other systems, like:

- Online Assessment System for Written Examinations
- Development of an Automatic Attendance System
- Intelligent Video Surveillance System for identification of the violation of discipline in the classroom or various other restricted areas of the University
- Automated Document Management System
- Cost Effective Cloud Infrastructure along with virtual Desktop Environments

4.3.4 ***Give details on access to on-line teaching and learning resources and other knowledge and information database/packages provided to the staff and students for quality teaching, learning and research.***

The following resources are provided to the staff and students for quality teaching, learning and research:

Infrastructure:

- A state-of-art gigabit network connecting the campus nodes.
- 256 Mbps dedicated optic fibre leased line and Wi-Fi hotspots enable round the clock internet connectivity on the campus.
- Intranet based facilities through FTP for data sharing within the campus.

Teaching and Learning:

- Availability of NPTEL video lectures (6 Terabytes) on Campus LAN.
- 24x7 learning through course websites and blogs maintained by respective faculty member.
- The Moodle is used for conduction of online tests, assignment posting, lab work submissions, etc.

Library:

- Access to a wide range of information resources including, leading national and international research journals and periodicals, databases, electronic media, project reports, CDs, etc.
- The library is fully computerized, accessible on the campus LAN and operates on specialized library software 'KOHA'.
- The library has implemented DSpace for making availability of various resources, like PG and Ph.D. thesis, research papers, etc.
- Remote Login facility for providing facility to secure access paid/licensed resources outside the campus.

4.3.5 ***What are the new technologies deployed by the university in enhancing student learning and evaluation during the last four years and how do they meet new / future challenges?***

The technologies deployed by the University to enhance the teaching-learning and

assessment processes are listed below:

- The University has provided a laptop to all the faculty members.
- The entire University campus is Wi-Fi enabled.
- Use of MOOC courses for advanced and additional learnings
- Course Websites for managing various online resources related to classroom teaching
- Use of Course Blog
- Moodle for conducting online tests, assessment of assignments, etc.
- Encouragement to PG and Ph.D. students for maintaining their digital profiles on scientific social networking sites, like ResearchGate, Mendely Desktop, etc.

4.3.6 ***What are the IT facilities available to individual teachers for effective teaching and quality research?***

The following IT facilities are available to the teachers for effective teaching and quality research:

- The University has given laptops/desktop computers to all the faculty members.
- A state-of-art gigabit network connects every corner of the University. Also, 256 Mbps dedicated optic fibre leased line and Wi-Fi hotspots enable round the clock internet connectivity on the campus.
- GoogleApps is being widely used as a campus collaboration system.
- Each faculty is given remote access to online library resources, using Virtual Private Networks.
- There are various FTP servers and other file sharing systems being used to copy and store commonly used software, documents and video lectures.
- *Turnitin* software for plagiarism checking.
- The Institute of Technology is a recognized Remote Centre for receiving various online educational programmes conducted by IIT-Bombay.

4.3.7 ***Give details of ICT-enabled classrooms/learning spaces available within the university? How are they utilized for enhancing the quality of teaching and learning?***

- The majority of the classrooms of the University are ICT-enabled with various audio visual facilities, including video projectors, overhead projectors, speakers, etc.
- The classrooms have connectivity with LAN.
- Each classroom and laboratories are monitored using Video Surveillance System for a disciplined teaching learning environment.
- Various training programmes related to use of modern aids for preparation of e-learning resources are conducted.

4.3.8 ***How are the faculty assisted in preparing computer- aided teaching-learning materials? What are the facilities available in the university for such initiatives?***

- Most of the faculty members are conversant with the software tools for making presentations. However, necessary training programmes are arranged, wherever required.
- Each faculty member is allotted a dedicated laptop/computer with internet/intranet facility.

- The University has 24X7 internet facility. Dedicated optic fibre leased line of 256 Mbps speed and Wi-Fi hotspots facilitate access of various online learning materials, video lectures, presentations, etc.
- Access to e-material provides the contents for preparing the teaching-learning aids.

4.3.9 ***How are the computers and their accessories maintained?***

- The University core staff includes a system administrator/computer facility coordinator and technical staff who holds the responsibility to supervise the maintenance related activities which are carried out by an AMC vendor.
- There are resident service engineers on the campus, so that the down time is minimized.
- Video Projectors and LCD Projectors are also maintained using AMC vendor.

4.3.10 ***Does the university avail of the National Knowledge Network connectivity? If so, what are the services availed of?***

No. Being a private university, we are not covered under the National Knowledge Network connectivity.

4.3.11 ***Does the university avail of web resources such as Wikipedia, dictionary and other education enhancing resources? What are its policies in this regard?***

Yes, the University has facilitated the faculty members, researchers and students to access online educational resources for academic and research. The campus firewall does not block Wikipedia, dictionary, educational blogs, etc.

NPTEL and various other MOOC courses under Audacity, Coursera, MIT Courseware, Stanford University, etc. are accessible from the campus.

4.3.12 ***Provide details on the provision made in the annual budget for the update, deployment and maintenance of computers in the university.***

Every year a substantial amount is earmarked in the annual budget for deployment, up-gradation and maintenance of IT infrastructure of the University. The budget allotted for Internet Expenses and maintenance of Computers in last five years is shown in Table 4.7.

Table 4.7: Budget Allocation for Computer Infrastructure during Different Years

Year	Budget Provision for Internet Expenses (in ₹)	Budget Provision for Maintenance of Computers (in ₹)
2010-11	1210000/-	1346000/-
2011-12	1250000/-	1642000/-
2012-13	1253000/-	1503400/-
2013-14	1510001/-	2045000/-
2014-15	3527000/-	2394000/-

4.3.13 ***What plans have been envisioned for the gradual transfer of teaching and learning from closed university information network to open environment?***

The University promotes blended learning for the 24x7 teaching learning environment. The faculty members are actively involved in sharing learning resources through course websites and blogs. The following are the plans towards contributing to the open course ware community:

- Development of Computer Aided Learning Tools.
- Preparation of Spoken Tutorials (as a part of project launched by MHRD's initiative of education through ICT) related to various books on engineering.
- The University is working towards the procurement of specialized video streaming servers to host varied numbers of video lectures and make it available remotely.

4.4 Maintenance of Campus Facilities

4.4.1 ***Does the University have an estate office/designated officer for overseeing the maintenance of buildings, classrooms, laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.***

Yes, the University has a full-fledged Estate Department that looks for the maintenance of buildings, classrooms, laboratories, lawns, sport fields, etc. It is headed by a qualified officer, supported by a group of competent staff members.

Specific Initiatives undertaken to Improve the Physical Ambience:

- Development of infrastructure for the Institute of Architecture
- Modernisation of Science Laboratories
- Construction of Sewage Treatment Plan
- Redesigning of the University Main Gate
- Extension and updating of Campus Irrigation System
- Updating of Campus Street Light System
- Extension of D Block, Institute of Technology
- Development of Cricket Ground
- Development of Synthetic Courts

4.4.2 ***How are the infrastructure facilities, services and equipment maintained?***

Maintenance of infrastructure and facilities is important for the University. There is a budget for maintenance. The sub-heads of maintenance are: Building, Furniture, Equipment, Garden, House Keeping, and Security.

There is a maintenance group within the Estate Department. The officials of maintenance department do regular inspections of infrastructure and facilities and take various decisions about the maintenance work. They also receive complaints through e-mail or phones and attend timely to them.



CRITERION V:

**STUDENT SUPPORT
AND
PROGRESSION**

CRITERION V: STUDENT SUPPORT AND PROGRESSION

5.1 Student Mentoring and Support

5.1.1 *Does the university have a system for student support and mentoring? If yes, what are its structural and functional characteristics?*

Yes, the University has a well-defined mentoring policy to support the students for sharing their problems related to academic and non-academic matters.

Objectives of Mentoring:

- To provide an opportunity of overall development to all the students
- To provide intervention and assistance to the students to grab the opportunity for the growth and development
- To develop a rapport between the students and the mentor and to provide a platform to the students for sharing their worries, anxiety, and stress relating to academic and non-academic issues
- To monitor the academic progress of the students
- To cultivate a higher degree of professional responsibilities and imbibe the values amongst the young students
- To identify the slow learners, fast learners and the weak students and to provide them suitable environment to grow and prosper

Mentoring Mechanism:

- As per the University mentoring policy, each faculty member is assigned a group of students to advise/guide for the duration of their study on the campus. This ensures the participation of all the faculty members in the mentoring and student support process.
- After group allocation, the mentor plans for a preliminary meeting with the students. During this meeting, the students are briefed about the mentoring process and ask them to fill their basic information in a mentoring form.
- The faculty mentors maintain a separate file for all the students assigned to them and keep a record of all the details. The Mentors meet and interact with the students at least twice during the semester.
- Based on these interactions, the mentor classifies the students into three categories, namely slow, advanced and weak learners. Depending upon the category of the students, he/she is guided to grow and develop. The mentor provides necessary encouragement to the advanced learners to excel. At the same time, he helps the slow and weak learners solve their difficulties.
- The summary reports of mentoring are sent to the concerned Head of the Department / Section Head.

The University Mentoring Policy will be provided to the peer team at the time of visit as Annexure 5.1.1.

5.1.2 *Apart from classroom interaction, what are the provisions available for academic mentoring?*

Apart from the classroom interactions, there are several provisions for academic mentoring of the students. These include:

- Tutorial sessions are planned in several courses to provide guidance to the

students in smaller groups.

- The faculty members have created Course Blogs to facilitate Online Academic Mentoring.
- For seminars, projects, field internships, every student is assigned a Faculty Guide from whom s/he can seek guidance.
- During industrial visits/field trips, the faculty members accompany the students and help them understand industrial problems, processes, applications and environment.
- For all the courses, Faculty Coordinators are appointed for helping the students to solve subject related difficulties. Besides, Faculty Advisors and Class Coordinators are appointed who look after students' academic performance, attendance, discipline and related issues.

5.1.3 ***Does the university have any personal enhancement and development schemes such as career counselling, soft skill development, career-path-identification, and orientation to well-being for its students? Give details of such schemes.***

Yes, the University has personal enhancement and development schemes for its students. Some of them are mentioned below:

Career Counselling:

- Career Counselling workshops are organized by the Placement Cell of the University. Alumni and industry experts are invited to talk about various career opportunities in different industries.
- The University classifies the students based on the recruiters' feedback about their subject fundamentals, soft skills, analytical skills, communication, etc. Accordingly, the students are guided in the required areas. If necessary, additional material/classes are arranged to help such students.

Soft Skill Development:

- The University puts significant efforts for personal enhancement and development of students by organizing a large number of co-curricular and extra-curricular events throughout the year. These include: Personality Development Workshops, Motivational Lectures, Soft-Skill Development Programmes, Expert Lectures, Seminars, etc.
- Centre for Continuing Education (CCE) organizes programmes on Communication, Leadership, Personality Development, Foreign Languages, etc.
- Based on the mock placement trials, the students who require improvement in soft skills are identified. For such students, additional soft skill development programmes are arranged.
- Various Students' Associations are formed, where students organize activities, such as debates, discussions, competitions, presentations, special lectures, management games, etc. on a regular basis.

5.1.4 ***Does the university provide assistance to students for obtaining educational loans from banks and other financial institutions?***

Yes.

5.1.5 ***Does the university publish its updated prospectus and handbook annually? If yes, what are the main issues / activities / information included / provided to students through these documents? Is there a provision for online access?***

Yes, the constituent institutes as well as the University annually publish their prospectuses and handbooks.

Prospectus:

The prospectus includes the following information:

- Vision and Mission Statements
- The Board of Governors
- Messages by the University Officials
- Programmes offered by the Institute and Curriculum in brief
- Admission Procedure and Eligibility Criteria
- Details about the Scholarships
- Programme and Hostel Fees
- Information related to Infrastructure, including offices of the University, Departments, Library, Laboratories, Computer Facilities, Industry Institution Interaction Cell, Hostel, Gymnasium, Bank Facility, etc.
- Brief profile of the faculty members
- Campus Life
- Ragging Zero-Tolerance

Handbook/Information Booklet:

Moreover, the handbook/information booklet provides the following information:

- Daily Prayer
- Academic Calendar
- Information about student section, student societies and organizations, infrastructure facilities
- Course details, like syllabus, teaching and assessment schemes, examination grades and passing standards, examination performance index
- Rules and regulations regarding academics, discipline, attendance, leave, sexual harassment, hostel, etc.
- Course passing standards
- Regulations for cancellation of admission at different stages
- Anti-Ragging, Grievance Redressal Cell, Women Development Cell, Complaint Committee for Prevention of Women Sexual Harassment

Provision for Online Access of Prospectuses and Handbooks:

Yes

5.1.6 ***Specify the type and number of university scholarships/freeships given to the students during the last four years. Was financial aid given to them on time? Give details for the following categories: UG/PG/M.Phil./Ph.D./ Diploma/others.***

Type of Scholarships:

The University offers various types of scholarships. The list of such scholarships is given below:

- Scholarships based on Merit
- Scholarships based on Merit cum Means

- Interest on Bank Loan
- Needy Student Fund
- Book Bank Facility
- Stipend to the meritorious Masters as well as full-time Ph.D. students

Financial Aids given in Time:

Yes

Details of Category wise Scholarships:

The summary of scholarship provision in various programmes is shown in Table 5.1.

Table 5.1: Scholarship Provisions in Various Programmes

Year	Name of the Scholarship	Level of the Programmes	No of Scholarship Provision	Amount for Scholarship Provision (in ₹)
2013-14	Scholarships based on Merit	UG	55	3750000/-
	Scholarships based on Merit cum Means	UG	106	5109856/-
		PG	554	31743065/-
	Interest on Bank Loan	UG	28	247087/-
	Needy Student Facility	UG	2	137500/-
	Stipend to the meritorious Masters students	PG	272	14069471/-
2012-13	Scholarship based on Merit cum Means	UG	25	852335/-
		PG	9	524000/-
	Interest on Bank Loan	UG	32	371833/-
	Needy Student Facility	UG	3	175000/-
	Stipend to the meritorious Masters students	P.G	223	9552011/-
	Stipend to the full time Ph.D. students	Ph.D.	24	962258/-
2011-12	Interest on Bank Loan	UG	49	497448/-
	Needy Student Facility	UG	3	175000/-
	Stipend to the meritorious Masters students	PG	157	8887650/-
	Stipend to the full time Ph.D. students	Ph.D.	26	3241499/-
2010-11	Interest on Bank Loan	UG	46	553803/-
	Needy Student Facility	UG	5	263000/-
	Stipend to the meritorious Masters students	PG	117	5528146/-
	Stipend to the full time Ph.D. students	Ph.D.	21	2871000/-

5.1.7 What percentage of students receives financial assistance from state government, central government and other national agencies (Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)?

Being a statutory private University, it is not covered under Section 12 (B) of the UGC Act and hence not eligible for financial assistance from the UGC. However, the University has devised its own scholarship mechanism, for which the details are

provided in Table 5.1.

Several cases, where the scholarships are received from state/central government and other national agencies, are listed below:

- The State Government provides scholarship to the students of SC/ST as per the norms. The University admits such students without tuition fees initially and then later it collects the fee amount from the state government.
- The University has also received financial assistance from the state government in the form of GSBTM-JRF and from the central government in the form of Jawaharlal Nehru Fellowship, Inspire Fellowship, Rajiv Gandhi Fellowship, Maulana Azad Fellowship, etc.

5.1.8 ***Does the university have an International Student Cell to attract foreign students and cater to their needs?***

The University provides a single window admission facility for overseas students. There is an officer in Academic Section who looks after the admission and affairs of international students.

Also, the University has created a position of Manager – International Relations. The position was filled-in by an experienced candidate; however, he could not continue his services due to unavoidable circumstances. The recruitment process to fill-in the same has been re-initiated.

5.1.9 ***What types of support services are available for (i) overseas students (ii) physically challenged / differently-abled students (iii) SC/ST, OBC and economically weaker sections (iv) students participating in various competitions/conference in India and abroad (v) health centre, health insurance etc. (vi) skill development (spoken English, computer literacy, etc.) (vii) performance enhancement for slow learners (viii) exposure of students to other institutions of higher learning/ corporates/business houses, etc. (ix) publication of student magazines***

Overseas Students:

For the overseas students, the University has identified a separate private hostel within the city with air-conditioning facilities and all modern amenities.

Physically Challenged / Differently-Abled Students:

- Wheelchair and ramp facilities are in place for the physically challenged students.
- Additional time is given during the examination for persons with varied disabilities, wherever applicable.
- There is a provision for allotting a writer during the examination in a condition, when a student is not able to write on his own.

SC/ST, OBC and Economically Weaker Sections:

- Seats are reserved for the SC/ST students, wherever the admissions are offered by Admission Committee for Professional Courses (a committee formed by Govt. of Gujarat).
- In addition to the scholarships given by the government, the students from

the weaker section of the society are given Merit cum Means based scholarships and Book Bank Facility.

- Tuition Fee Waiver (TFW) Scheme, instituted by the State Government is also implemented as per norms in B.Tech., B.Pharm., and B.Arch. Programmes.

Students Participating in Various Competitions / Conference in India and Abroad:

- The students are encouraged to participate in national and international level competitions/conferences organized by leading institutes / universities / organizations of the country.
- The University provides financial assistance to the students participating in national /international sports and cultural competitions. Also, the students representing the University at national / international technical events like Robocon, SAE BAJA, moot court and business competitions are given financial assistance.
- Full-time Ph.D. students are given financial assistance to attend and present research papers at International Conferences in India and abroad.

Health Centre:

- The University has made arrangements to provide medical facilities on the campus by appointing a full time Doctor, who is available daily from 11.30 a.m. to 6.30 p.m.

Health Insurance:

- All the students are covered under the State Government Insurance Scheme.

Skill Development (Spoken English, Computer Literacy, etc.):

The University has made arrangement of students' skill development through two different modes: (i) by including English, Foreign Language and Basic Computer Courses in the curriculum, and (ii) by organizing skill development courses through various Students' Associations, Placement Cell, Centre for Continuing Education (CCE), etc. Several such activities are listed below:

- The University offers English and other foreign language courses, such as French, German, Spanish and Chinese to the under-graduate students.
- The students are also offered several Supplementary and Value Added Courses.
- Courses on Cyber Security, Entrepreneurship, etc. are offered to the students.
- Mock Sessions for Group Discussions and Personal Interviews are organised during the placement season.
- MBA (Full Time) students undergo a compulsory course on 'Written Analysis and Communication (WAC)' in the first year. This course covers Written and Oral Communication, Critical Reasoning and Logical Thinking.
- The Institute of Law organizes professional training for the students from the first semester. In the initial four semesters, the training is on communication skills, personality development, decision making, attitude, team work and collaboration, negotiation skills etc. In the last four semesters, professional training is given based on various career options.

Performance Enhancement for Slow Learners:

- Slow learners are separately counselled and remedial classes are conducted for them.

Exposure of Students to Other Institutions of Higher Learning/ Corporates /Business Houses:

- Exposure to corporate/business houses, industries, and NGOs is ensured through internship courses. There is a provision for structured Summer Internship /Projects to give exposure of Industries (to Engineering, Pharmacy and Science students), Corporate Houses (to Management students), District Courts, High Court and Supreme Court (to Law students), etc.
- The University has signed MoUs with foreign universities, including University of Southern California (USC), Florida Atlantic University (FAU), and RMIT University, Australia. Under these MoUs, many students have visited FAU and USC for Summer Research Internship.
- The students are encouraged to take part in extension and co-curricular activities organized by the premier institutes, like IITs, IIMs, National Law Universities, etc.
- The University also regularly organises conferences, symposiums, seminars and conclaves where academicians, industry and corporate veterans are invited.
- Industry visits are regularly arranged for the students. Foreign visit are arranged for the MBA (FB&E) students.
- The students of the Institute of Law visited foreign Law Schools and have also registered for their online courses.

Publication of Student Magazines:

The constituent institutes of the University encourage students to publish their magazines. Several such efforts are listed below:

- The Institute of Technology publishes its annual magazine 'Interface' and alumni magazine 'Setu'. The Rotaract Club of Nirma Institutes has been publishing its annual magazine 'Reckon' from past nine years. The ISTE Student Chapter publishes 'Archlights' and the ISA Students' Chapter publishes its magazine - MagIC.
- The Institute of Law facilitates the publication of students magazine AXIOM and Student Law Review (e-journal).
- The students of the Institute of Management publish a magazine - 'Sapiens'.
- Nirma Institute of Pharmacy Students Association (NIPSA) publishes its magazine – Seismic Bytes.

5.1.10 ***Does the university provide guidance and/or conduct coaching classes for students appearing for Civil Services, Defence Services, NET/SET and any other competitive examinations? If yes, what is the outcome?***

The constituent institutes of the University and Centre for Continuing Education (CCE) help the students prepare for various competitive exams. These include:

- The Centre for Continuing Education conducts coaching for GATE Examination.
- The Institute of Pharmacy provides Pre-GPAT coaching and examination to

the B.Pharm. students.

- The Institute of Technology arranges guiding seminars for GATE/GRE through its students' associations.

The students of the constituent institutes of the University have been consistently performing well in various competitive examinations.

5.1.11 ***Mention the policies of the university for enhancing student participation in sports and extracurricular activities through strategies / schemes such as (i) additional academic support and academic flexibility in examinations (ii) special dietary requirements, sports uniform and materials (iii) any other (please specify***

Policies of the University for Enhancing Students' Participation in Sports and Extracurricular Activities:

- In order to enhance the students' participation in various co- and extra-curricular activities, the University has prepared structured guidelines for the listed activities:
 - i) Sports Activities
 - ii) Cultural Activities
 - iii) Adventurous Activities
 - iv) Extramural Activities
- At the University level, there is Students' Welfare Board for encouraging sports and extracurricular activities. A very senior level person is appointed as Head – Students' Welfare Board in addition to a full-time Chief Coordinator – Students' Welfare Board.
- Each constituent Institute of the University has its Student Activity Committee and a Coordinator who looks after all the related activities.

Facilities and Encouragement for Sport Activities:

- The University encourages the students, who are proficient in sports by giving them excellent indoor and outdoor sports facilities.
- There is a well-maintained sports ground for outdoor games, like cricket, football, basketball, badminton and volleyball. Indoor game facilities are provided for chess, carom and table tennis.
- There is also a well-equipped gymnasium in the campus for the students.
- Various sports events, including the Annual Sports Day are organized throughout the year and trophies and certificates are given to the winners.
- There is a provision of awarding medals to the students with outstanding achievements at national/international level in sports/cultural/research/social areas during the convocation of the University.
- The students with distinguished achievements at state/national/international level are felicitated on the Annual Day.

Academic Support and Flexibility in Examinations:

- The students participating in important national/international events are given flexibility in submission of Assignments/Class Tests/Laboratory Work.
- The attendance appeal committee considers such students and condone their absence.

- The faculty members provide extra coaching to the students participating in Sport Meets to compensate for the loss of classes.

Sport Uniform and Dietary Requirements:

- Uniforms are given to the students participating in state/national/international level sports competitions.
- During the training of Yoga, the University provides suitable diet to the participating students.

Any Other:

- The University provides special budget to the students for designing and fabricating special equipment/models for participating in national level technical competitions, such as Robocon, SAE BAJA.

5.1.12 ***Does the university have an institutionalized mechanism for students' placement? What are the services provided to help students identify job opportunities, prepare them for interview, and develop entrepreneurship skills?***

Yes, the University has a structured mechanism for students' placement. The same is described below:

University Level: At the University level, there is an Advisory Council for Training and Placement. A senior person of professor level is appointed as Head - Corporate Relations to plan and coordinates the overall placement activities.

Institute Level: Each institute has its dedicated Placement Cell to facilitate the students to choose appropriate career option. The activities of the Cell are coordinated by the Manager-Corporate Relations. The Placement Cell of each institute has modern infrastructure with facilities for conducting written tests, group discussions, personal interviews, etc.

Services Provided by the Placement Cell:

- The major endeavour of the Placement Cell is to get the students placed in Multi-national, Government and various other organisations of repute.
- The Cell facilitates the placements by printing placement brochures containing details of the students and circulating them to all major employers.
- It arranges mock interviews to identify the strengths and weaknesses of the students. It also conducts aptitude tests.
- The Placement Cell helps in arranging industrial visits, internships and industrial training for the students.
- Apart from the above, special sessions and workshops are organized where professionals are invited to train the students for soft and professional skills.

Entrepreneurship Development Centre:

- The University has recently established an Entrepreneurship Development Centre to promote the awareness about the entrepreneurship amongst the students. The Centre has a full-time Officer In-charge to coordinate the activities.
- All the constituent institutes of the University offer a course on 'Entrepreneurship'.

- 5.1.13 *Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus during the last four years).*

Please refer to Table 5.2 for the details of the students selected during campus interviews. The list of major employers is provided in Table 5.3.

Table 5.2: Campus Placements in Last Four Years

Name of the Institute	Particulars	2010-11	2011-12	2012-13	2013-14
Institute of Technology	No. of Students Placed	625	556	504	510
	No. of Companies Visited	104	77	100	113
Institute of Management	No. of Students Placed	152	167	151	140
	No. of Companies Visited	45	44	61	50
Institute of Pharmacy	No. of Students Placed	26	22	46	36
	No. of Companies Visited	21	13	30	27
Institute of Science	No. of Students Placed	NA	NA	7	10
	No. of Companies Visited	NA	NA	13	13
Institute of Law	No. of Students Placed	NA	21	31	11
	No. of Companies Visited	NA	16	17	7

Table 5.3: List of Major Employers

Name of the Major Employers	
Asea Brown Boveri (ABB) Ltd.	Adani Power
Bombardier	Alembic Limited
Broadcom	Amdocs
CARE Ltd.	Amneal Pharmaceuticals
Citibank N.A.	Axelor Technologies
Coca Cola	BalmerLawrie & Co. Ltd.
Cognizant	Bank of Baroda
CRISIL Ltd.	Cadila Pharma Ltd.,
Dabur Ltd.	CEAT Tyres
Deutsche Bank Global (DBOI)	Cybage
Federal Bank	DCM Shriram
Ford	Designmate
GSK Pharmaceuticals	Fractal Analytics
HCL Infosystems Ltd.	Future General India
Hewlett Packard	Godrej & Boyce
Hindustan Unilever	Gujarat National State Petroleum Corporation
Housing Development Finance Corporation Ltd. Bank	Gujarat State Fertilizer Corporation
ICICI Bank Ltd.	GVK EMRI
Infosys Ltd.	HDFC Standard Life Insurance Company Ltd.
Intel	Hitachi Home

International Business Machines Corporation(IBM)	ICICI Prulife
L & T Limited	IDFC Ltd.
Mahindra & Mahindra Ltd.	Infostretch
Maruti	IntasBiopharma
Morgan Stanley	Intas Pharma
Motorola	ISGEC Hitachi
Mu Sigma	Johnson Control
Nestle India Ltd.	KhimjiRamdas
Nokia	L & T Infotech
Reliance	Lupin Research Centre
Samsung Electronics	Mahindra Finance
Samsung Reserch Lab	Mavericks
ShapoorjiPallonji	NBC Bearing
Shell India Ltd.	Nielsen (India) Pvt. Ltd.
Siemens	Nirlife Ltd.
Sun Pharma	Novartis
Tata Consultancy Services	ONGC Petrochem
Tata Motors Ltd.	Oxygen Healthcare
Tech Mahindra	Perkin elmer
Teva Pharmaceuticals	Piramal Healthcare
Thomson Reuters	Premier Biosoft
Thorogood	Reliance Lifesciences
Wipro Ltd.	Sai Infosystems (India) Ltd.
Zee Entertainment	Searce
Apollo Tyres	Sutherland Global
Arvind Limited	Synopsys
Ashok Leyland	Tact India
Berger Paints India Ltd.	Tata AIG General Insurance Co. Ltd.
Cairn India	Torreid
Cargill Corp	Torrent Power
Coffee Day Beverages	Troikaa Pharmaceutical
Daikin	UCO Bank
Essar Group	Wockhardt Research Ltd.
Fact set	Zeus Learning
Hilti	Zydus Cadila
Industrial Development Bank Ltd.	Bajaj Finance Ltd.
Infibeam	BAN Labs Ltd.
KEC International	Evosys
Kotak Mahindra Bank Ltd.	Gujarat Narmada Valley Fertilizers and Chemicals limited
Linde Engineering	ICICI Securities
Meru Cabs	Idea Cellular
Ranbaxy Laboratories Ltd.	Lambda Therapeutics
Reckitt Benckiser	Maharshi Ayurveda
Saint Gobain	Mankind Pharma
Streebo	Panacea
Tata Chemicals	Roselabs Biosciences
Thermax	Usha International Ltd.
Trident	ACC Cement
Zydus Research	

5.1.14 ***Does the university have a registered Alumni Association? If yes, what are its activities and contributions to the development of the university?***

Alumni Associations:

All the constituent institutes of the University have their alumni associations. The list of such associations are provided below:

- i) NITAA- Nirma Institute of Technology Alumni Association
- ii) IMNUAA- Institute of Management Nirma University Alumni Association
- iii) IPNUAA-Institute of Pharmacy Nirma University Alumni Association
- iv) NUILAA -Nirma University Institute of Law Alumni Association
- v) ISNUAA - Institute of Science Nirma University Alumni Association

The University uses a software *Alma Mater* to manage its alumni relations.

Activities of Alumni Associations:

- Expert lectures from alumni members throughout the year and in the orientation programmes, pre-placement talks, etc.
- The Alumni provide feedback on syllabus updating.
- The Alumni help in arranging special workshop seminars, STTPs, Conferences on advanced topics.
- Representatives of the Institute of Management alumni participate in selection of the students for MBA programme.
- Representatives of Alumni Associations participate as members of IQAC.
- Alumni Association of the Institute of Technology publishes a magazine SETU every year.
- Alumni Meets of the Institute of Management and the Institute of Technology are held at various locations across the country.
- Financial assistance for students' participation in national/state level paper presentation is provided by the Pharmacy Alumni Association.
- Scholarships are given by the Institute of Technology Alumni Association.
- Felicitation of toppers by the Institute of Pharmacy Alumni Association.

5.1.15 ***Does the university have a student grievance redressal cell? Give details of the nature of grievances reported. How were they redressed?***

Yes, the University has a Grievance Redressal Cell.

There are no major grievances in last four years.

There are minor grievances pertaining to academic and administrative matters that have been resolved at different levels. For example, the matter of not showing the Semester End Examination Answer Sheets and the students reporting pertaining to the same has been addressed by the Cell. The students can now see the assessed answer sheets.

5.1.16 ***Does the university promote a gender-sensitive environment by (i) conducting gender related programmes (ii) establishing cell and mechanism to deal with issues related to sexual harassment? Give details.***

The University promotes a gender-sensitive environment and to full extent supports gender equality. Several gender related programmes have been conducted as listed

below:

- A Gender Sensitization Rally (Walkathon) was organized on April 18, 2013.
- During the University 10 year's celebrations, a cultural programme was organized on the theme of 'Gender Friendly Society'. Also, T-Shirts symbolizing gender equality were distributed to the staff, students and faculty members.
- A workshop on 'Gender Sensitization' for faculty and non-teaching staff was organised on March 08, 2014.
- A seminar was conducted for all the faculty and staff members of the Institute of Technology on January 11, 2014. The topics for discussion were: Gender Sensitization with Legal Provision, Gender Issues in Social Milieu and Role of College Teacher in Gender Sensitization.
- The female students are given self-defence training.

Mechanism to Deal with the Issues related to Sexual Harassment:

In order to provide a congenial and safe working environment, provision for the Complaint Committee for Prevention from Women Sexual Harassment was constituted very early. Later, Women Development Cell was also constituted. Thus two bodies are now working for women empowerment, gender equality and creating safe working conditions, namely:

- i) Women Development Cell
- ii) Complaint Committee for Prevention from Women Sexual Harassment

Women Development Cell:

With an objective to sensitize all members of Nirma University community towards the Supreme Court's Statutory Mandate on prohibiting gender discriminations and sexual harassment at the work place, a Women Development Cell was constituted. It not only provides support and congenial environ but also aims:

- To provide for dialogue, discussions and deliberation on women's rights and gender-related issues.
- To encourage participation from NGOs and law enforcement agencies in the area.
- To become a resource centre for women and provide a forum for exchange of ideas.
- To review safety and security measures for female employees and girl students at Nirma University campus.

Complaint Committee for Prevention from Women Sexual Harassment:

The University in sync with the guideline of the UGC has constituted a Committee to deal with cases of grievances concerning any kind of harassment including sexual harassment and take suitable actions. The objectives of the Committee are well defined as mentioned below:

- To prevent discrimination and sexual harassment against women, by promoting gender amity among the students and employees.
- To lay down procedures for the prohibition, resolution, settlement and prosecution of acts of discrimination and sexual harassment against women by the students and employees.
- To deal with cases of discrimination and sexual harassment against women in a time bound manner, aiming at ensuring support services to the

victimized and termination of the harassment.

- To recommend appropriate punitive action against the guilty party to the Chair/Director General of Nirma University.

5.1.17 ***Is there an anti-ragging committee? How many instances, if any, have been reported during the last four years and what action has been taken in these cases?***

Anti-ragging Committee:

- Yes, there is an Anti-ragging Committee. In fact, the University has adopted a zero-tolerance approach towards ragging and any incident indicative of the said nature.
- There are Anti-ragging Committees and Anti-ragging Squads. A University-level committee meets before the commencement of the academic year. Further, institute level committee and squads work around the year to prevent any untoward incident.
- At the University Level, there is a Monitoring Cell of Anti-Ragging Measures, which is chaired by the Director General of the University. The Cell consists of all the Heads of Institutions, Chief Operating Officer and Executive Registrar of the University as members and the Chief Warden (Hostels) as the Member Secretary.

Case of Ragging:

- No case of ragging has been reported in last four years.

5.1.18 ***How does the university elicit the cooperation of all its stakeholders to ensure the overall development of its students?***

The University elicits information from all its stakeholders through a structured feedback mechanism. Feedback is taken from the students, parents, domain experts, and alumni on curricular and co-curricular aspects.

More specifically, in the following ways the University take support of various stakeholders:

Parents:

- Representatives of parents are nominated as members of the Anti-Ragging Committee at Institute Level, Anti-Ragging squads, etc.

Industry, Corporate, NGO, Courts and Law Professionals:

- Industry professionals help in delivering expert lectures, workshops, seminars, etc.
- The industry, corporate and law professionals help the students in projects/ internship/training.
- The industry experts and corporate professionals are nominated as members of various statutory bodies like, Board of Governance, Academic Council, Faculty, Board of Studies/Academic Area Committees, etc.

Alumni Members:

- The support of alumni is taken for sensitizing the students to industry needs and summer and final placement.
- The University has nominated alumni representatives in IQAC.

5.1.19 ***How does the university ensure the participation of women students in intra- and inter-institutional sports competitions and cultural activities? Provide details of sports and cultural activities where such efforts were made.***

The University provides equal opportunity to girl students to participate in various intra and inter-institutional sports competitions and cultural activities. Wherever possible, separate games and events are organized for women students. Table 5.4 provides the summary of participation of girl students in sports and cultural activities.

Table 5.4: Participation of Girl Students in Sports and Cultural Activities

Year	Name of the Activity	No. of Girl Students' Participated
2013-14	Sports	128
	Cultural	156
2012-13	Sports	131
	Cultural	159
2011-12	Sports	73
	Cultural	86
2010-11	Sports	93
	Cultural	50

5.2 Student Progression

5.2.1 ***What is the student strength of the university for the current academic year? Analyse the Programme-wise data and provide the trends for the last four years.***

Student strength of the University for the current academic year:6985

Programme-wise data of student progression is shown in Table 5.5.

Table 5.5: Programme wise Student Progression in Last Four Years

Name of the Programme	Student Progression	Year Wise %			
		2011*	2012*	2013*	2014*
M.Tech.	PG to Ph.D./JRF/RA	5.56	3.22	3.01	1.16
	Employed through Campus Selection	25.73	22.22	35.24	15.00
	Other than campus recruitment	16.08	28.65	42.77	80.00
MBA (Full-time)	Employed through Campus Selection	89.41	92.27	84.44	89.53
	Other than campus recruitment	10.59	3.31	11.11	6.98
	Entrepreneurs	0.00	4.42	4.44	3.49
M.Pharm.	PG to Ph.D./JRF/RA	6.00	11.00	6.00	8.00
	Employed through Campus Selection	54.00	35.00	58.00	53.00
	Other than campus recruitment	14.00	17.00	15.00	11.00
	Entrepreneurs	5.00	2.00	5.00	4.00

M.Sc.	PG to M.Phil.	0.00	1.67	1.69	0.00
	PG to Ph.D./JRF/RA	32.69	20.00	3.39	6.35
	Employed through Campus Selection	26.92	26.67	13.56	14.28
	Other than campus recruitment	3.85	3.33	0.00	20.63
	Other	36.54	46.67	79.66	58.73
LL.M.#	PG to M.Phil.	--	--	--	--
	PG to Ph.D./JRF/RA	--	--	14.29	33.33
	Employed through Campus Selection	--	--	--	--
	Other than campus recruitment	--	--	14.29	33.33
	Entrepreneurs	--	--	71.43	33.33
B.Tech.	UG to PG	7.59	8.89	9.09	8.58
	Employed through Campus Selection	74.96	65.44	58.10	78.00
	Other than campus recruitment	8.30	6.63	10.01	10.55
	Entrepreneurs	7.14	5.07	7.80	1.40
B.Pharm.	UG to PG	50.00	62.00	56.00	53.00
	Employed through Campus Selection	6.00	4.00	20.00	10.00
	Other than campus recruitment	12.00	10.00	4.00	12.00
	Entrepreneurs and Self Employed	10.00	8.00	6.00	6.00
B.A. LL.B., B.Com. LL.B	UG to PG	--	33.80	37.97	26.95
	Employed through Campus Selection	--	29.58	39.24	24.11
	Other than campus recruitment	--	16.90	7.59	21.99
	Entrepreneurs	--	12.68	7.59	20.57

*based on the available data.

First batch passed out in year 2013.

5.2.2 *What is the programme-wise completion rate during the time span stipulated by the university?*

The programme-wise completion rate is shown in Table 5.6

Table 5.6: Programme-wise Completion Rate

Name of the Programme	Percentage of students who completed the programme within the time frame				
	Engineering	Management	Pharmacy	Law	Science
UG	89 %	--	93%	84%	--
PG	94 %	94 %	96%	75%	94%

Note: The data shown in Table 5.6 are for passing out batch of year 2014.

5.2.3 *What is the number and percentage of students who appeared/ qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defence, Civil Services, etc.?*

The details of the students who qualified in competitive examinations in last four years are given in Table 5.7.

Table 5.7: Details of Students Qualified in Competitive Exams

Name of the Examination	Number of Qualified Students*
UGC-CSIR NET	12
GATE	221
GPAT	155
GRE	165
TOEFL	99
GMAT	14
CAT	182
Indian Engineering Services	2
IELTS	3
CLAT for PG	158

*Based on the available data.

5.2.4 **Provide category-wise details regarding the number of Ph.D./ D.Litt./D.Sc. theses submitted/ accepted/ resubmitted/ rejected in the last four years.**

The details regarding the number of Ph.D. theses submitted/ accepted/ resubmitted/ rejected in the last four years are shown in Table 5.8

Table 5.8: Category-wise Ph.D. Details

Year	Name of the Programme	Ph. D. Thesis			
		Submitted	Accepted	Re-submitted	Rejected
2014	Engineering	2	2	-	-
	Management	1	1	-	-
	Pharmacy	1	1	-	-
	Law	-	-	-	-
	Science	1	1	-	-

Year	Name of the Programme	Ph. D. Thesis			
		Submitted	Accepted	Re-submitted	Rejected
2013	Engineering	3	3	-	-
	Management	2	2	-	-
	Pharmacy	1	1	-	-
	Law	-	-	-	-
	Science	7	7	-	-

Year	Name of the Programme	Ph. D. Thesis			
		Submitted	Accepted	Re-submitted	Rejected
2012	Engineering	5	4	-	1
	Management	1	1	-	-
	Pharmacy	3	3	-	-
	Law	-	-	-	-
	Science	3	3	-	-

Year	Name of the Programme	Ph. D. Thesis			
		Submitted	Accepted	Re-submitted	Rejected
2011	Engineering	8	8	-	-
	Management	1	1	-	-

	Pharmacy	11	11	-	-
	Law	-	-	-	-
	Science	1	1	-	-

5.3 Student Participation and Activities

5.3.1 *List the range of sports, cultural and extracurricular activities available to students. Furnish the programme calendar and provide details of students' participation.*

With the mission of overall development of the students, the Students' Welfare Board of the University organizes various sports, cultural and extracurricular activities. Some of them are listed below:

Sports Activities:

- The University organizes Institute level and Inter-Institute competitions of Volleyball, Football, Cricket, Table Tennis, Carom, Chess, Tug of War and Athletics every year. The winners and runner ups are awarded with trophies and certificates.
- The students are also motivated to participate in inter-university sports tournaments and inter-university youth festival.
- The University organizes Annual Sports Competitions.
- As far as infrastructure for such activities is concerned, the campus has two main grounds and a sports complex. In the sports complex, there are three Tennis Courts, two Basketball Courts and two Volleyball Courts with synthetic rubberized surface and flood lights. The Cricket ground is available with Turf wicket and lawn on the outfield. Carom, Chess, and Table Tennis facilities are available in the basement of Students Activity Centre.
- The Gymnasium is available in the building of the Students Activity Centre, which is well equipped with all the requisite machines.

Cultural Activities:

- The University regularly arranges extracurricular activities, including institute level and university level sports and cultural festival. There are events of Music, Dance, Theatre, Literacy and Fine Arts in the cultural festival.
- Apart from these, the University organizes events, like Annual Cultural Festival, Raas Garba, Independence Day and Republic Day Celebration.
- The University houses air-conditioned, audio-visual equipped auditoriums, having varying seating capacity from 40 to 400 persons.

Extracurricular Activities:

- Social activities like, Blood Donation Camp, Celebration of Special Days, like Flag Day, Computer Literacy Programmes in nearby primary schools, and Literacy Programmes for slum area are also organized at the Institute level.
- Various camps at nearby villages for Tobacco Awareness, Vaccination, Health, Medical, Cancer and Nutrition Awareness, Traffic Awareness, Test regarding Thalassaemia, Dental check-up, etc. are arranged.
- Adventure Activities like mountaineering camps at Himalaya, desert

adventure camp at desert of Rajasthan have been also arranged.

Programme Calendar:

The activity calendar for year 2014-15 is shown in Table 5.9.

Table 5.9: Activity Calendar for year 2014-15

Name of the Activity	Date
Blood Donation Camp	April 2014, August 2014, December 2014
Independence Day Celebration	August 15, 2014
Institute Level Cultural Festival	August to October 2014
Raas Garba (Ramzat)	October 2014
Cricket, Volleyball, Football & Basketball Selection	September 2014
Institute Level Sports Competition	January 2015
Inter Institute Athletics Meet	February 2015
Inter Institute Cultural Festival	February 2015
Republic Day Celebration	January 26, 2015

Apart from the activities listed in Table 5.9, all the institutes arrange several extra- and co-curricular activities round the year.

Students' Participation:

The summary of students' participation in sports, cultural and extracurricular activities is given in Table 5.10.

Table 5.10: Students' Participation in Sports, Cultural and Extracurricular Activities

Name of the Sports, Cultural and Extracurricular Activity	Total Students' Participation
For Year 2013-14	
Sports Activities	
Inter Institute Athletics	200
Inter Institute Sports Meet	272
Inter University Sports Tournament of Forum of Private Universities	47
Cultural Activities	
Inter Institute Cultural Programme	344
Inter Institute Ras-Garba Programme	2561
Cultural Evening (Celebration of completion of 10 years of the University)	75
Cultural Programme as a part of Republic Day Celebration at Sabarkantha District	5
Extracurricular Activities	
Walkathon (Celebration of completion of 10 years of the University)	800
Organ donation initiative taken by Times of India	144
Celebration of Independence Day on 15-08-2013	1100 Approx.

Orientation Programme for girls students about NCC Activities	200 Approx.
Run for Unity organized by Government of Gujarat on 15-12-2013	73
Walkathon & Seminar on awareness campaigns about prevention of HIV/AIDS (as a part of Celebration of National Youth Day)	250 Approx.
Jaisalmer Dessert Adventure Camp	63
Celebration of Republic Day - 26-01-2014	700 Approx.

5.3.2 ***Give details of the achievements of students in co-curricular, extracurricular and cultural activities at different levels: University / State / Zonal / National / International, etc. during the last four years.***

The summary of the students' achievements in co-curricular and extra-curricular activities of last four years are shown in Table 5.11. The details will be provided to the peer team at the time of visit as Annexure – 5.3.2.

Table 5.11: Summary of Students' Achievement (last four years)

Students' Achievements in		
Co-curricular and Extra-curricular Activities	Cultural Activities	Sports Activities
251	93	34

5.3.3 ***Does the university conduct special drives/campaigns for students to promote heritage consciousness?***

- Yes, the University conducts special drives and campaigns for its faculty members and students to promote heritage consciousness.
- The Institute of Management organized a half-day educational tour to Lothal. The tour was arranged with an aim of providing glimpses of organized behaviour reflected in the remains of the Harappan Town of the ancient Indus Valley civilization.

5.3.4 ***How does the university involve and encourage its students to publish materials like catalogues, wall magazines, college magazine, and other material? List the major publications/materials brought out by the students during the last four academic sessions.***

The University encourages the students to publish materials, like wall magazines, college magazines to showcase their talents in literary activities. Some of the details are given below:

- The Institute of Technology publishes its annual magazine 'Interface' and alumni magazine 'Setu'. Apart from these, Rotaract Club of Nirma Institutes has been publishing its annual magazine 'Reckon' from past nine years. ISTE student chapter publishes 'Archlights' and ISA Students' Chapter publishes its magazine called, 'MagIC'.
- The Institute of Law facilitates the publication of students magazine AXIOM and Student Law Review (e-journal). Also, the Literary and Drama Committee of the institute displays creative write-ups on the notice board based on different themes.
- 'Legal Trigger' is an e-magazine run by the students of the Institute of Law. It acts as an information hub for law students. Trigger Times is a weekly

newspaper that provides updates in the field of law.

- The Institute of Pharmacy Students Association (NIPSA) publishes its magazine – Seismic Bytes.
- The Students of the Institute of Management publish a magazine called, ‘Sapiens’.

5.3.5 ***Does the university have a Student Council or any other similar body? Give details on its constitution, activities and funding.***

The University has established the Students’ Welfare Board. In addition, within the University there are several branch-wise and institute-wise Students’ Associations.

Constitution of the Students’ Welfare Board:

Director General (Chairman)

Executive Registrar

Chief Operating Officer

All Heads of the Institutions

One Head of the Department / Professor nominated by the Head of the Institution

Dean-Students’ Activities (Member Secretary)

Chief Coordinator – Students’ Activities

Constitution of the Students’ Associations:

Each association has 4-5 office bearers including President, Vice-President, Secretary and Treasurer.

Activities of the Students’ Associations:

The Students’ Associations are very vibrant and regularly organize various academic, cultural and social activities. Some of them are listed below:

- Seminars, workshops, training programmes, expert lectures
- Group discussions, debates, elocution, quiz competitions
- Robotic, computer programming competitions
- Tabaco / Cancer / Nutrition /Traffic awareness programmes, Blood donation camps, Literacy programmes, etc.

5.3.6 ***Give details of various academic and administrative bodies that have student representatives on them. Also provide details of their activities.***

The students are members of the following academic and administrative bodies:

- Internal Quality Assurance Cell
- Students’ Welfare Board
- Placement Cell
- Alumni Association
- Library Committee
- Anti-Ragging Committee
- Women Development Cell
- Nirma University Law Journal Committee



CRITERION VI:

**GOVERNANCE,
LEADERSHIP AND
MANAGEMENT**

CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**6.1 Institutional Vision and Leadership****6.1.1 *State the vision and the mission of the university.*****Vision:**

Shaping a better future for mankind by developing effective and socially responsible individuals and organizations.

Mission:

Nirma University emphasizes on all round development of its students. It aims at producing not only good professionals, but also good and worthy citizens of a great country, aiding in its overall progress and development.

It endeavours to treat every student as an individual, to recognize their potential and to ensure that they receive the best preparation and training for achieving their career ambitions and life goals.

6.1.2 *Does the mission statement define the institution's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, the institution's tradition and value orientations, its vision for the future, etc.?*

The University Mission statement defines its distinctive characteristics in the following ways:

In Terms of Addressing the Needs of the Society:

- The Vision statement of the University focuses on the development of a better future for the mankind, thereby representing an honest intent and commitment for the welfare and advancement of the society.
- It also emphasizes on the development of effective and socially responsible individuals and organizations. In other words, the University expects its students to be committed to the welfare of the society by actively contributing to different social causes.

The Students it Seeks to Serve:

- The Mission statement of the University is unique in the sense that it emphasises on the holistic development of the students. It also envisages addressing the individual needs of the students.
- Equally importantly, the University does not only focus on the career goals of the students, but also on their life goals.

The University's Tradition and Value Orientation :

- The mission statement specifically highlights the fact that the University is committed to producing worthy and ethical citizens who will contribute effectively to the overall progress and development of the country.
- The University is committed to produce high quality professionals who will reflect and demonstrate exemplary values and set traditions that the institution stands for, propagates and imbibes in the students.

The University's Vision for the Future:

- The Vision of the University focuses 'on shaping a better future of mankind'. The Vision statement depicts that the University shall contribute in development of today's knowledge economy, provide greater access to educational opportunities and significantly contribute in education-technology innovations which would further contribute in the progress and advancement of the society at large.

6.1.3 ***How is the leadership involved (i) in ensuring the organization's management system development, implementation and continuous improvement? (ii) in interacting with its stakeholders? (iii) in reinforcing a culture of excellence? (iv) in identifying organizational needs and striving to fulfil them?***

There are two levels of leadership within the University: (i) University level, and (ii) Institute level. The University level leadership team consists of Vice President, Director General, Chief Operating Officer, Director (Academic and General Administration) and Executive Registrar. On the other hand, the Institute level leadership includes: the Director and the Heads of Department. All the incumbents are highly competent and possess the necessary experience to provide academic and administrative leadership.

In Ensuring the Organization's Management System Development, Implementation and Continuous Improvement:

The University has adopted a 'Bottom Up Approach' in management system development, implementation of various policies and continuous improvement. Accordingly, the suggestions given by the faculty members are discussed at the Department and Institute levels. If required, the suggestions are brought to the University Level Coordination Committee. The suggestions related to curriculum revision/modifications are discussed at Board of Studies/Academic Area Committee, Faculty and subsequently at Academic Council. Important suggestions are also brought to Board of Governors Meeting and necessary actions are taken.

The hierarchy-wise leadership involvement is described below:

- The President of the University chairs the Board of Governors (BoG) meetings. During one of the meetings, the annual report is presented and the suggestions are invited for further improvement.
- The Director General is the Chief Executive and Chief Academic Officer of the University. He presides over the meetings of the Academic Council (AC), Finance Committee, University Level Internal Quality Assurance Cell (IQAC), Library Council, Students' Welfare Board, Coordination Council, Faculty of Doctoral Studies & Research and Placement Council. The Deans of the various Faculties are the leaders of the concerned Faculty and chair the Faculty Meetings. Similarly, the Department/Area Heads lead the Board of Studies/Area Committee Meetings.
- The Director General (i) exercises general supervision and control over the affairs of the University; (ii) ensures implementation of the decisions of the authorities of the University; (iii) is responsible for imparting of instruction and maintenance of discipline in the University; and (iv) exercise such other powers and performs such other duties as may be assigned to him under the University Act or the regulations or as may be

delegated to him by the Board or the President, as the case may be.

- For implementation of various policy decisions and continuous improvement, the Director General (i) monitors progress made on the University strategic planning and research policy, (ii) holds regular meetings with the Institutes' Heads (HoI), (iii) supervises the academic audit of different institutes, (iv) invites quarterly report from the HoIs about the progress made by the institute regarding academic and research related matters, and (v) takes review of faculty development programmes.
- In addition, there is a meeting of the University officials and the Heads of Institutes every day for about half an hour to discuss and deliberate on academic matters. This meeting helps the leaders expedite urgent matter, share information and common concerns.
- At the Institute Level, for better coordination and monitoring, the Director of the Institute arranges weekly meetings with the HoDs, where all matters including academic planning, implementation, reviewing academic programmes, important administrative matters, etc. are discussed.
- Similarly, at the Department level, the HoDs call meetings of all the faculty members on a weekly basis and discuss various issues, pertaining to syllabus update, course delivery, academic audit, continuous evaluation, attendance monitoring, student guidance and support, feedback, etc.

In Interacting with the Stakeholders:

The University leaders are associated with all the stakeholders and regularly interact with all of them.

- The industry experts and corporate professionals are nominated as members of various statutory bodies, like Board of Governors, Academic Council, Faculties, Board of Studies/Academic Area Committees, etc. This arrangement gives all the University leaders an opportunity to interact with the industry personnel.
- The University has included several reputed research organizations as the recognized Ph.D. Research Centres. The Director General and the HOIs regularly visit these organizations as well as invite their officials to the University campus for discussion and collaboration.
- The Parents are invited during Orientation Programme, Annual Day, Convocation and other such functions, where they can interact with the Department Heads and the concerned faculty members.
- All the constituent institutes of the University have their Alumni Associations. These associations organize Alumni Meets within the campus as well as in selected metro cities. The concerned Director, HoDs and Faculty members attend Alumni Meets and interact with the alumni members.
- The Director of the institute addresses all the students during Orientation Programme and thus builds healthy rapport for future interaction.
- Student representatives are nominated as members in various committees, like Internal Quality Assurance Cell, Students' Welfare Board, Placement Cell, Library Committee, Anti-Ragging Committee and Women Development Cell. This also gives opportunity to the University leaders to dialogue with the students.
- Apart from these, the students can informally meet the Institute Head,

HoDs, etc.

In Reinforcing a Culture of Excellence:

- In order to reinforce a culture of excellence, the University has created a dedicated Academic Development and Research Cell (ADR Cell). It deliberates on quality assurance and creates a culture of excellence within the University. It also endeavours to inculcate a learning culture in the University through sharing of ideas and best practices.
- Apart from this, there is a University level IQAC that meets from time to time. Further, every constituent institute of the University has an IQAC. All the Heads of the Departments, several senior faculty members, students, industry representatives and a few administrative staff are the members of this Cell. The IQAC members meet regularly and discuss issues pertaining to improvements in all aspects.

In Identifying Organizational Needs:

- The University has formed a 'Coordination Committee', which comprises Vice President, Director General, Chief Operating Officer, Executive Registrar, and all the Heads of the Institutes to identify the academic and administrative needs of the University and its different institutes.
- This Committee meets monthly and puts efforts to fulfil the needs of various institutes.
- The primary purpose of this Committee is system development and improvement. Various policy matters are discussed and deliberated in this Committee and decisions are made. Further, appropriate agencies and role holders are identified and assigned the responsibility for the implementation of the decision. Equally importantly, the implementation process is also monitored by the Coordination Committee.
- For identifying all financial needs, the University has evolved a structured annual budget system. The overall annual budget of the Institute is discussed among the faculty members and approved before the beginning of the financial year and it is further broken in to activity-wise detailed budget.
- Also, the Five Year Strategic Plan of the University was finalized after SWOC analysis and majority of the University/Institute needs were covered in the same.

6.1.4 ***Were any of the top leadership positions of the university vacant for more than a year? If so, state the reasons.***

All leadership positions are duly filled and no position is vacant for more than a year.

6.1.5 ***Does the university ensure that all positions in its various statutory bodies are filled and meetings conducted regularly?***

- The University puts continuous efforts to fill all the positions of the statutory bodies. As and when the vacancies occur due to retirement or resignation by the members, the positions are filled within a reasonable time period.
- The University has a set of regulations for summoning and conducting all

statutory body meetings. In the regulations, the timelines for the meetings of statutory bodies are well defined and adhered to.

- The statutory body meetings are generally held twice in a year and are also called as and when a necessity arises. The agenda of all such meetings is circulated to the members, well in advance. All such meetings are conducted very systematically and the Minutes of Meetings are circulated immediately. Based on the Minutes of Meetings, the ‘action taken reports’ are prepared and all records are maintained systematically.

6.1.6 ***Does the university promote a culture of participative management? If yes, indicate the levels of participative management.***

Since its inception, the University encourages all its faculty and staff members to contribute in various capacities in the management and growth of the University. There is a democratic culture within the University, where all faculty and staff members share their opinions and suggestions, thereby participating in institution building. Formally, in the following ways, the faculty and staff participate in the University Management:

- The University has constituted many Academic Bodies, viz., Board of Studies (BoS), Academic Area Committees (AAC) and Faculties. Most of the senior faculty members are nominated in the BoS/AAC and some are members of Faculties of Technology and Engineering / Management / Pharmacy / Science / Law / Architecture. The faculty members involved in these academic bodies are empowered to suggest changes in academic matters, course curriculum, etc.
- Apart from these, faculty and student representatives are part of various councils and committees, including Library Council, Placement Advisory Council, Women Development Cell, Anti Ragging Committee, Canteen Committee, Internal Quality Assurance Cell, Students’ Welfare Board, Examination Committee, etc.
- All the Heads of Institutes participate in all policy matters. They are part and parcel of strategy planning and implementation. They are also active participants of ‘Coordination Committee’.
- In each department of the institute, area wise groups are formed and are headed by senior faculty. Area wise meetings are regularly held. Thus, faculty members are involved in (i) deciding the curriculum and syllabus of related subjects (ii) laboratory development (iii) procurement of equipment, and (iv) suggesting the purchase of books and journals.
- The budget proposal of each department is decided after taking the opinion and suggestions from all the faculty members.
- Some of the faculty members work as faculty advisors for different student organizations.
- Faculty meetings are organised regularly and suggestions from faculty members and staff are invited from time-to-time on various issues.

6.1.7 ***Give details of the academic and administrative leadership provided by the university to its affiliated colleges and the support and encouragement given to them to become autonomous.***

Not Applicable, as there are no affiliated colleges.

6.1.8 ***Have any provisions been incorporated / introduced in the University Act and Statutes to provide for conferment of degrees by autonomous colleges?***

Not Applicable.

6.1.9 ***How does the University groom leadership at various levels? Give details.***

By way of sharing the responsibilities and putting faith in all its staff and faculty members, the University grooms leadership among academic administrators at various levels. The following are several formal means of grooming leadership at various levels:

- Various Deans and senior faculty members are nominated on rotation basis as members at various academic bodies, like BoG, AC and Finance Committee.
- Recently, the University has introduced a scheme of headship of departments by rotation to inculcate leadership among the faculty members.
- The faculty members are given responsibility of academic administration, including appointment as Academic Coordinator, Programme Coordinator, Section /Area Head, Exam Coordinator, etc.
- The faculty members are assigned the responsibility for organizing various mega events, like national/international Conferences, Seminars, Short Term Training Programmes, Alumni Meets, etc.
- The faculty members are promoted to a higher level based on seniority and expertise. Also, there is an attractive Career Advancement Scheme (CAS) for higher scale and promotion.
- The faculty members also buy books on leadership and borrow books from the library to enrich their understanding of leadership. Finally, they also learn from one another and build one another.

6.1.10 ***Has the university evolved a knowledge management strategy? If yes, give details.***

The University puts continuous efforts in knowledge creating, utilizing and disseminating through various means. These include:

- Organizing Conferences, Seminars, Workshop, Hands-on-Training etc. on different topics for in-house and external participants.
- The Conference Proceedings are prepared and made available through well-known publishers.
- Project Reports, PG Dissertations, and Ph.D. Theses, etc. are well-maintained in the library D-space and the students are encouraged to use them.
- All the libraries of the University are well connected and all of them have digital repository of Ph.D. thesis, faculty publications, magazines, photo albums, institute publications, newspaper clippings, videos, speeches of renowned experts, etc.
- The University has framed systematic guidelines for filing patents under intellectual property management. A separate Intellectual Property Management Advisory Committee is formed to examine the cases of patents.
- The faculty members are encouraged to write books, book chapters, research papers, newspaper articles, case studies, etc. All such faculty

members who have such publications to their credit are felicitated on the Annual Day.

6.1.11 ***How the following values are reflected the functioning of the university?
(i) Contributing to national development, (ii) Fostering global competencies among students, (iii) Inculcating a sound value system among students, (iv) Promoting use of technology, (v) Quest for excellence***

As the University is already accredited by NAAC, it emphasises and adheres to the value framework of NAAC. The leaders at the University know and practice the NAAC value framework and it is well reflected in the functioning of the University.

Contributing to National Development:

- Nirma University puts rigorous efforts in imparting quality education to its students. It not only aims at producing good professionals, but also focuses on preparing worthy citizens of the country, thus significantly contributing to the overall progress of the nation.
- The University significantly contributes in nation building by way of its broad range of extension activities. The extension activities at the University are structured in three ways: (i) As a part of curriculum, (ii) Voluntary extension activities by the students, (iii) As activities through various Student Associations.
- The University has a structured Extension Activity Policy and accordingly various activities, such as societal awareness programmes, rallies, blood donation camps, literacy campaigns, etc. are organized on a regular basis. Various camps are organized at nearby villages on Tobacco Awareness, Vaccination, Cancer and Nutrition Awareness, Traffic Awareness, etc.
- The University has formed NSS Advisory Committee, which motivates students to carry out different societal activities.
- A few noteworthy interventions of the University in terms of extension activities are:
 - ✓ Legal Aid Clinic at Sabarmati Jail to provide counselling to the prisoners, assist them in getting advocates, assisting them through government schemes, etc.
 - ✓ The students of Institute of Management worked on a project of Human Development Index in 45 villages of Bhiloda and Himmatnagar Talukas of Sabarkantha District.
 - ✓ The University contributes to national development through research and development. It organises conferences, workshops, training programmes, value added courses, etc. for the students, faculty members and industry professionals.
 - ✓ Apart from the conventional courses, the University offers many courses in the areas of Energy Systems, ICT Tools & Network Security and VLSI Technology, which are currently the thrust areas of the nation.

Fostering Global Competencies among the Students:

- The curricula and the syllabi of all the programmes offered by the University meet the global standards. They are developed after benchmarking and extensive consultation with the stakeholders. The course contents are examined on a continuous basis and requisite

improvement is made by revising syllabi.

- All the laboratories, Computer Centres and library are well-equipped with state-of-the-art resources and facilities. This helps the students to acquire practical knowledge and core competencies as per international standards.
- The University has established linkages with several foreign universities for student and faculty exchange. Accordingly, there is a provision for the students to go for Summer Internship at international universities, including University of Southern California (USC), Florida Atlantic University (FAU), USA and HoF University, Germany.
- The University regularly invites foreign professors and experts to deliver short courses in various thrust areas. The students are encouraged to register for Massive Open Online Courses (MOOCs), offered by reputed international universities.
- The students are given exposure to join international companies, encouraged to participate in international events and to prepare for GRE/TOEFL/GMAT examinations, etc.
- Various institutes of the University offer courses of foreign languages, such as French, Spanish, German, etc.
- Moreover, doctoral students are provided travel support for attending and presenting papers in international conferences.

Inculcating a Sound Value System among Students:

- The University strongly believes in developing a sound value system amongst its students. Courses like 'Yoga & Meditation' and 'Ethics' are incorporated in the different curricula. Moreover, the students are required to work with NGOs to understand societal issues and be socially responsible.
- Well-known Experts, Spiritual Leaders are invited to give lectures on various aspects of attitude, discipline, ethics, patriotism, etc. The importance of all such qualities is also covered during Orientation Programmes.
- Values of leadership and teamwork are inculcated in the students through a host of courses.
- In addition, elective courses are offered in the fields of Ethics and Corporate Social Responsibility.
- Sound value system is reinforced by various extension activities in which almost all the students participate.
- The University strongly believes in training and disciplining students in a manner that will develop students' morals. To maintain discipline and harmony, various rules and regulations are in place with sufficient provisions for appeal.

Promoting the Use of ICT:

- ICT today is a sine qua non for the teaching-learning process. All students are required to undergo compulsory IT courses. A new course on Cyber Security has also been introduced. In addition, several elective courses in IT areas are offered in different programmes.
- The University has a rich IT infrastructure. It has an Internet connection of 256 Mbps and several computer labs. It also has legal versions of requisite

software.

- The Instructors at the University use blended learning, using modern ICT tools and techniques. They use Google Apps, Moodle, MonkeySurvey, wordpress.com, etc. to enhance student learning.

Quest for Excellence:

- The University puts continuous efforts to achieve excellence in teaching-learning activities, research activities, extension activities, administration, financial operations, etc. The University has well-established, comprehensive and rigorous arrangements for the initiation, adoption, approval, review, modification and annual monitoring of its entire academic and research activities.
- The University constantly work towards achieving excellence, which is evident from several prestigious awards won by the University. The constituent institutes of the University are constantly ranked in the top educational institutions by various magazine surveys and other national survey bodies, namely Outlook, The Week, Careers 360, Data Quest CMR and many more.
- The University strives for excellence by sending various proposals, like: (i) Proposal to Government of Gujarat for granting the status of ‘Centre of Excellence’ to Nirma University, (ii) Proposal to UGC for granting a ‘Centre with Potential of Excellence in Particular Area (CPEPA)’
- All the institutes under the University have dedicated Internal Quality Assurance Cells (IQAC). The IQAC is conceived as a mechanism to build and ensure a quality culture at the institutional level. The committee comprises internal and external members and meets frequently.
- The University has also organized a national seminar on ‘Best Practices for enhancement of Institutional Quality and Excellence’ during May 24-25, 2012 with the support of NAAC.
- The University organised a National Conference on Higher Education on April 17, 2013.

6.2 Strategy Development and Deployment

6.2.1 *Does the university have a perspective plan for development? If yes, what aspects are considered in the development of policies and strategies?*

(i) Vision and mission, (ii) Teaching and learning, (iii) Research and development, (iv) Community engagement, (v) Human resource planning and development, (vi) Industry interaction, (vii) Internationalisation

The University has developed a Strategic Plan for the period 2014-19. It took the University one year to develop the plan as it involved a rigorous exercise and participation from all stakeholders.

Each institute has its specific environment and challenges. Thus, the institutes differ in their strategic plans. Thus, the strategic plan consists of the plan of the University as well as those of different Institutes.

The following are the underlying strategies included in the strategic plan:

Strategic Goal 1: To become a student centric institution

Objective 1: To provide career opportunities to the students

Objective 2: To maintain high level of student satisfaction

Strategic Goal 2: To develop Faculty for Excellence in Instruction and Research

Objective 1: To have sufficient faculty members

Objective 2: To conduct Faculty Development Programmes

Strategic Goal 3: To develop Faculty for Excellence in Research

Objective 1: To promote Minor and Major Research Projects

Objective 2: To increase publications

Strategic Goal 4: To facilitate the growth of the University

Objective 1: To increase academic programmes

Objective 2: To add modern infrastructure

Objective 3: To modernise Labs, Libraries and Computing Facilities

While preparing the detail policies and strategies of the Strategic Plan, the following parameters are considered:

Vision and Mission:

- The University Vision and Mission emphasize on the all-round development of its students. The same spirit is reflected in the strategic plan of the University.
- The strategic plan was prepared with an aim to provide outstanding programmes at Under-graduate (UG) and Post-graduate (PG) levels; offering continuing education programmes; to be a research leader advancing the frontiers of engineering and science through increasingly multidisciplinary initiatives; and to serve the citizenry and industry as an agent of technological, economic and educational innovations and advancements.

Teaching and Learning:

- In the current Strategic Plan, it has been decided to implement 'Outcome Based Education (OBE)' at both UG and PG level programmes. For this necessary modifications in the curriculum will be made in-line with the Graduate Attributes (GAs) and Bloom's Revised Taxonomy. Also, the teaching, learning and evaluation methodologies are being changed accordingly.
- Also, it was also decided to initiate the 'Project based Learning' approach at all UG and PG programmes.
- Identifying the areas and exploring the possibilities of offering interdisciplinary programme jointly by various departments.
- Offering more institute and department level courses of interdisciplinary nature every semester.
- Encouraging Interdisciplinary Projects. Supporting the interdisciplinary ideas, nurturing and incubating them with initial seed money and extending after development supports for commercialization of the product.

Research and Development:

- Research and Development is also given top priority in the strategic planning. More emphasis is given to increase research, consultancy and testing in interdisciplinary areas.
- Implementation of the Research Policy.
- A department level committee is to be constituted in order to identify the thrust research areas of the department.
- Inviting / recruiting distinguished researchers and creating research chairs for leading and strengthening thrust areas.
- Development of intellectual property management system. Conducting patent awareness / IPR awareness seminars.

Community Engagement:

- Community and extension services are given priority in the strategic plan. It has been decided to enhance the social responsibility amongst the students and faculty members.
- Involving all the Students' Associations to participate in the extension activities.
- Signing MOUs to work with NGOs for defined societal activities.
- Conducting Awareness Programmes to inculcate social responsibilities amongst the students.

Human Resource Planning and Development:

- One of the important goals of the Strategic Plan is human resource planning and development. Accordingly, faculty recruitment and development is taken very seriously and a thorough planning is being done.
- Increasing faculty strength at the senior level with good research / industry experience and enhancing the competency of the existing faculty is in the main agenda of human resource development.
- Advertising the vacant faculty position with wide publicity at the international level, offering attractive packages and academic flexibilities to the deserving candidates are the key ingredients of faculty recruitment.
- To train more faculty members through Industrial Training, STTPs, Workshops, Seminars, Refresher Courses, orientation programmes, etc.

Industry Interaction:

- Industry Institute Interaction is covered in the University Strategic Plan. Hence, it is proposed to identify the potential industries and to approach them for consultancy, testing, training, etc.
- Providing customized consultancy services to the industry on live problems.
- Organizing Industry Meets.

Internationalisation:

- In the Strategic Plan of the University, it is envisaged to become a leading national university with well-structured curriculum of all UG and PG programmes, state-of-the-art infrastructure, highly qualified and committed faculty members and selection of an appropriate group of

talented students.

- In addition, the University also focuses on collaborating with reputed foreign universities for student and faculty exchange programmes.

6.2.2 ***Describe the university's internal organizational structure and decision making processes and their effectiveness.***

- The University has an efficient and robust organizational structure. The University is governed under the Act passed by the Gujarat Legislative Assembly U/s. 8 of the University. The following bodies are defined as Authorities of the University:
 - a) The Board of Governors
 - b) The Academic Council
 - c) The Finance Committee
 - d) Such other authorities as may be declared by the Regulations to the authorities of the University.
- Under clause (A), the University has constituted many Academic Bodies, like those of Board of Studies, Area Committees, Faculties, three different Examination Committees, etc., which are mentioned in organization chart of the Bodies and Authorities, given in Annexure 6.2.2-a (attached at the end of this criterion).
- The President is the Chancellor of the University. The officers of the University are: Vice-President, Director General, Chief Operating Officer, Director (Academic & General Administration), Executive Registrar, Dean - Faculty of Technology and Engineering (FoTE), Dean - Faculty of Management (FoM), Dean - Faculty of Pharmacy (FoP), Dean - Faculty of Science (FoS), Dean - Faculty of Law (FoL), Dean - Faculty of Architecture (DoA) and Dean - Faculty of Doctoral Studies and Research (FDSR). In addition to these, Academic Development and Research (ADR) Cell, Coordination Committee, Internal Quality Assurance Cell (IQAC), etc. are also in place for the smooth functioning of the academic and administrative affairs. The Organizational set-up of the authorities of the University is given in Annexure 6.2.2-b (attached at the end of this criterion).
- The administration of the University is decentralized. The Director General, Director (Academic & General Administration), Deans of Faculties and Executive Registrar are the officers of the University. The roles and responsibilities of different authorities are well-defined and sufficient administrative and financial powers are delegated to them to perform their roles effectively.
- For effective internal coordination and monitoring, the Director General interacts with the HoIs and the senior faculty members periodically. At the University level, a monthly Coordination Council meeting of the HoIs with Vice President and Director General is held for overall coordination.
- The respective HoIs interact with HoDs weekly, where all matters including academic, administrative, etc. are discussed for better coordination. The HoD regularly interacts with faculty members and supporting staff of the department.

6.2.3 ***Does the university have a formal policy to ensure quality? How is it designed, driven, deployed and reviewed?***

Yes, the University has a formal policy to ensure quality.

The Quality Policy is designed after thorough discussion during series of meetings. All such meetings were chaired by the Director General. All Heads of the Institutes, Director (Academic & General Administration) and Institute Level IQAC Coordinators took active part in all these meetings and gave their valuable suggestions to prepare the draft of Quality Policy. Finally, the Policy was approved by the competent academic bodies.

The Policy will be driven by the ADR Cell and IQAC under the guidance of Director General. In the policy, there is a provision to review it periodically.

The detailed Quality Policy will be provided to the peer team at the time of visit as Annexure 6.2.3.

6.2.4 ***Does the university encourage its academic departments to function independently and autonomously and how does it ensure accountability?***

Autonomy to the Constituent Institutes:

- The University firmly believes in participative management and all Heads of Institutes and Heads of Departments share responsibilities for the smooth functioning of the institutes and departments.
- The University regulations imbibe the concept of autonomy with accountability. Decentralization is evolved with proper and appropriate delegation of powers by the Board of Governors to the Director General, Heads of Institutions, Heads of Departments and finally to the Section Heads. Delegation of Administrative and financial powers are given to different officers and other statutory bodies through regulations.
- The administration at all levels is decentralized in such a way that the staff from bottom to top can participate in the decision making process.
- In all academic bodies, like Board of Studies, Academic Area Committees, Faculty and Academic Council, Faculty Members, Deans and the Heads of Departments are the members. They have full autonomy as far as academic decision making is concerned.
- There is no interference from the University in majority of academic matters, including (i) inviting visiting and expert faculty members (ii) faculty selection up to Assistant Professor level, (iii) deciding paper setters for various exams, (iv) exam result scrutiny, and (v) changes in the course curriculum, etc.

Ensuring Accountability:

- In case of academic matters, the accountabilities are ensured through self-regulation. Quarterly progress report is sent to the Director General and the University management. Further, Annual Progress Report is presented before the BoG every year.
- All recommendations of the BoS, Academic Area Committee and Faculty are submitted to Academic Council.
- Accountability is also ensured through regular Coordination Committee

meetings, daily meetings, ADR Cell meetings and IQAC meetings.

- The progress of all ongoing funded research projects is monitored by the different committees and periodic reports are sent to the Director General.
- In financial matters, the internal and external audit is carried out by the Chartered Accountants.

6.2.5 ***During the last four years, have there been any instances of court cases filed by and against the institute? What were the critical issues and verdicts of the courts on these issues?***

- During last four years, very few court cases were filed against the University or the constituent institutions. In all the cases, the verdict of the court has been in favour of the decision taken by the University.
- Only in two cases, the University had filed cases in the court against the Fee Regulatory Committee. In those two cases, the verdicts of the High Court and the Supreme Court have been in favour of the University.
- The critical issues involved in these cases were about the prescribing the fee for the different programmes being run under the institutions of University by the Fee Regulatory Committee. The High Court gave direction to Fee Regulatory Committee to revise the fee structure on the basis of justification given by the constituent Institutes of the University.
- The second was about not taking the financial impact of implementation of the revised pay scale based on the 6th Pay Commission recommendations, while prescribing the fee. In this case, the Supreme Court directed the Fee Regulatory Committee to allow the University to get the reimbursement of the additional financial burden through fee in sixth instalments particularly for the payment of arrears.

6.2.6 ***How does the university ensure that grievances/complaints are promptly attended to and resolved effectively? Is there a mechanism to analyse the nature of grievances for promoting better stakeholder-relationship?***

There are both formal and informal mechanisms in place to redress grievances.

Formal Grievance Redressal Mechanism:

- A formal, structured grievance mechanism is present and operated through a Grievance Redressal Cell. The grievance raised is redressed within the stipulated period of time through a committee. There are Grievance Redressal Committees at the Department/Institutes/University level to deal with the grievances of the students.
- The grievances may broadly include the following complaints of the aggrieved students:
 - i) Academic
 - ii) Non-Academic
 - iii) Assessment
 - iv) Victimization
 - v) Attendance
 - vi) Charging of Fees
 - vii) Conduct of Examinations
 - viii) Harassment by the fellow students, etc.

- Also, as per the guidelines of the UGC and the Supreme Court of India, the University has constituted Women Development Cell and Complaint Committee for prevention of women sexual harassment to deal with the cases of grievances concerning any kind of harassment including sexual harassment.

Informal Grievance Redressal Mechanism:

Some of the informal methods of grievance redressal are:

- Exhibit of answer copies of the examinations
- Informal mid-semester feedbacks from the students
- Suggestion boxes, etc.

6.2.7 ***Does the university have a mechanism for analysing student feedback on institutional performance? If yes, what was the institutional response?***

The University has a setup a mechanism of taking feedback from the students on institutional performance.

- All graduating batch students fill online feedback on institutional performance.
- The feedback is discussed in the HoDs' meeting and in the Coordination Committee meeting and necessary actions are taken.

6.2.8 ***Does the university conduct performance audit of the various departments?***

The University is serious about the academic audit of the constituent institutes and the departments. Considering this, a separate portfolio of Academic Audit is created and a senior level professor is appointed to look after the activities.

The University has a mechanism of Academic Audit at three levels, namely:

- i) Audit at the personal level, where the senior professors and the HoDs constantly audit the classroom teaching of the faculty members.
- ii) Audit at the institutions level by an independent committee which conducts the overall audit of each departments / areas in academic, research, extension and other related matters.
- iii) Audit by the University level independent committee for overall assessment of the different academic, research, extension and related aspects of the constituent institutions.

For all such audits, necessary guidelines, forms, etc. are finalized and circulated to the concerned members.

6.2.9 ***What mechanisms have been evolved by the university to identify the developmental needs of its affiliated institutions?***

- Developmental needs of the constituent institutes are identified from time to time through the meetings of the Heads of Institutes with the University Management. Also, such needs are discussed during the regular Coordination Committee meeting and the alternatives are discussed.
- The University has evolved a Strategic Plan for five years after thorough discussion. In this plan, majority of development needs are identified.
- Apart from this, the University has a very structured budget mechanism to identify the financial needs. The annual budget is first discussed at the

institute level, where requirements related to laboratory development, purchase of new hardware and software, addition of new resources in library, student projects, furniture, faculty deputation, etc. are covered.

6.2.10 ***Does the university have a vibrant College Development Council (CDC) / Board of College and University Development (BCUD)? If yes, detail its structure, functions and achievements.***

Not Applicable.

6.3 Faculty Empowerment Strategies

6.3.1 ***What efforts have been made to enhance the professional development of teaching and non-teaching staff?***

Since the inception, the University is giving utmost importance to the professional development of teaching and non-teaching staff. It is covered under three categories, namely (i) Faculty Qualification Improvement Programmes, (ii) Faculty & Staff Development Programmes (iii) Funding for Research Activities.

Faculty Qualification Improvement Programmes:

- Deputation of faculty members for qualification improvement (Ph.D. and PG) programmes to premier national institutes, like IITs and NITs.
- Encouraging the in-house faculty members having B.E./B.Tech. qualification to join Split PG programmes of the University.

Faculty & Staff Development Programmes:

- Understanding the importance of professional development of staff and the faculty members, the University has set-up a dedicated 'Faculty Development' portfolio. A senior professor is assigned the responsibility under the supervision of a core committee headed by the Director General.
- The University regularly organizes various staff development programmes, including Induction Training, Orientation Programme, Refresher Courses, etc.
- Programmes on Research Paper Writing, Project Proposal Writing, Intellectual Property Management, etc. are arranged from time to time.
- The University sponsors faculty members for Short-Term Training Programmes (STTPs), UGC Refresher Courses, Seminars, Workshops and Conferences. Special budget provision is made for all such programmes.
- Mandatory Industrial Training Programmes for faculty members.
- Specialized Training Programmes are arranged for office staff and technical staff.
- Each institute organises research and idea sharing events on a regular basis.

Funding for Research Activities:

- The University provides seed money for minor projects to the faculty. It helps them initiate their research work. Later, they can apply for government funding for their major research projects. Finally,

performance appraisal is also used as a tool of professional development.

- The University gives reimbursement towards purchase of books, subscription of research journals, internet charges, etc.

6.3.2 ***What is the outcome of the review of various appraisal methods used by the university? List the important decisions.***

- The University has adopted 'Performance Based Appraisal System (PBAS)' as per the UGC guidelines for all its Faculty. The PBAS has three categories, namely (i) Teaching, Learning and Evaluation, (ii) Co-curricular, Extension and Professional Development, (iii) Research Publication and Academic Contributions.
- All the faculty members fill the PBAS form and submit to the concerned Head. It is evaluated and reviewed by a team of 2-3 senior faculty members. Finally, all such forms are submitted to the Director's Office.
- The PBAS scores are used for various purposes. Faculty members with PBAS scores not meeting the minimum requirement as suggested in UGC guidelines are called by the Director and necessary guidance is provided. Based on the scores in Category-III, the potential researchers are identified and they are encouraged to focus more on research/consultancy/testing. Likewise, new faculty with less PABS scores were not regularised and their probation period was extended.
- The PBAS scores of consecutive years are used as reference, while deciding the promotion under Career Advancement Scheme.

6.3.3 ***What are the welfare schemes available for teaching and non-teaching staff? What percentage of staff has benefitted from these schemes in the last four years? Give details.***

The University offers the following perquisites to all its employees:

- Medical reimbursement facilities as indoor patient
- Reimbursement of expenditure on children education
- Reimbursement towards expenditure incurred due to relocation
- Reimbursement of expenditure towards books, subscription of research journals, internet charges, etc.
- Reimbursement of expenditure on recreational activities

100 % of the regular employees are benefitted from these schemes.

6.3.4 ***What are the measures taken by the University for attracting and retaining eminent faculty?***

For attracting and retaining eminent faculty, the University has taken the following measures:

- There is a special provision to give higher pay scales to the eminent faculty.
- Faculty welfare schemes, such as medical reimbursement facilities, reimbursement of expenditure on children education, reimbursement towards expenditure incurred due to relocation, etc. are in place.
- Allowance to visit home town, LTC
- The University provides a conducive environment and academic flexibility

to all senior/ eminent faculty members. It is important to note that faculty are felicitated for their outstanding achievements on the Foundation Day.

- The University provides funding to the faculty members for minor research projects. It gives Registration fees, TA/DA to faculty members for attending workshops, seminars, conferences within and outside India.
- The University has a generous policy to depute teachers for qualification improvement with full salary and study leave.
- Pick-up and drop facility is provided to all senior faculty members.

6.3.5 ***Has the university conducted a gender audit during the last four years? If yes, mention a few salient findings.***

The University is very serious about the issue of gender sensitization and supports gender equality to full extent. Within the University, two bodies working for the women empowerment, gender equality and creating safe working conditions, namely Women Development Cell and Complaint Committee for Prevention of Women Sexual Harassment. Also, the University organizes gender sensitization programmes. However, no formal gender audit is carried out.

6.3.6 ***Does the university conduct any gender sensitization programmes for its faculty?***

The following gender sensitization programmes were arranged by the University:

- A Gender Sensitization Rally was organized on April 18, 2013.
- During the University 10 year's celebrations, a cultural programme was organized with a theme of 'Gender Sensitization'. Also, T-Shirts symbolizing gender equality were distributed to the staff, students and faculty members.
- A workshop on 'Gender Sensitization' for faculty and non-teaching staff members was organised on January 11, 2014.
- Seven sessions of self-defence workshop for girl students of Institute of Technology were also arranged.

6.3.7 ***What is the impact of the University's Academic Staff College Programmes in enhancing the competencies of the university faculty?***

The University mainly runs professional courses, such as engineering, management, pharmacy, architecture, etc. Thus, it does not have a separate Academic Staff College.

However, considering the importance of Faculty and Staff development activities, the University has set-up its own system of 'Faculty Development' under the supervision of a core committee headed by the Director General. A senior professor is given the charge of organizing and monitoring staff development activities.

The Faculty Development programmes are arranged in four different categories, namely

- i) Induction Training Programme of 4 weeks for newly recruited faculty members before they go for class-room teaching
- ii) Orientation Programme of 2 weeks for teachers having 2-5 years of teaching experience

- iii) Refresher Course of 2 weeks
- iv) Research Orientation of 2 weeks

6.4 Financial Management and Resource Mobilization

6.4.1 *What is the institutional mechanism available to monitor the effective and efficient use of financial resources?*

- The University has prescribed regulations for monitoring the effective and efficient use of financial resources. For maintenance of account, internal audit and systematic process of preparing annual budget are available.
- For every expenditure, there are well-defined budget heads and separate budget is allocated for each head. Also, throughout the year, budget record in each head is maintained and thus financial resources are monitored effectively.
- There is a practice of both internal and external audit by chartered accountants is in place.
- There is a mechanism of scrutinizing the proposals of equipment and book purchase by a separate committee.

6.4.2 *Does the university have a mechanism for internal and external audit? Give details.*

- The University has a structured mechanism of internal and external audit of all bills.
- The accounts of the University are being audited on a concurrent basis by an Internal Auditor who is a Chartered Accountant.
- The Audit is being conducted as per the various rules and regulations framed by the University within the Framework of Delegation of Powers.
- There is a system of Pre-Audit of all the expenditure above ₹10,000/- before payment.
- All the expenditure bills/cash memo are signed by competent authority and audited by the designated staff of Account Section.
- The external audit is done by an auditing agency appointed by the Board of Governors, who is also a statutory auditor of the University.
- Annual accounts along with the Statutory Auditor Report are submitted to Board of Governance (BoG) every year.

6.4.3 *Are the institution's accounts audited regularly? Have there been any major audit objections, if so, how were they addressed?*

Yes, the institution's accounts are audited regularly. There has not been any major audit objection.

6.4.4 *Provide the audited income and expenditure statement of academic and administrative activities of the last four years.*

Please refer to Annexure 6.4.4 (attached at the end of this criterion) for audited income and expenditure statement of the University for the last four years.

6.4.5 *Narrate the efforts taken by the university for resource mobilization.*

For resource mobilization, the following measures are taken by the University:

- All the programmes offered by the University are self-financed. Thus,

from time-to-time fee revision as approved by the State Fee Regulatory Committee is the major source of resource for the University.

- The University encourages faculty to apply for research projects to the external funding agencies, such as DST, DBT, ISRO, Gujarat Council on Science and Technology (GUJCOST), DRDO, etc.
- The University also mobilises resources through training and testing/consultancy/environment auditing work, etc.

6.4.6 ***Is there any provision for the university to create a corpus fund? If yes, give details.***

The Corpus Fund of ₹ 10.00 Crores has been invested in Government of India 8% Saving (Taxable) Bonds through ICICI Bank.

6.5 Internal Quality Assurance System

6.5.1 ***Does the university conduct an academic audit of its departments? If yes, give details.***

- In past, the Academic Audit was carried out informally by the Institute level IQAC. Now, the Academic Audit is made structured and rigorous.
- A senior level professor is appointed to look after Academic Audit related activities.
- Systematic guidelines and forms are designed for academic audit and implementation has been initiated.

6.5.2 ***Based on the recommendations of the academic audit, what specific measures have been taken by the university to improve teaching, learning and evaluation?***

Based on the peer faculty class-room teaching observations (faculty audit), the following measures are taken:

- The deficiencies and limitations observed during the audit are informed to the concerned teacher.
- Wherever required, the deficiencies are communicated in written to the concerned faculty member and a copy of the same is kept in the CR file.
- The HoD/Area Chair keeps a periodic check to see if the faculty have overcome the deficiencies fully and report of the same is submitted to the Head of the Institute.
- Based on the common weaknesses emerged during the audit, the special lectures/orientation programme are arranged and relevant topics are included.
- Wherever required, the junior faculty members are assigned mentors.

6.5.3 ***Is there a central body within the university to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?***

- The University has established ADR Cell in year 2008 for the continuously review of the teaching learning process, including curricula, pedagogy, and assessment.
- The functions of this Cell are primarily to monitor and guide the constituent Institutes and to raise the standard of academic and research activities.

- The ADR Cell comprise of Director, Deputy Director and three Coordinators. The Cell is supported by a full time secretary.
- The Cell works continuously studying, researching, curating, analysing, conceptualising and implementing the best and innovative practices in all the institutes.
- Some of the noteworthy contribution of ADR Cell is mentioned below:
 - ✓ Introduction of ‘Outcome Based Education (OBE)’ in all the constituent institutes of University
 - ✓ Improvisation of different syllabi
 - ✓ Organisation of various workshops/faculty development programmes on teaching-learning methodology, research, etc.
 - ✓ Development of new Student Feedback Forms
 - ✓ Implementation of the ICT enabled best practices
 - ✓ Implementation of University Research Policy
 - ✓ Implementation of University Mentoring Policy
 - ✓ Introduction of rigorous Academic Audit system

6.5.4 ***How has IQAC contributed to institutionalizing quality assurance strategies and processes?***

- Internal Quality Assurance Cell is conceived as a mechanism to build and ensure a quality culture at the university/institute level. The IQAC comprises internal members as well as external members. It meets frequently to review and recommend various quality steps.
- The IQAC contributes in various areas pertaining to quality assurance such as teaching-learning, research, etc.
- Several noteworthy contribution of IQAC are mentioned below:
 - ✓ Significant contribution in revamping the syllabus and course structure of all programmes
 - ✓ Introduction of supplementary/enrichment programmes at all levels
 - ✓ Introducing ‘Outcome Based Education (OBE)’ for all ongoing programmes
 - ✓ Introducing ‘Project Based Learning’
 - ✓ Offering MOOC/NPTEL Courses as Special Audit Courses
 - ✓ Creating Blogs/Course Website for all the courses

6.5.5 ***How many decisions of the IQAC have been placed before the statutory authorities of the university for implementation?***

All major decisions of IQAC, where involvement of statutory authorities is required, have been place before the statutory bodies.

6.5.6 ***Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.***

Currently, there are external members in the IQAC Committees of the University and of all Institutes. They bring a new perspective to the quality dimension. Their feedback is valuable.

6.5.7 ***Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?***

- All newly admitted students in a group of 25-30 students are allotted a

mentor. The mentor continuously interacts with the students and bifurcate the students in to weak, slow and fast learners.

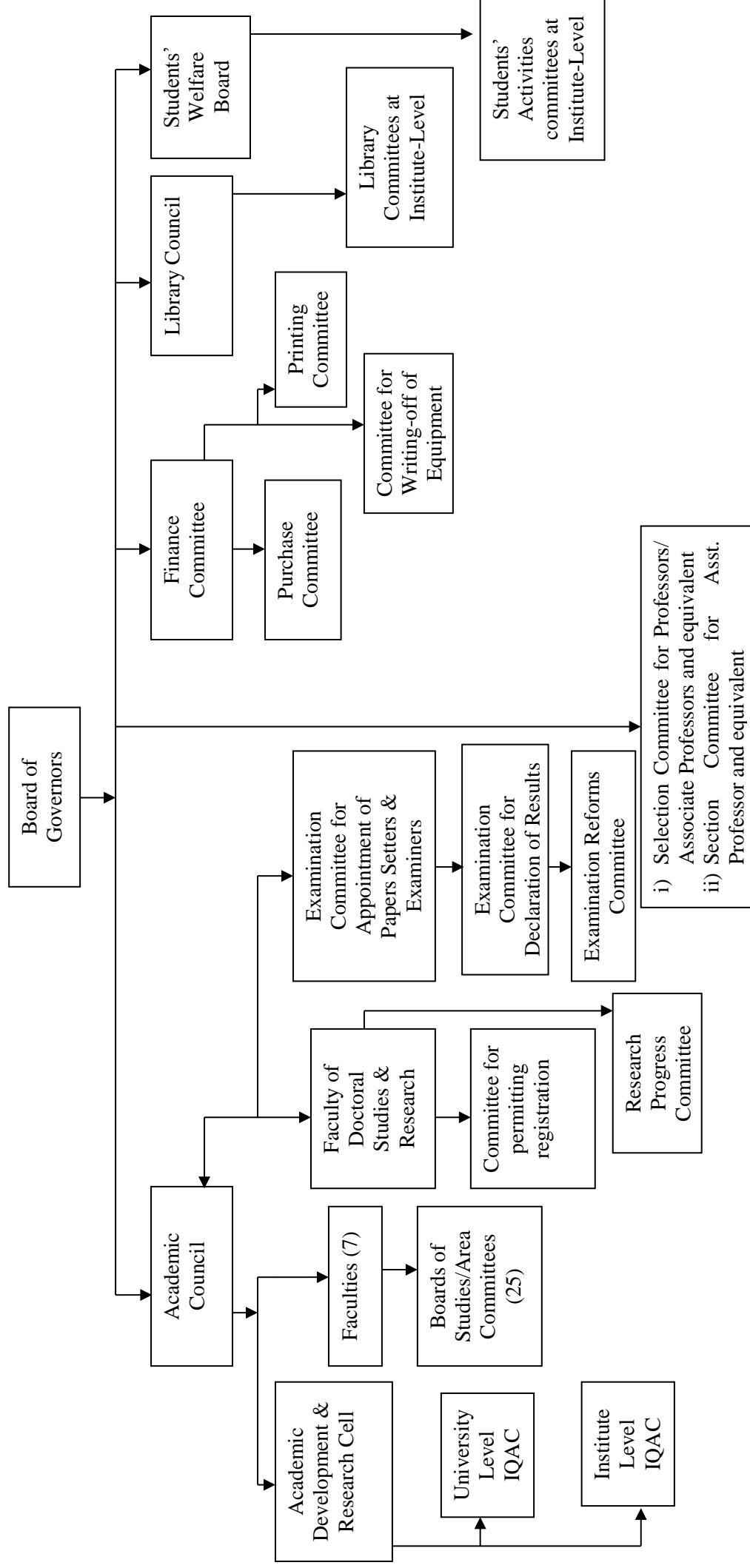
- During all mentoring, the weak and slow learners are given special attention. Gradual improvement is observed in all such students.

6.5.8 ***What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?***

- The institutes quarterly send their progress/review reports to the Director General.
- The Director General addresses the faculty twice in a year and listens to their views.
- The Coordination Committee comprises of the Vice President, Director General, Chief Operating Officer, Executive Registrar, and all Heads of the Institutes meets every month to discuss about various academic and administrative matters.
- Once in a week, the Head of the Institute (Director) holds a meeting with all the HoDs and discusses academic planning, research activities, expert lectures, field trips, student counselling, student placement, faculty feedback, seminars/workshop/training, syllabus updating, infrastructure requirements, etc.
- Also, twice during the semester, the Director meets all the faculty members of different departments and discusses various aspects of teaching-learning and research.
- All financial matters are continuously reviewed by the Chief Accountant and the Auditors.

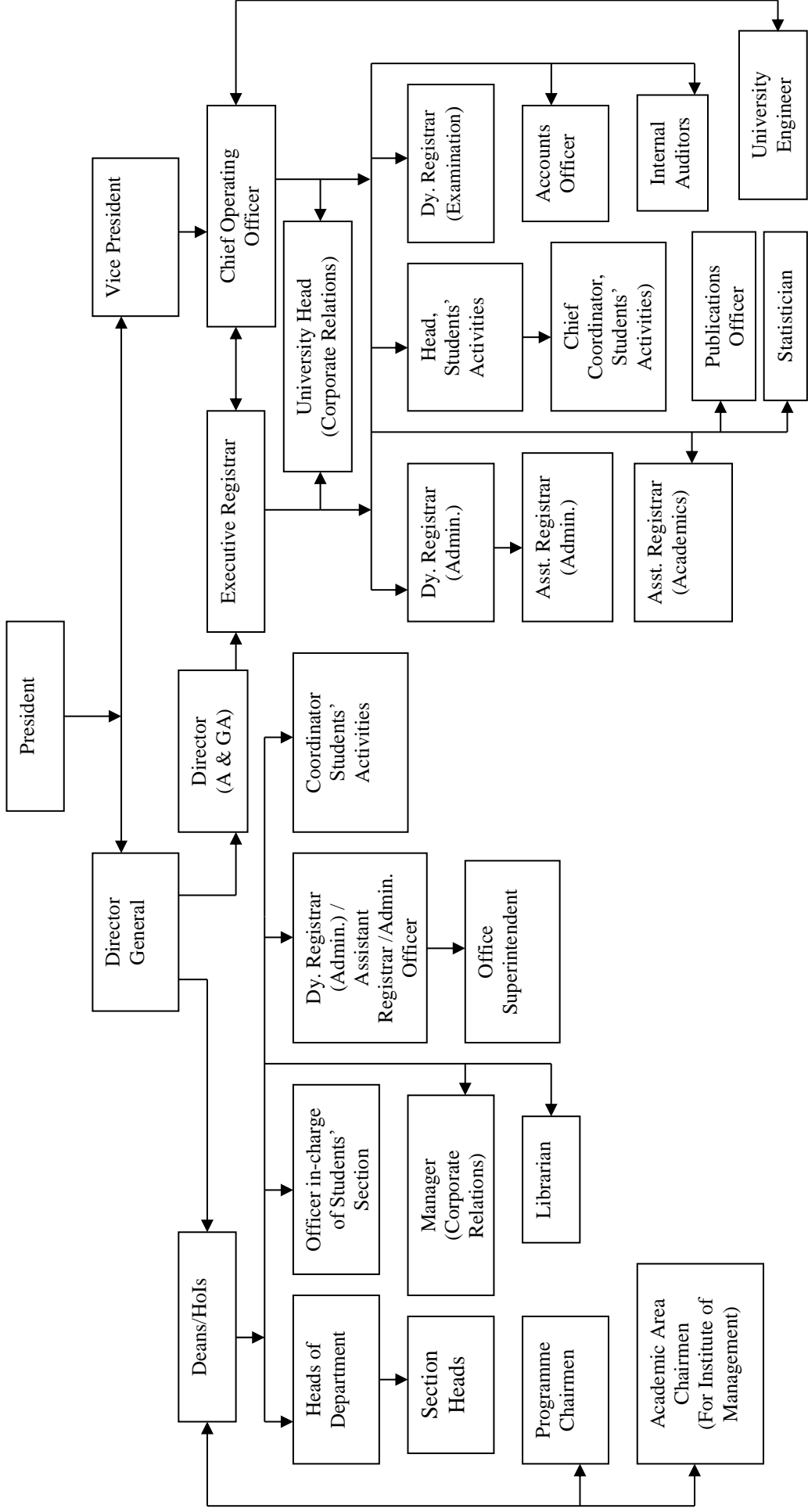
ANNEXURE 6.2.2-a

Organizational Chart of Nirma University Authorities, Councils, Committees



ANNEXURE - 6.2.2-b

Organizational Set-up of the University Authorities



Annexure - 6.4.4

Audited Income and Expenditure Statement of the University for the Last Four Years

NIRMA UNIVERSITY
CONSOLIDATED BALANCE SHEET AS ON 31st MARCH 2011

FUNDS AND LIABILITIES	Amount		Schedule	PROPERTY AND ASSETS		Schedule	Amount	
	31.03.2011	31.03.2010		31.03.2010	31.03.2011		31.03.2010	31.03.2011
Endowment Fund						3		
Opening Balance	100,000,000	100,000,000		Fixed Assets			11,571,073	10,651,978
				Gross Block			242,773,971	189,230,805
				Central Office			130,083,872	126,569,653
				Institute of Technology			22,441,186	20,115,402
				Institute of Management			69,847,819	67,946,128
				Institute of Diploma Studies			35,296,029	32,536,504
				Institute of Pharmacy			135,458,788	94,475,386
				Institute of Science			425,745	425,745
				Institute of Law				
				IP CELL				
	36,381,688	26,818,691		Less: Depreciation			647,898,483	541,951,601
	198,819,739	151,618,385						
	128,522,981	88,306,950						
	50,329,082	38,328,135						
	37,994,541	25,543,893		Central Office			4,858,551	3,726,756
	4,957,782	3,281,120		Institute of Technology			65,929,192	65,929,192
	13,900,093	5,816,630		Institute of Management			56,468,613	56,468,613
		470,905,906		Institute of Pharmacy			9,414,205	9,414,205
				Institute of Diploma Studies			33,619,393	27,557,598
				Institute of Science			7,949,353	4,320,472
				Institute of Law			20,757,959	8,111,685
				IP CELL			340,354	324,706
Development of PG Programme							233,854,385	175,853,227
Institute of Technology		784,610		Net Block				
				Central Office			6,712,522	6,925,222
				Institute of Technology			154,682,256	123,301,613
				Institute of Management			64,228,308	70,101,040
				Institute of Diploma Studies			10,059,690	10,701,197
				Institute of Pharmacy			36,228,426	40,388,530
				Institute of Science			27,346,676	28,216,032
				Institute of Law			114,700,829	86,363,701
				IP CELL			85,391	101,039
							414,044,098	366,098,374
Project Fund				Add: Work in Progress				
Institute of Pharmacy	1,850,197	2,022,603		Central Office			1,170,842	NIL
Institute of Technology	3,682,323	3,037,276		Institute of Technology			200,000	10,001,406
Institute of Management	344	860		Institute of Management			NIL	300,000
				Institute of Pharmacy			NIL	702
				Institute of Science			NIL	15,656
				Institute of Law			500,000	13,190,269
								23,508,053
							1,870,842	

NIRMA UNIVERSITY CONSOLIDATED BALANCE SHEET AS ON 31 st MARCH 2011						
FUNDS AND LIABILITIES	Schedule	PROPERTY AND ASSETS		Schedule	Amount	
		31.03.2011	31.03.2010		31.03.2011	31.03.2010
Investment by						
Nirma Education and Research Foundation		NIL	57,855,368	Investments Relief Bonds issued by RBI Central Office		100,000,000
Deposits (without Interest)	1			Current Assets, Loans and Advances		
Institute of Technology		16,346,902	12,102,932	Closing Stock		725,732
Institute of Management		5,766,167	5,131,210	Central Office	771,138	588,547
Institute of Diploma Studies		8,691,779	6,126,529	Institute of Technology	610,386	160,256
Institute of Pharmacy		2,761,300	3,461,690	Institute of Diploma Studies	178,398	1,449,315
Institute of Science		1,102,990	829,000	Institute of Pharmacy	1,693,221	810,363
Institute of Law		2,244,650	1,061,000	Institute of Science	589,508	3,734,213
			36,913,788		3,842,651	
Unsecured Loans				Loans and Advances		
			131,100,000	Central Office	14,290,054	3,920,643
Liabilities	2			Institute of Technology	5,065,387	4,956,334
Central Office		12,748,219	7,867,868	Institute of Management	4,257,236	3,654,879
Institute of Technology		130,726,053	106,245,561	Institute of Diploma Studies	705,372	944,732
Institute of Management		48,311,298	41,492,036	Institute of Pharmacy	3,128,284	2,492,097
Institute of Diploma Studies		28,617,607	22,265,311	Institute of Science	1,278,615	920,149
Institute of Pharmacy		17,521,760	29,180,626	Institute of Law	1,182,045	1,098,048
Institute of Science		3,959,582	4,764,336			17,986,882
Institute of Law		15,237,799	17,357,765		29,906,593	
			257,122,318	Cash and Bank Balances		
				Central Office	28,427,786	15,176,067
				Institute of Technology	195,812	7,457,923
				Institute of Management	71,894	7,904,602
				Institute of Diploma Studies	3,045,844	4,363,241
				Institute of Pharmacy	5,039,426	6,507,112
				Institute of Science	11,298	659,979
				Institute of Law	2,866,613	2,630,496
				JIPCELL	225,582	209,625
					39,884,255	44,909,045

NIRMA UNIVERSITY

CONSOLIDATED BALANCE SHEET AS ON 31ST MARCH, 2012

FUNDS AND LIABILITIES	PROPERTY AND ASSETS		SCHEDULE	Rupees	
	31.03.2012	31.03.2011		31.03.2012	31.03.2011
Endowment Fund Central office	100,000,000	100,000,000	3	663,486,966	647,898,483
Building Corpus Fund Received during the year	16,100,000	NIL		287,502,383	233,854,385
Scholarship Fund Received during the year	32,345,963	NIL			414,044,098
Reasonable Surplus for Growth & Development	613,970,224	470,905,906			1,870,842
Development of PG Programme Institute of Technology	282,597	784,610	4	5,100,719	3,842,651
Project Fund	5,673,669	5,532,804		94,613,027	50,459,937
Deposits (without Interest)	44,491,146	36,913,788	5	28,735,246	39,531,311
Unsecured Loans	100,500,000	131,100,000		572,432,495	412,810,647
Liabilities	265,044,514	257,122,318			
TOTAL	1,178,407,853	1,002,359,486	TOTAL	1,178,407,853	1,002,359,486

Notes Forming part of Accounts 14

As per our report of even date attached to the consolidated accounts of Nirma University

For Hemanshu Shah & Co
Chartered Accountants
Firm Registration No. 122/2/2011

(H.C. SHAH)
Proprietor

Membership No. 36441
Place : Ahmedabad
Date: August 21, 2012

Executive Registrar
Nirma University

Place : Ahmedabad
Date: August 21, 2012

NIRMA UNIVERSITY

CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31st MARCH, 2012

INCOME	SCHEDULE	2011-12		2010-11		EXPENDITURE	SCHEDULE	2011-12		2010-11	
		Rupees	Rupees	Rupees	Rupees			Rupees	Rupees		
Fees Income	6	715,321,591	655,960,502			Salaries and Allowances	10	414,934,306	391,475,246		
Other Income	7	30,672,969	28,357,388			Visiting Faculty Expenses		6,670,095	6,155,729		
Surplus on Diesel/Petrol Activity	8	(36,685)	22,713			Students Training and Welfare Expenses	11	35,984,557	37,621,786		
Newly Student Fund	9	1,521,598	1,150,164			Library Periodicals and Membership Fees Expenses		16,290,758	16,217,768		
Donation for Building Corpus		16,100,000	NIL			Electricity Expenses		18,446,163	16,369,652		
Excess of Expenditure Over Income		159,621,848	122,890,138			Seminar Expenses		6,403,469	4,377,666		
						Staff Welfare and Training Expenses		15,675,119	9,342,166		
						Administration and Other Expenses	12	62,280,643	67,346,278		
						Provision for Depreciation	13	53,156,277	57,585,354		
						Allocation of Depreciation from Nirma Education and Research Foundation		101,849,713	70,695,748		
						Amount transferred to Building Corpus Fund		16,100,000	NIL		
						Amount transferred to Scholarship Fund		32,345,903	NIL		
						Reasonable Surplus Fund For Growth and Development Transferred to Central Office (20% of Fees Income)		143,564,318	131,192,102		
TOTAL		923,201,321	808,386,905			TOTAL		923,201,321	808,386,905		

Notes Forming part of Accounts

14

As per our report of even date attached to the consolidated accounts of Nirma University

For: Hemanshu Shahi & Co.
Chartered Accountants
Firm Registration No. 124,19W



(Signature)
Vice President
Nirma University

(B.C.SHAH)
Proprietor
Membership No 36441
Place: Ahmedabad
Date: August 21, 2012

(Signature)
Executive Registrar
Nirma University
Place: Ahmedabad
Date: August 21, 2012

NIRMA UNIVERSITY

CONSOLIDATED BALANCE SHEET AS ON 31ST MARCH, 2013

FUNDS AND LIABILITIES	SCHEDULE	31.03.2013 ₹	31.03.2012 ₹	PROPERTY AND ASSETS	SCHEDULE	31.03.2013 ₹	31.03.2012 ₹
<u>Endowment Fund</u> Central office		100,000,000	100,000,000	<u>Fixed Assets</u>	4	791,132,566	663,486,966
<u>Building Corpus Fund</u>		20,100,000	16,100,000	Gross Block		343,066,080	287,302,383
<u>Scholarship Fund</u>		68,638,103	32,345,903	Less: Depreciation			376,184,583
<u>Resonable Surplus for Growth & Development</u>		794,740,585	613,970,224	Net Block		448,066,486	1,341,789
<u>Development of PG Programme</u> Institute of Technology		272,710	282,397	Add: Work in Progress		2,959,819	377,526,372
<u>Project Fund</u>		6,766,903	5,673,669	<u>Investments</u>		100,000,000	100,000,000
<u>Secured Loan</u>	1	10,232,476	NIL	Central office			
<u>Deposits (without Interest)</u>	2	49,272,273	44,491,146	<u>Current Assets, Loans and Advances</u>		4,171,806	5,100,719
<u>Unsecured Loans</u>	3	374,743,672	265,044,514	Closing Stock		223,492,329	94,613,027
<u>Liabilities</u>				Loans, Advances and Receivables	5	32,515,392	28,735,240
TOTAL		1,424,766,722	1,178,407,853	Cash and Bank Balances		613,560,890	572,432,495
				<u>Balance in Income and Expenditure Account</u>	6		
				TOTAL		1,424,766,722	1,178,407,853

Notes Forming part of Accounts

15

As per our report of even date attached to the consolidated accounts of Nirma University
For Hemanshu Shah & Co.
Chartered Accountants
Firm Registration No. 127439W

A.S. Baid
Executive Registrar
Nirma University

Place : Ahmedabad
Date : September 28, 2013

H.C. Shah
Vice President
Nirma University

02

(H.C. SHAH)
Proprietor
Membership No 36441
Place : Ahmedabad
Date : September 28, 2013

NIRMA UNIVERSITY
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31st MARCH, 2013

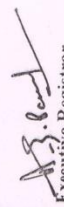
INCOME	SCHEDULE	2012-13 ₹	2011-12 ₹	EXPENDITURE	SCHEDULE	2012-13 ₹	2011-12 ₹
Fees Income	7	903,851,797	715,321,591	Salaries and Allowances	11	437,460,839	414,934,306
Other Income	8	30,213,583	30,672,969	Visiting Faculty Expenses		5,952,211	6,670,095
Surplus (Deficit) on Diesel /Petrol Activity	9	NIL	(36,685)	Students Training, Welfare and Activity Expenses	12	40,336,224	35,984,557
Needy Student Fund	10	2,555,089	1,521,598	Library Periodicals and Membership Fees Expenses		15,656,929	16,290,758
Donation for Building Corpus		4,000,000	16,100,000	Electricity Expenses		19,654,353	18,446,163
Excess of Expenditure Over Income		41,128,395	159,621,848	Seminar Expenses		6,527,133	6,403,469
				Staff Welfare and Training Expenses		17,415,922	15,675,119
				Administration and Other Expenses	13	82,453,589	62,280,643
				Provision for Depreciation	14	60,293,911	53,156,277
				Allocation of Depreciation from Nirma Education and Research Foundation		73,558,857	101,849,713
				Amount transferred to Building Corpus Fund		4,000,000	16,100,000
				Amount transferred to Scholarship Fund		37,668,535	32,345,903
				Reasonable Surplus Fund For Growth and Development Transferred to Central Office(20% of Fees Income)		180,770,361	143,064,318
TOTAL	15	981,748,864	923,201,321	TOTAL		981,748,864	923,201,321

Notes Forming part of Accounts


As per our report of even date attached to the consolidated accounts of Nirma University

For Hemanshu Shah & Co.
Chartered Accountants

Firm Registration no 122339W


Executive Registrar
Nirma University

Place : Ahmedabad
Date : September 28 , 2013


Vice President
Nirma University

(H.C.SHAH)
Proprietor

Membership No 36441
Place : Ahmedabad

Date : September 28 , 2013

03

NIRMA UNIVERSITY						
CONSOLIDATED BALANCE SHEET AS ON 31ST MARCH, 2014						
FUNDS AND LIABILITIES	SCHEDULE	PROPERTY AND ASSETS		SCHEDULE	31.03.2014	
		31.03.2013	31.03.2014		31.03.2013	31.03.2014
<u>Endowment Fund</u>		100,000,000	100,000,000	6	867,789,776	791,132,566
<u>Building Corpus Fund</u>		20,100,000	20,100,000		396,656,671	343,066,080
<u>Scholarship Fund</u>	1	90,213,092	68,638,103			448,066,486
<u>Reasonable Surplus for Growth & Development</u>		1,018,224,266	794,740,585			2,959,819
<u>Development of PG Programme Institute of Technology</u>		265,444	272,710			451,026,305
<u>Project Fund</u>	2	5,309,130	6,766,903	7	279,924,597	32,515,392
<u>Secured Loan</u>	3	NIL	10,232,476			
<u>Deposits (without Interest)</u>	4	52,346,767	49,272,273	8	572,377,927	613,560,890
<u>Liabilities and Provisions</u>	5	396,900,056	374,743,672			
TOTAL		1,683,358,755	1,424,766,722	TOTAL	1,683,358,755	1,424,766,722

Notes Forming part of Accounts 16

As per our report of even date attached to the consolidated accounts of Nirma University For Hemanshu Shah & Co. Chartered Accountants Firm Registration No. 122439W



H.S. Shah
Executive Registrar
 Nirma University

H.C. Shah
President
 Nirma University

Place : Ahmedabad
 Date : July 7, 2014

02

(H.C. SHAH)
 Proprietor
 Membership No 36441
 Place : Ahmedabad
 Date : July 7, 2014

NIRMA UNIVERSITY							
CONSOLIDATED INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED ON 31st MARCH, 2014							
INCOME	SCHEDULE	2013-14 ₹	2012-13 ₹	EXPENDITURE	SCHEDULE	2013-14 ₹	2012-13 ₹
Fees Income	9	1,090,848,404	903,851,797	Salaries and Allowances	12	477,572,533	437,460,839
Fee Recovered for the year 2012-13		26,570,000	NIL	Visiting Faculty Expenses		10,706,945	5,952,211
Other Income	10	50,449,125	30,213,583	Students Training, Welfare and Activity Expenses	13	53,426,183	40,171,690
Needy Student Fund	11	1,810,102	2,555,089	Library Periodicals and Membership Fees Expenses		19,112,012	15,656,929
Donation for Building Corpus		NIL	4,000,000	Electricity Expenses		19,514,783	19,654,353
				Seminar Expenses		8,140,836	6,527,133
				Staff Welfare and Training Expenses		18,263,517	17,415,922
				Administration and Other Expenses	14	102,762,366	82,618,123
				Provision for Depreciation	15	67,130,931	60,293,911
				Allocation of Depreciation from Nirma Education and Research Foundation		66,202,971	73,558,857
				Amount transferred to Building Corpus Fund		NIL	4,000,000
				Amount transferred to Scholarship Fund		62,177,910	37,668,535
				Reasonable Surplus Fund For Growth and Development Transferred to Central Office(20% of Fees Income)		223,483,681	180,770,361
				Excess of Income(Expenditure) over Expenditure(Income)		41,182,963	(41,128,395)
TOTAL		1,169,677,631	940,620,469	TOTAL		1,169,677,631	940,620,469

As per our report of even date attached to the consolidated accounts of Nirma University
 For Hemanshu Shah & Co.
 Chartered Accountants
 Firm Registration no 12249NW
 (H.C.SHAH)
 Proprietor
 Membership No 36441
 Place : Ahmedabad
 Date : July 7 , 2014



(Signature)
 President
 Nirma University
 03

(Signature)
 Executive Registrar
 Nirma University
 Place : Ahmedabad
 Date : July 7 , 2014
 3

Notes Forming part of Accounts 16



CRITERION VII:

**INNOVATIONS
AND
BEST PRACTICES**

CRITERIA VII: INNOVATIONS AND BEST PRACTICES

7.1 Environmental Consciousness

7.1.1 *Does the University conduct a Green Audit of its campus?*

The University has constituted a committee for conducting Green Audit of the University. The audit is conducted by the committee on a yearly basis. The committee has prepared an Environmental Policy. It has also developed a series of action plans to supplement each of the University's environmental policy objectives.

7.1.2 *What are the initiatives taken by the University to make the campus eco-friendly?*

The University gives the utmost importance to its environment. It keeps the campus sylvan and pollution free and takes care of the entire campus through various measures. The green environment is maintained consciously by planting the various types of plants. Over the years, the trees have grown up and the green coverage has gone up.

All attempts are being made for the minimal consumption of energy in the campus. The special measures implemented for saving electrical energy are as follows:

- TS type tube-lights are used at certain places
- Installation of LED light fixtures in all new construction work
- Campus lighting using LED bulbs
- Installation of Variable Refrigeration Volume (VRV) based Systems in Air Conditioning
- Installation of Variable Frequency Driven (VFD) based Pumps for Water Supply System
- Installation of capacitors for maintaining power factor/load factor at the University electric sub-station
- LCD monitors in most of the computers
- Latest and updated computer peripherals in most of the computers
- All the employees of the University have been motivated to consume energy economically in the staff rooms, offices, classrooms and the laboratories

Conservation of Water:

As far as the conservation of water is concerned, the water is supplied in all water rooms through press cock, which is an auto off type of cock, thus ensuring no wastage of water. A sewage treatment plant, using Fluidised Media Reactor (FMR) technology having 400 m³ per day operating 24 hours with a designed flow rate of 16.66 m³ per hour, has been installed. The treated water is used for low end purposes, such as in toilets for flushing, gardening on the campus etc.

Use of Renewable Energy:

An Organic Waste Converter Machine (OWC), having the capacity of 50kg per batch with batch time of 10 to 15 minutes, the power consumption of 8HP and area occupation of 3m x 4m, is installed and it treats waste food and dry leaves/dry flowers, etc. converting it into organic manure, which is used in maintaining the gardens in the

campus. The fertilizer output from the machine in terms of kg is about 60% to 70% of the input (Waste).

Dustbins (around 225 in number) are kept on the entire campus for collecting the different kind of wastes.

Water Harvesting:

On the campus, there is a lake, spread over approximate 8,000 sq.mt. area and having an average depth of 25 feet. The rain water collected from the campus is stored in the lake. There are five percolation wells constructed (as per the specifications given by Ahmedabad Municipal Corporation) to percolate the collected water from the campus.

Check Dam Construction:

Not Applicable

Efforts for Carbon Neutrality:

To prevent carbon emission and to provide pollution free atmosphere, the University buses fetch most students, faculty and staff members to the University, thus avoiding the use of individual vehicles by the faculty, staff and students.

Planting a variety of trees and plants in the various gardens has contributed to carbon neutrality in the campus.

Wherever possible, communication is done through Email, thus preventing the use of papers. All the employees are advised to make use of papers, only if necessary.

Plantation:

The campus has almost 81 different types of trees with a total number of trees around 3,773. There is also medicinal plants garden in the campus with 156 different varieties.

The green environment containing different types of trees and plants attract various types of birds to the campus. Some of them are: House Sparrow, Cuckoo, Red vented bulbul, Myna, Peacock, Owl, Common Kingfisher, Hoopoe, etc.

Hazardous Waste Management:

An incineration is used for the disposal of animal waste and efficient exhaust system is used to make the campus free from pollution. Autoclaving techniques are used for management of microbial waste for biosafety.

E-Waste Management:

All the old and out dated computers and peripherals are disposed off under the buyback scheme by replacing them with new ones. However, those components and parts which can be used in other systems are kept aside for the future use.

The students of all the constituent institutes of the University are made well-aware of the need for the preservation of the environment, eco-friendly system, conservation of energy in the form of electricity, water, etc. through:

- i) Environment related courses in the Curriculum
- ii) Seminar, workshops, and frequent Awareness Programmes

- iii) Participation in plantation of plants both normal and medicinal ones

The University Campus is lush green with huge trees, sprawling lawns, crotons, perennial and seasonal flowers, bushes, lakes, fountain, and ponds with lotuses in addition to numerous other plants inside the specially created open spaces in the buildings. The scenic beauty of the Campus impresses the visitors and leaves a lasting impression in addition to providing a soothing and calm atmosphere to the inhabitants.

7.2. Innovations

7.2.1 *Give details of innovations introduced during the last four years which have created a positive impact on the functioning of the University.*

Various innovations have been introduced during the past years in the teaching-learning process, general administration and admissions. These have produced definite tangible benefits on the functioning of the University. In academic area, the following innovations have been introduced:

- Introduction of enrichment courses
- Continuous evaluation of the students-providing more academic freedom to the faculty members (60% of total marks)
- Review of quality of question papers and regular result analysis
- Development of social awareness and citizenship roles amongst the students through various courses
- Creation of Idea Lab and Robotic Lab
- Admissions in all the Institutes are done through national competitive examinations
- Separate statutory Faculty of Doctoral Studies and Research
- Introduction of Academic Audit at all the Institutes
- Development of Research Policy
- Appointment of the University Head Corporate Relations for enhancing training and placement activities at all the Institutes in a coordinated and integrated manner
- MoUs with reputed R&D Organizations and Industries:
 - i) Institute of Plasma Research
 - ii) Piramal Industries
 - iii) Beiersdorf, Germany for academic and training purpose
- Extension Activities are carried out by the students as:
 - i) a part of the curriculum,
 - ii) on voluntary basis,
 - iii) by the student organizations

Managing Social Projects is a compulsory course in the MBA programme. Another example is of establishment of free Legal Aid Cell by the Institute of Law at Sabarmati Jail for providing legal assistance to the jail inmates.
- Structured Academic Training Programme under ADR Cell for the faculty members.
- The administrative wing has also introduced a number of innovations that

include:

- ✓ Bottom-up Approach of Preparation of Budget
- ✓ Creation of Centre for Continuing Education

The University has a proactive approach for introducing innovations at all levels and in all areas. Three important innovations that have been introduced in the teaching-learning process are listed below:

Outcome Based Education:

Effective teaching-learning process is a sine qua non for academic success. Nirma University follows Outcome Based Education (OBE) to develop the requisite knowledge, skills, attitudes and habits of students. The purpose of the teaching-learning process at the University is to be student-focused. Thus, the University endeavours to promote student-centred learning.

Shifting to OBE at the University is expected to result in more directed and coherent curriculum, Graduates to be more “relevant” to industry and Continuous Quality Improvement (CQI) in place.

Blended Learning:

Another innovation that has been introduced in the teaching-learning methodology followed by all the constituent institutes of the University is ‘Blended Learning’. This method of learning combines classroom and online education. Blended Learning uses online technology to not just supplement but transform and improve the learning processes.

Internship under NGOs:

In addition to the other noteworthy innovation practiced at the University is ‘Internship under NGOs’ to carry out the Extension Activities. These activities aim to achieve and realise the Mission of the University.

Further, all the constituent institutes of the University have introduced Community Services as part of the curriculum. This kind of service enables the students to understand the society, its people, problems, solutions required, etc. It also strengthens the bonds with each other as well as with other members of the community. Moreover, it enhances their inter-personal skills and increases their social network. It increases a sense of social responsibility and subsequent desire to ‘give back’ to the society.

7.3 Best Practices

7.3.1 *Give details of any two practices which have contributed to better academic and administrative functioning of the University.*

PRACTICE ONE

Title of the Practice:

Continuous Evaluation of Academic Progress of the Students

Objectives of the Practice:

The para two of the Mission statement of the University states – “It endeavours to treat students basically as individuals, to recognize their potential and to ensure that they receive the best preparation and training for achieving their career ambitions and life goals”.

To fulfil the Mission, the University follows ‘Continuous Evaluation (CE)’ as one of its best practices. The objectives of the CE are to:

- Move from Summative to Formative Assessment
- Emphasize on Higher Order Thinking Skills (HOTS) and not on Lower Order Thinking Skills (LOTS)
- Boost creativity among the students
- Empower the faculty to choose the best assessment tools for the course
- Be in sync with benchmarked International Practices

The Context:

Evaluation in a generic sense is observing and grading every student during the teaching-learning process on all the defined aspects and the term “continuous” indicates that evaluation is not ‘just’ a one-time activity, but a continuous process. The student is expected to learn from the classroom activities, the environment and peers besides keeping pace with the course delivery. Continuous Evaluation is done to facilitate multifaceted the all-round development and to quantify the overall growth of the students.

The Challenges in Adopting the CE are:

- To design tools for assessment suitable for the student to understand and faculty to practice/deliver
- To implement a paradigm shift i.e. to put the learner in the centre
- To inculcate Higher Order Thinking Skills
- To have experienced and qualified faculty

The Practice:

The continuous evaluation practice monitors the student’s academic as well as holistic progress. The process for the practice is as follows:

- The aspects of monitoring are declared by the course faculty in the beginning of the course.
- The student is monitored on several aspects, e.g., knowledge enrichment, involvement in classroom and team activities, articulation, presentation and dexterity skills, pace with trends, discipline specific ethics, values, etc.
- Depending within the course purview, the faculty declares the results from time to time on different aspects (per se) and the students are systematically informed.
- The students are expected to meet the concerned course faculty, receive suggestions, and engage themselves in fruitful discussions with the faculty and peers to identify the lacuna and possible corrective actions.

- The student is also mentored based on the academic performance, learning of discipline specific skills.
- The student is motivated, oriented to become a life-long learner.
- The faculty members also introspect the course content, course delivery methods, teaching-learning strategies, pattern of evaluation and map each component to recognize the flaws, if any. The process allows the faculty to evolve better mechanisms / creative ways of pedagogy and offer diagnosis.
- Since the academic year 2012-13, CE is introduced in all the programmes under Nirma University. The 60% of grading is under the CE component and 40% is evaluated under Semester End Examination (SEE). The results of CE component (and its sub-components) are declared in a stipulated time frame, much before the SEE. The students are made aware about the component-wise distribution in the beginning of the semester.
- In a few of the programmes, a course feedback mechanism is developed wherein the faculty describes the course effectiveness; achievement of learning outcomes and feedback for the improvement.

Uniqueness in the context of Indian Higher Education:

- The graduate and post-graduate programmes offered by the University are open for pan India students apart from a few supernumerary seats. The students from various boards / background and cultural diversity are brought at par.
- As the CE approach emphasizes on thinking processes and expression, provides easy connect among varied masses, it helps groom students. The CE inclusion brings transparency in evaluation, avoids biasing and reduces the ill-feeling among students.

Constraints / Limitations:

- The CE approach demands focus on each student, indicating sufficient time to be devoted by the mentor faculty for the students. The constraint is experienced faculty availability with desired qualification.

Evidence of Success:

The CE component is introduced across the University in the academic year 2012-13. Since then the faculty members are empowered to adopt the different teaching-learning techniques for the course effectiveness. As it is the paradigm shift, some faculty members have chosen a few techniques along with conventional classroom teaching, e.g.,

- Flipping the classroom
- Discussions on a topic using NPTEL / YouTube videos
- Open Book Examination
- Learning from Peers Presentations
- Simulations and Case Studies, Role Plays
- Pre-reading Material Based Discussions
- Participation and Interaction in the Class Activities
- Class tests and Term Assignment, etc.

The engagement and involvement of the students are encouraging and it is evident from the overall results in the last couple of years. The failure in various courses in CE components has reduced, showing the effectiveness of the approach.

Problems Encountered and Resources required:

The CE approach shall be an indicator of students' overall growth over a period. The faculty / mentors needs to invest time in evolving various techniques, besides researching ways of improvement.

This formative and continuous assessment is a manpower intensive approach. Further, it requires significant documentation for maintaining transparency in evaluation.

There are no problems encountered yet, rather it reduces the grievances.

PRACTICE TWO

Title of the Practice:

Bottom-up Approach for arrival of the Budget Estimates for each financial year.

Objectives of the Practice:

- To make the budgeting process more participative and transparent
- To involve different stakeholders in the budgeting process
- To systematise the budgeting process and to adhere to the rules and regulations of the University

The Context:

The arrival of the budget for various activities that are to be carried out in a particular year at any institution is very challenging, as the resources are to be allocated for various levels of activities taking into consideration the need of the stakeholders, classroom and laboratory modernisation, technology development, curricular and co-curricular activities of the students, faculty and staff development, industrial visits, etc. In addition, it is a challenging task to ensure that all the faculty members at all levels understand the impact of arrival at the correct budget and streamlining them towards the expected results. Past experiences have shown that if the inputs are not taken from all those who are involved in day to day activities and future development of the Institution, the goals set by University are not fulfilled. Therefore, bottom-up approach and deliberations on various levels have resulted in realistic, meaningful and attainable budget proposal.

The Practice:

The Regulation Act 1(A) has been brought out by the University regarding submission of all the budget estimates. The budget proposal includes following components:

1. Estimated Expenditure for the Current Activities – (Recurring)
2. Estimated Expenditure for the Current Activities – (Non-Recurring)
3. Estimated Expenditure for the New Activities – (Recurring)

4. Estimated Expenditure for the New Activities – (Non-Recurring)
5. Estimated Receipts
6. Expenditure for (a) Consumables, (b) Books & Periodicals, (c) Computer Software, (d) Equipment and (e) Maintenance of Equipment
7. Purchase of New Equipment
8. Conducting of National Seminar/Conferences, etc.
9. Research Activities

The detailed procedure has been evolved, which includes deliberations in the departments at all levels be scrutinized by Area/Section Level Committee, Department Level Committee, etc. The same is discussed at the University level.

These types of deliberations at various levels ensure the realistic budget proposal aiming at attaining the goals set by the University and Institutes.

Evidence of Success:

The last few years' results have shown that the utilisation of the budget and the various activities for which allocations of the fund provided have been quite satisfactory. There has been satisfaction amongst the faculty members at all levels that their contribution towards the preparation of budget proposal for various activities they had intended for has resulted in fruitful gains. This has also resulted in unified approach with satisfaction at all the levels.

Problems Encountered and Resources required:

Some of the faculty members have less experience, are not exposed to some of the latest developments in their own areas and lack exposure to arrive at the proper cost of various equipment, budget preparation methods, etc. So, they have to be trained and motivated to go through the latest developments in their own areas, carry out market survey for identifying the latest equipment and their costs, etc. The University provides all facilities and resources to overcome all the said deficiencies in the faculty members by providing training and motivation.



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