

Manav Rachna International University

The Annual Quality Assurance Report (AQAR) of the IQAC AY2016-17

Part – A

1. Details of the Institution

1.1 Name of the Institution

Manav Rachna International Institute of Research and Studies
(Formerly Manav Rachna International University)

1.2 Address Line 1

Sector-43, Aravali hills

Address Line 2

Delhi-Surajkund Road

City/Town

Faridabad

State

Haryana

Pin Code

121004

Institution e-mail address

info@mriu.edu.in

Contact Nos.

0129-4198600

Name of the Head of the Institution:

Dr. N.C. Wadhwa

Tel. No. with STD Code:

Mobile:

Name of the IQAC Co-ordinator:

Mobile:

IQAC e-mail address:

1.3 **NAAC Track ID** (For ex. MHCOGN 18879)_____

1.4 Website address:

Web-link of the AQAR:
For ex. <http://www.ladykeanecollege>.

1.5 Accreditation Details

Sl. No.	Cycle	Grade	CGPA	Year of Accreditation	Validity Period
1	1 st Cycle	A	3.05	2015	5 years
2	2 nd Cycle				
3	3 rd Cycle				
4	4 th Cycle				

1.6 Date of Establishment of IQAC : DD/MM/YYYY

1.7 AQAR for the year

2016-17

1.8 Details of the previous year's AQAR submitted to NAAC after the latest Assessment and Accreditation by NAAC (*for example AQAR 2010-11 submitted to NAAC on 12-10-2011*)

- i. AQAR _____ (DD/MM/YYYY)
- ii. AQAR _____ (DD/MM/YYYY)
- iii. AQAR _____ (DD/MM/YYYY)
- iv. AQAR _____ (DD/MM/YYYY)

1.9 Institutional Status

- University State Central Deemed Private
- Affiliated College Yes No
- Constituent College Yes No
- Autonomous college of UGC Yes No
- Regulatory Agency approved Institution Yes No
- (eg. AICTE, BCI, MCI, PCI, NCI)

- Type of Institution Co-education Men Women
- Urban Rural Tribal
- Financial Status Grant-in-aid SC 2(f) UG 2B
- Grant-in-aid + Self Financing Totally Self-financing

1.10 Type of Faculty/Programme

- Arts Science Commerce Law PEI (PhysEdu)

TEI (Edu) Engineering Health Science Management

Others (Specify)

1.11 Name of the Affiliating University (*for the Colleges*)

NA

1.12 Special status conferred by Central/ State Government-- UGC/CSIR/DST/DBT/ICMR etc

Autonomy by State/Central Govt. / University

University with Potential for Excellence

UGC-CPE

DST Star Scheme

UGC-CE

UGC-Special Assistance Programme

DST-FIST

UGC-Innovative PG programmes

Any other (*Specify*)

UGC-COP Programmes

2. IQAC Composition and Activities

2.1 No. of Teachers

12

2.2 No. of Administrative/Technical staff

6

2.3 No. of students

1

2.4 No. of Management representatives

1

1

2.5 No. of Alumni

2.6 No. of any other stakeholder and community representatives

1

2.7 No. of Employers/ Industrialists

1

2.8 No. of other External Experts

1

2.9 Total No. of members

24

2.10 No. of IQAC meetings held

4

2.11 No. of meetings with various stakeholders:

No.

Faculty

3

Non-Teaching Staff/ Students

1

Alumni

1

Others

2.12 Has IQAC received any funding from UGC during the year? No

If yes, mention the amount

NA

2.13 Seminars and Conferences (only quality related)

(i) No. of Seminars/Conferences/ Workshops/Symposia organized by the IQAC

Total Nos.

3

International

National

State

Institution Level

3

(ii) Themes

Research, Quality Assurance, Curriculum Quality, Outcome Based Learning, Academic Excellence

2.14 Significant Activities and contributions made by IQAC

Significant Activities include FDPs, institutionalization of quality assurance procedures, preparation of quality assurance manual, initiatives for improving standards of teaching, promoting quality research, conducting academic audit, strengthening feedback system and enhancing evaluation quality.

During the year the main contribution of IQAC has been in the direction of institutionalization of quality initiatives, standardization of academic processes and spreading a culture of quality.

2.15 Plan of Action by IQAC/Outcome

The plan of action chalked out by the IQAC in the beginning of the year towards quality enhancement and the outcome achieved by the end of the year *

Plan of Action	Achievements

** Attach the Academic Calendar of the year as Annexure.*

2.15 Whether the AQAR was placed in statutory body Yes

Management

Syndicate

Any other body

Provide the details of the action taken

All the decisions taken by the IQAC in its four meetings held during the year have been implemented in the different departments and administrative units of the university. Action taken report by the various units in respect of implementation of these decisions is available on record.

Manav Rachna International University
Internal Quality Assurance Cell

ANNUAL QUALITY ASSURANCE REPORT

2016-17

Criterion 1

1. Curricular Aspects

1.1 Details about Academic Programmes

Level of the Programme	Number of existing Programmes	Number of programmes added during the year	Number of self-financing programmes	Number of value added / Career Oriented programmes
PhD	20 Faculty of Engg. and Technology <ul style="list-style-type: none"> ○ Aeronautical Engg. ○ Automobile Engg. ○ Biotechnology ○ Civil Engg. ○ Computer Science & Engg. ○ Electronics & Communication Engg. ○ Electrical and Electronics Engg. ○ Mechanical Engg. ○ Physics ○ Chemistry ○ Mathematics Faculty of Applied Sciences <ul style="list-style-type: none"> ○ Physiotherapy ○ Nutrition and Dietetics Faculty of Commerce and Business Studies <ul style="list-style-type: none"> ○ Commerce ○ Business Studies Faculty of Media Studies & Humanities <ul style="list-style-type: none"> ○ Journalism and Mass 	0	20	0

	<p>Communication</p> <ul style="list-style-type: none"> ○ English <p>Faculty of Management Studies</p> <ul style="list-style-type: none"> ○ Management ○ Psychology <p>Faculty of Computer Applications</p> <ul style="list-style-type: none"> ○ Computer Applications 			
PG	<p>PG Programmes - 14</p> <p>Faculty of Engg. & Technology-</p> <ul style="list-style-type: none"> ○ M.Tech.- Biotechnology + Civil (Structural Engg, Construction Management) + CSE (Computer Engg, Computer Engg - Computer Networking) + ECE (Communication Sys, VLSI Design & Embedded Sys) + EE (Power System & Electrical Drives) + ME (Industrial Engg) ○ M.Sc.- BT + Energy & Environment <p>Faculty of Applied Sciences</p> <ul style="list-style-type: none"> ○ M.Sc.(Nutrition & Dietetics) ○ Master of Physiotherapy <p>Faculty of Media Studies & Humanities</p> <ul style="list-style-type: none"> ○ MA-Journalism and Mass Communication <p>Faculty of Management Studies</p> <ul style="list-style-type: none"> ○ MBA (Dual Specialization- Fin, HRM, IB, Mktg. Mgt, Media Mgt, IT, Retail Management, Real Estate Management, Sports Management, Social Enterprise, Entrepreneurship, Family Business, Event Management, Agri-Business, Tourism & Hospitality) + MBA (Healthcare Mgt) ○ MA-Applied Psychology <p>Faculty of Computer Applications</p> <ul style="list-style-type: none"> ○ MCA + MCA (Lateral Entry) 	2	16	0
		<p>Faculty of Commerce and Business Studies</p> <ul style="list-style-type: none"> ○ M.Com. <p>Faculty of Media Studies & Humanities</p> <ul style="list-style-type: none"> ○ MA (Eng) started. <p>Faculty of Management Studies –</p> <ul style="list-style-type: none"> ○ MBA (Dual Specialization increased by including Business Analytics with IBM + Edu Sys Mgt + Energy Mgt + Sustainable Dev + Disaster Mgt+ NGO Mgt& Op + Societal & Community Service Mgt. 		

UG	<p>UG Programmes - 21</p> <p>Faculty of Engg. & Technology</p> <ul style="list-style-type: none"> ○ B.Tech.-Aeronautical Engg. ○ B.Tech-Automobile Engg. ○ B.Tech – Biotechnology ○ B.Tech-Civil Engg. ○ B.Tech – Computer Science & Engg. and CSE with various specialization in association with IBM in Business Analytics & Optimization, Cloud Computing, IT Infrastructure Mgmt, Cyber Security & Forensics ○ B.Tech-Electronics & Communication Engg. ○ B.Tech-Electrical & Electronics Engg. ○ B.Tech – Mechanical Engg. and with specialization in Industry Integrated in association with JBM <p>Faculty of Applied Sciences</p> <ul style="list-style-type: none"> ○ Bachelor of Physiotherapy ○ B.Sc.- Nutrition and Dietetics <p>Faculty of Commerce and Business Studies</p> <ul style="list-style-type: none"> ○ BBA (Gen) + BBA (Banking) + BBA Global(IB) + ○ B.Com (Hons) + B.Com (Hons)-Industry Integrated <p>Faculty of Media Studies & Humanities</p> <ul style="list-style-type: none"> ○ BA- Journalism and Mass Communication ○ BA (Hons)-English ○ B.A. (Hons.)-Economics <p>Faculty of Management Studies</p> <ul style="list-style-type: none"> ○ BA (Applied Psychology) ○ B.Sc.(Hospitality& Hotel Administration) <p>Faculty of Computer Applications</p> <ul style="list-style-type: none"> ○ BCA ○ B.Sc (IT) <p>Faculty of Planning and Architecture</p> <ul style="list-style-type: none"> ○ B.Arch. ○ B.Sc. Interior Design 	<p>1</p> <p>Faculty of Engg. & Technology</p> <ul style="list-style-type: none"> ○ B.Tech. –EE (Power Electronics with SU-Kam) ○ Increased specializations in B.Tech.-CSE - Graphics & Gaming in association with IBM <p>Faculty of Commerce & Business Studies</p> <ul style="list-style-type: none"> ○ BA (Hons.)- Economics started, shifted from Faculty of Media Studies & Humanities 	22	0
PG Diploma	0	0	0	0
Advanced Diploma	0	0	0	0
Diploma	0	0	0	0
Certificate	0	0	0	0
Others	○	○	10	0

(B.Tech. – Lateral Entry)				
Total	55	3	58	0

Inter-disciplinary	0	0	0	0
Innovative	0	0	0	0

1.2 (i) **Flexibility of the Curriculum:** The curricula of all programmes cover Foundation Courses, Core courses and Elective courses. The last category includes options for Discipline Electives, Generic Electives and Open Electives. In each Elective category, a basket of subjects is provided to enable the students to choose from thereby allowing them to pick up courses from a wide range that covers subjects from within the discipline as well as interdisciplinary subjects subject to the availability of resources.

(ii) Pattern of programmes:

Pattern	Number of programmes
Semester	UG-22 & PG-16
Trimester	0
Annual	0

Ph.D Programmes : Aeronautical Engg., Automobile Engg., Bio Technology, Civil Engg., Computer Engg., Electronics and Communication Engg., Electrical Engg., Mechanical Engg., Physics, Chemistry, Mathematics, Computer Application, Commerce, Business Studies, Management, Physiotherapy, Nutrition & Dietetics, Psychology, Media Studies and English.

1.3 Feedback from stakeholders Alumni Parents Employers Students
(On all aspects)

Mode of feedback : Online Manual Co-operating schools (for PEI)

Analysis of Students' feedback on faculty for B.Tech. programmes for two semesters of Academic Session 2016-17 is placed as **Annexure-I**

Annexure-I

The student feedback is taken on multiple parameters which include knowledge base of the teacher, preparedness of the teacher for the class, communication skills, sincerity and commitment of the teacher, ability to integrate course material with the environment and accessibility of the teacher in and outside the class. On similar pattern, feedback is taken from alumni, parents and employers in both manual and online mode. In the overall feedback analysis, the university is rated high on teaching quality, research output, student support system, infrastructure, evaluation procedures, library resources, employability and placements, governance and campus atmosphere. The feedback points to high level of satisfaction among different stakeholders groups.

1.4 Whether there is any revision/update of regulation or syllabi, if yes, mention their salient aspects.

- (i) The curricula are revised regularly to align the programme structure and course contents with students' aspirations and recruiters' expectations. The academic programmes are designed by taking suggestions from the faculty members, alumni, industry and other stake holders. As a part of our commitment towards quality education and excellence, we embarked on promoting faculty development programs, seminars, workshops and conferences at national and international levels, which keeps the faculty members and students abreast of their field.
- (ii) A new course, Business Processes (based on SAP), was introduced during Jan-June 2016 in the 6th Semester of majority of the UG programmes.
- (iii) Industrial Training for final year students of all B.Tech. programmes shifted from 8th semester to 7th semester with period of training reduced from 24 weeks to 10 weeks except for Biotechnology for which the period remains unchanged.
- (iv) Study Scheme for 2015-19 batch and thereafter is updated as per CBCS pattern by including Foundation courses, Core courses and Elective courses (Generic Electives, Discipline Electives and Open Electives).
- (v) Revision of the syllabi contents is carried out by all departments as per the recommendations of stakeholders, duly considered at BOS level in each department, recommended by the BOF at Faculty level and put approved at the level of Academic Council.

1.5 Any new Department/Centre introduced during the year. If yes, give details.

The following organisational changes at faculty level were introduced with the start of Academic Session 2015-16:

- (i) Manav Rachna Innovation & Incubation Centre, introduced in the year 2014-15, is a seminal initiative of Manav Rachna International University and is dedicated to Founder Visionary Dr. O.P. Bhalla whose dream was to encourage research and propel students to bring their pioneering ideas to the shop floor. The students at the MRIIC have proved their mettle time and again by conceiving ideas and transforming these into viable products using the Centre's state-of-the-art facilities. MRIIC is fully equipped with design, fabrication and manufacturing facilities, which are available to the users on a 24×7 basis. The facilities are available to students participating in International / National competitions and projects.
- (ii) The following additional programmes were introduced:
 1. M.Tech Computer Engineering with specialization in Computer Networking

2. M.Tech Civil Engineering with specialization in Construction Management
3. M.Tech Civil Engineering with specialization in Transportation Management
4. MSc Energy and Environment
5. Bachelor of Arts (Applied Psychology)

Criterion – II

2. Teaching, Learning and Evaluation

2.1 Total No. of permanent faculty	Total	Asst. Professors	Associate Professors	Professors	Others
	415	301	71	42	1

2.2 No. of permanent faculty with Ph.D.

110

2.3 No. of Faculty Positions Recruited (R) and Vacant (V) during the year

Asst. Professors		Associate Professors		Professors		Others		Total	
R	V	R	V	R	V	R	V	R	V
5	-	1	-	1	-	-	-	7	-

2.4 No. of Guest and Visiting faculty and Temporary faculty

0

8

-

2.5 Faculty participation in conferences and symposia:

No. of Faculty	International level	National level	State level
Attended	65	369	8
Presented papers	85	32	07
Resource Persons	10	09	01

2.6 Innovative processes adopted by the institution in Teaching and Learning:

STUDENT-CENTRIC LEARNING :

- Our Curriculum and pedagogy stems from our belief in 'Multiple Intelligence' pedagogy and diverse teaching and learning methods are based on 'Experiential Learning'. We believe that both teachers and students are co-learners and our teachers facilitate rather than teach according to the banking concept where one is the receiver and the other is the giver.
- Students get all ICT support in their smart classrooms and are encouraged to perform as digital learners. The latest technology with projectors is extensively used to benefit the young learners. The

modules are aligned with the curriculum in an interactive and engaging way.

- Students under faculty of Engineering are compulsorily made to undergo a minimum 24 weeks (since reduced to 10 weeks) industrial training as a part of their curriculum in many departments.
- Students are encouraged to do certificate courses and internship programs during summer breaks.
- Students learn through experiential methods like live field projects, workshops, action research, simulations, prototyping, role-playing scenarios, socio-drama/psychodrama, dance, meditation, global immersions, case studies, seminars, industry interface, guest lectures and mentoring etc.
- The list of participatory activities adopted by the faculty is:
 - Use of ICT in Lectures and Tutorials
 - Soft skill and Personality development classes
 - Career guidance and counselling workshops
 - Industrial Visits
 - Debate and Panel discussions
 - Open House Sessions
 - Group Discussions and Seminars
 - Survey based field work and projects
 - Experience sharing sessions with Entrepreneurs
 - Quiz Competition
 - Case Studies
 - Film screenings and Documentary preparation
- Keeping pace with MRIU's goal to promote quality education, the spacious Dr O.P Bhalla Central Library offers a platform for research, innovation and development. It has a collection of over 1,00,000 books and 50,000 electronic resources. The library subscribes 30,000 National / International journals and has a rich e-resource.
- Career Development Centre (CDC) is the training arm of MRIU which provides coaching not only on basic employability skills and business communication but also on personal productivity skills like Time Management, Problem Solving, Decision Making, Team Building and Managerial Skills which are rated high in the corporate world.
- In professional institutions, every student dreams of a job through campus placements. Fulfilling this dream of students has been a constant endeavour of Corporate Resource Centre at MRIU.
- To further facilitate the learning activities, Internal Quality Assurance Cell (IQAC) is instrumental and is engaged in quality enhancement on continuous basis. IQAC is involved in undertaking and institutionalizing quality enhancement initiatives and promoting holistic development of its students.
- IQAC seeks to develop and apply quality benchmarks and parameters for making student centric learning by ensuring proper feedback system and by organizing FDPs that helps in enhancing academic delivery through softer aspects of teaching – learning process.
- Quality management system has been put in place for academic audit for various university departments.
- A new course 'Holistic Wellness and Life Skills' have been introduced across all the departments in the university. Concept of CBCS (Choice based Credit System) is also in the phase to be adopted.
- Manav Rachna Innovation and Incubation Centre (MRIIC) acts as a facilitation centre for the students by assisting innovators in realizing their dream projects. The focus is on applied research leading to patents, research publications and generation of IPRs with the ultimate objective of improving

employability of a university graduate. Skill development programs are a regular feature at MRIIC. The centre is fully equipped with design, fabrication and manufacturing facilities which are available to the students 24 X 7.

- MRIU has student chapters of reputed professional bodies for their all round professional development. This includes American Society for Quality (ASQ), Institute of Electronics & Electrical Engineers, USA (IEEE), Institution of Engineers (India), Indian Society of Technical Education (ISTE), Society of Automotive Engineers (SAE), American Society for Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) etc to name some.
- Manav Rachna Academic Staff College (MRASC) has also been established for promotion of education and advancement of learning to meet the following objectives:
 - Assess the teaching learning needs of present day in Indian and Global context.
 - Utilize opportunities for development of student personality, initiative and creativity.
 - Promote computer literacy as well as use of ICT in teaching and learning process
 - Imbibe modern and futuristic teaching / learning techniques, skill sets and innovative tools and promote R&D culture among students.

UNIVERSITY TEACHING, LEARNING AND EVALUATION SCHEDULE:

- A comprehensive Academic Calendar is prepared by the Dean Academics in consultation with the Deans of all Faculties of the University for the entire university indicating total teaching days and holidays for the semester, commencement of classes, schedule for internal Sessional exams, University End semester Practical & Theory exams and Vacation period. Based on this comprehensive academic calendar, various Faculties then prepare their exclusive Academic Calendar.
- Heads of the departments then prepare their respective Academic cum Activity Calendar based on the academic schedule notified by Dean of Faculty. It generally covers their roadmap for conducting FDPs, Conferences, Workshops, Industrial visits for students, Departmental meetings with class representatives and other day to day activities planned for the semester.
- Electives offered to the students are floated well in advance and faculty so required for inter departmental courses, is requisitioned in time before deciding the teaching load. Time table in-charge for the department then prepares class-wise, room-wise and faculty-wise detailed Time Table for the semester.
- Course Coordinators are assigned for each course being taught in the semester. They chalk out the lesson plan and tutorial / assignment sheets for the course along with text books and teaching material to be used for each topic in consultation with all other faculty members teaching that course. Fortnightly review is done for syllabus coverage and also before the start of internal sessional exams for finalizing the sessional paper.
- Course Coordinator files are maintained for each course. It contains list of faculty teaching a particular course along with their contact and time table information, complete lesson plan along with text books and teaching material to be referred, assignment sheets with their solutions, university question papers for last 3 – 4 years with solution for conceptual, numerical and design problems. It also has power point handouts and course notes.
- Comprehensive booklet ‘Teacher’s Diary’ is maintained by each teaching faculty member for every course. The diary includes academic calendar, teacher’s time table, syllabus and course plan for the course with proposed date and actual date of syllabus coverage, student attendance and computational

sheet for internal assessment. It also includes calling details made to Parents to keep a strict monitoring of students who are not regular in attending classes.

- Students are also made available with the learning material for each subject via: the syllabus, assignment / tutorial sheets and lecture notes through Learning exchange module of ERP developed by TCS.
- Internal evaluation is a continuous process throughout the semester and has weightage for attendance, graded sessional test and tutorials / assignments submitted and overall performance of the candidates.
- Examination department handles the external paper setting and evaluation in a sacrosanct manner. Transparency is maintained with respect to examination pattern (internal and external), marks distribution and grading system.

BLENDED LEARNING BY USING e-LEARNING RESOURCES:

- The Central Library is in sync with the latest in technology, offering a balanced combination of print and digital collections. The online databases like IEEE, ASME, ASCE, Infotrac Gale, J-Gate Ebscohost, Knimbus and membership of digital consortia DELNET and other professional bodies have opened up a wealth of opportunities for scholars and students alike. Kindles have recently been added to the existing collection of e-books
- The Library is Wi-Fi and RFID enabled (a technology facilitating self-service of books in areas like the issue of books, return, renewal, reissue, reservation and security management), offering the latest state-of-the art technological applications including e-books, audio-books, e-journals, i-pads to maximize the use and ease of library resources.
- Professional Virtual Community: This module is a single sign on portal enabling the authenticated user to experience a social networking like interaction with fellow students, Faculty member and management representatives. This portal also acts a medium of Learning Management System (LMS) for the student, participate in online quizzes, debates, and much more. Student can interact with fellow students, their mentors, faculty members and staff.
- Teachers enjoy autonomy in their teaching methodologies through which they improvise to blend e-learning resources like National Program on Technology Enhance Learning (NPTEL), NITTTR Chandigarh Technology Enabled Learning (NCTEL) etc.
- MRIU has a Cloud campus which is a comprehensive yet flexible Learning Management System, compatible with multiple devices such as desktops, Laptops, Tablets and Smart phones that give students and faculty access to a world - class digital library with over 50000 titles from 634 publishers covering Business, Management, Engineering, Finance, IT and many more topics keeping in sync with 7500 plus skill development courses.
- Students are encouraged to adopt the e-resources of learning in their presentations, dissertations and researches and are facilitated with an infrastructure to access in the Departments of studies besides the Central Library.
- Keeping in trend with the latest developments some departments use various online resources and contents to make teaching and learning process interesting and effective. Simulations, open educational resources are used quite frequently by the faculty members as departments and centres are internet enabled. This helps them in using the e-learning resources to teach the courses. Some of the sources are as given below:

- MIT open courseware
- Harvard Business School online courses
- IGNOU web resources
- Online course materials and multimedia resources of other national and international institutions.
- Matlab Central
- MHRD e-PG PathShala
- eDX: Open Online Course from Universities across Globe

INNOVATIVE TEACHING APPROACHES/METHODS/PRACTICES ADOPTED :

- Incubation and Enterprise: A number of companies are in various stages of incubation. Business plans have been developed for these enterprises and soon these entities will enter the start up phase. Examples are ‘International Engineers Federation’, ‘Technoplanet labs’, ‘Parallax Games’ and ‘Self Reliant Foundation’. This will be an ongoing activity of the Incubation Centre.
- Under the National Skill Development Mission of the Government of India, Manav Rachna is actively engaged in establishing training facilities for developing skilled manpower. Areas being actively considered are welding, piping/plumbing, air-conditioning, computer maintenance, Website development, App development etc.
- MRIIC is actively involved in training engineers and has conducted several training programmes in the past. The areas include Automobile Engineering, Mechanical Engineering, Welding, Biotechnology, Environment, Robotics, App making and Game development etc.
- Short term courses in the area of Robotics & Electronics are being provided in association with various reputed private companies. These cover the areas of APP & Game Development and Ethical Hacking. The Electronics Workshop/Training domains include: Microcontrollers (8051, PIC, AVR), Arduino, VLSI Design using EDA tools, PCB Fabrication, FPGA based digital system design, Embedded C, VHDL/Verilog and Embedded system design using ARM Processors.
- Tata Consultancy Services (TCS), knowledge partners with MRIU in multi-dimensional academic value addition programs. TCS-MRIU Pragati Project Identifies 20 B.Tech-CSE students in Second year. The Community across 4 years will be engaged in collaborative learning in software programming, testing and project management to acquire employable skills. Further, under the aegis of TCS-LISP Relationship Programme, TCS shall be providing cutting-edge professional facilities like Internship Programme, Industrial Visits, Guest Lectures and Faculty Development Programmes. This knowledge partnership shall culminate in huge value addition to our Academic Programmes.
- Different training events like in-house workshops for teachers and students on various pedagogical and technical issues have been organized at the Department and the University levels also.
- ICT resources like tele-conferencing, supplementary audio-video and e-resources are incorporated in teaching and learning. A considerable improvement has been made in the infrastructure incorporating state-of-art conference rooms, seminar spaces, presentation facilities, classrooms etc to provide latest technological exposure to the students.
- All this has considerably improved the learning process. Manav Rachna has exhibited R&D and academic excellence with 1093 research publications (2009 onwards) and overall 3000 + published research papers in International/ National Journals. Seven patents have been granted and eleven patents

have been filed by the faculty members before joining this university. 67 patents have been filed by the faculty members and students after joining MRIU.

- Manav Rachna students regularly participate in prestigious International/ National Project Competitions and keep on winning numerous awards. These include Best New Concept Car BAJA SAE India, Auto Mall Expo, Formula SAE India, Imagine Cup, Intel India Embedded Challenge, Shell-Eco, SUPRA SAE India, MICROSOFT IMAGINE CUP and MICROSOFT Apps for Office Challenge.
- Such innovations are evaluated and are given due acknowledgements in the annual appraisals for Faculty members. The teachers also gain points in their API for the innovations they make. Motivation is also given in terms of monetary incentive for publications in national / international journals.
- Manav Rachna has partnered with SAP India and has started SAP Student Academy at its campus. Students are given 200 hours training on Technical module (ABAP) and Functional modules (FI, MM, HR, and SD).
- Advanced learners are identified on the basis of their pass percentage, classroom performance, regularity in submission of class works and assignments, punctuality and personal interactions.
- The bright students are identified and they are given proper guidance to prepare for competitive exams like GATE, GRE, CAT etc.
- Special training is provided prior to campus placement drives for brushing up their Aptitude and Technical skills.
- Mock personal interview and GD sessions are also organized to boost their confidence.
- The Manav Rachna Innovation and Incubation Centre (MRIIC) is actively involved in training bright engineers and has conducted several training programmes in the past.
- MRIIC acts as an incubation centre with the primary aim of assisting advanced learners / innovators in realizing their dream projects and eventually incubating these projects so that new industrial enterprises can be started. This enables graduates to become job givers rather than job seekers.
- They are facilitated with an enriching experience of pre-service exposure to the institutional affairs, administrative issues and organizational needs through their participation in the different organizing committees for seminars and conferences, editorial board of students' magazines and other technical clubs and societies.

FOCUS ON ORGANIZING ACADEMIC DEVELOPMENT PROGRAMMES:

- Feedback on curriculum and teaching learning methods is obtained from the faculty teaching various subjects during course coordinator meetings and a brain storming session for introducing new courses is conducted during departmental meetings, based on market needs. The suggestions are placed before the Board of Studies for consideration and appropriate action.
- Inputs are obtained from all stake holders viz. Alumni, Students, Employers and experts from other academic institutes before introducing a new course by conducting a workshop on syllabus need and requirement.
- Workshop conducted includes experts from leading academic institutes & industry, Alumni and Parents along with subject experts of each domain and Board of Study members in the department.
- Subsequently all relevant suggestions are placed before the Board of Faculty and Academic Council for consideration and approval.

STUDENT PERFORMANCE AND LEARNING OUTCOMES :

Each department of a Faculty has articulated its Graduate Attributes. As a sample, following qualities are expected from an Engineering graduate:

- Sound foundation in the basics of Engineering fundamentals.
- Ability to exhibit strong, independent learning, analytical & problem solving skills, effective communication and team work spirit.
- Aptitude for effective use of modern equipments and programming tools to solve real life problems.
- Talent to have a successful career in Indian companies and MNCs and to excel in Postgraduate studies, Research & Development and to become Entrepreneurs.
- Display of professional and ethical attitude, good leadership qualities and commitment to social responsibilities.
- Ability to value and practice life-long learning

These attributes are inculcated through academic curriculum, co-curricular and extracurricular activities combined with mentoring. Monitoring is done through examination and by obtaining feedback from different stakeholders such as students, alumni, parents, employers etc.

Academic programmes in the University are outcome based. While some departments have specified them, the others are following it in a customary manner.

- Keeping in view interests of all their stakeholders, departments have formulated the Program Educational Objectives (PEOs) that are comprehensive statements describing the career and professional accomplishments that the program is preparing the learner for.
- Program Outcomes and Program specific Outcomes (POs and PSOs) are then devised which describe what students are expected to know or will be able to do when they graduate from a program.
- Mapping of Program Education Objectives (PEOs) with Program Outcomes and Program specific Outcomes (POs& PSOs) is done in the curriculum structure.
- All departments strive to maintain high standards by revising academic syllabi to suit the industrial requirements. Therefore choice based system consisting of Foundation Courses, Core Courses and Elective Courses (Generic, Discipline and Open) are offered during the course of study. The detailed semester-wise course structure for any program is available in the curricula and study scheme of the program.

The University adopts comprehensive continuous evaluation procedure. Two Sessional exams & an end term exam is conducted every semester to assess student performance. End semester practical exams & viva voice is also conducted to evaluate their performance.

NEW TECHNOLOGIES DEPLOYED IN ENHANCING STUDENT LEARNING :

The ongoing mission of each department is to generate new knowledge in their domain and allied area and transfer it to the society, particularly to the industry. Departments are also engaged in cutting edge activities in specific burning areas and are involved in multi-disciplinary research areas as well. Departments also identify their Strengths, Weaknesses, Opportunities and Challenges for enhancement.

Following measures are planned to meet future challenges.

- Departments aim to adopt best teaching and learning practices to enhance the critical and logical thinking abilities of its students and gain nationwide recognition.
- Choice based system is being incorporated, which will enable a much-required shift in focus from teacher-centric to learner centric education.
- Departments envision excelling in various thrust research areas by obtaining sponsored project grants and contribute towards the progress of the nation.
- Departments also aim to impart the most up to date training to its undergraduate and postgraduate students through Alumni network and by increasing industrial and research collaboration.
- Departments plan to create centre of excellence and augment its teaching and research infrastructure through continuous up-gradation of its Lab facilities.
- To encourage research interests of the student and faculty members the departments plan to organize national / international conference in technical association with reputed agencies and leading academic institutes.

2.7 Total No. of actual teaching days during this academic year

176

2.8 Examination/ Evaluation Reforms initiated by the Institution (for example: Open Book Examination, Bar Coding, Double Valuation, Photocopy, Online Multiple Choice Questions)

The University has a full-fledged office of the Controller of Examination with a proper establishment and sufficient number of staff. An ERP platform developed by M/s. TCS, *inter alia*, handles evaluation process in pre-examination, examination and post - examination phases.

Pre-examination processes -

- Controller of Examination notifies the names of Chief Superintendent and Superintendents for every Faculty prior to the start of exams.
- The Superintendents then prepare the examination date sheet and computerized list of registered students for each paper and the seating /attendance plan and appointment of Invigilators etc.
- Payments of fee are accepted through Cash Receipt / Bank Challan etc. The University also provides on-line payment gateway from the session 2013-2014.

Examination process :

- The University has in-house secure facilities for typing, printing, photo copying and all such activities related to Examination within the arena of the Office of Controller of Examination.
- The Examination material is delivered and collected under security with confidentiality to and from the Examination Centres within the campus by the University staff.
- Question paper packets are delivered to the Superintendent just half an hour before the commencement of examinations.

Post-examination process –

- Attendance is maintained by individual Superintendents appointed for a centre and is finally submitted to the Chief Superintendent.
 - Result processing is done with the examination software available in the Office of Controller of Examination.
 - Results are notified within stipulated time on the website and individual departmental notice boards
 - Certification is done at the time of Convocation, or as and when the candidates apply for it.
-
- Details pertaining to evaluation processes are made known to all stakeholders: students through Student Handbook; teachers through induction programme, regular department meetings and FDPs conducted by IQAC. Even parents are informed of examination schedule and results.
 - Copious ICT interventions through website, emails, SMS, ERP are affected for making all stakeholders aware of every examination/ evaluation process.
 - All results are uploaded on website / conventional notice boards for a swift information to students/parents

EXAMINATION REFORMS INITIATED :

- Right since inception of the university, examination results are based on SGPA/CGPA and credits using a relative grading system.
- Both formative and summative evaluation approaches are deployed to good effect. Real time feedback from students/ teachers is used to improve academic delivery.
- Question paper administered to students is one randomly picked from a set of question papers to preclude even a remote chance of leakage.
- An inhouse-developed marks rationalization computer implemented algorithm is deployed without any manual intervention based on global average of all the courses of a particular programme in a semester.
- A close moderation / vetting of each single question paper is undertaken to ensure that a mistake-free question paper is administered in the examination hall.
- Examination Answer Scripts are given a confidential code so as to eliminate any chance of suspicion or unfair means.
- In each semester, a student can appear in supplementary paper of odd or even semester to prevent any piling of back-papers over an extended time-period.
- Revaluation of any paper is permitted. Improvement of grades is permitted through reappearing.
- The above measures have very substantially impacted to culminate in a robust evaluation mechanism on quality, reliability and timeliness.
- Results are being declared within three weeks of the last paper held. Results are uploaded on website for immediate access even during non-teaching period. In case of delay the following measures are in place:
 - Reminders are sent to the respective Deans and the Superintendent Evaluation after the expiry of the stipulated time.
 - Second reminders are issued just after five days of the first with a copy to the Deans/ Superintendent Evaluation regarding delay in receiving the award list.

TRANSPARENCY IN THE EVALUATION PROCESS :

Confidentiality:

- Examiners are recommended by the BOS of the concerned Departments.
- Each answer-script is assigned a fictitious roll number after removal of the original roll number.
- Spot evaluation is in place ever since inception of the university.
- Each answer-script is evaluated by multiple evaluators to ensure uniformity of award of marks.
- Packets of question paper are delivered just half an hour before the commencement of examinations to ensure fidelity of conduct of examinations.

Transparency:

- Provision of Re-evaluation of the answer books in case of any grievance from the Examinee.
- Separate scrutinizers are appointed for the re-evaluation task. Marks previously allotted are not disclosed to the new evaluator. Difference of marks if more than 10% after re-evaluation, a third opinion is taken from a senior faculty as a process.
- Student can obtain the copy of answer book through RTI.
- Students shall be shown answer books for rechecking or any other error before declaration of results, from the next semester.

REFORMS IN Ph.D. EVALUATION PROCESS :

- The admission to PhD programmes is strictly done on the basis of regulations contained in the PhD Ordinance of the University. All eligible candidates have to appear in a written test (of 70 marks) organized by MRIU, as per guide lines of the UGC, followed by an interview / presentation carrying a weightage of 30 marks. Those applicants who are short listed appear before the DRC of the concerned department for judging the suitability of the research plan and availability of the supervisor.
- The recommendations of the DRC are put up in the meeting of the BOS and further submission to the Board of Faculty and the Academic Council for its approval.
- The University follows the UGC Regulations of 2009 on Ph.D. degrees in a stringent manner. It is mandatory for the research scholars to go for course work, pre-submission seminars, publication of research papers in journals of repute and score 20 points among other requirements before the final submission of the thesis.
- A Ph.D Quality Enforcement Committee (QEC) headed by the Pro Vice Chancellor carries out a very stringent quality check of short synopsis / long synopsis / Ph.D Thesis before allowing submission. QEC also validates and approves the score of a candidate.
- Once approved it is mandatory for the candidate to upload the short synopsis / long synopsis / Ph.D Thesis on ShodhGangotri / Shodh Ganga.
- A panel of atleast six experts in the subject area of Research work from states other than Haryana are suggested by the Supervisor(s) and placed before DRC for approval by BOS.

A large panel of senior academicians is employed to select board of examiners for the Ph.D Thesis. PhD Theses are evaluated by two External Examiners.

2.9 No. of faculty members involved in curriculum restructuring/revision/syllabus development as member of Board of Study/Faculty/Curriculum Development workshop

106	39	118
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2.10 Average percentage of attendance of students

72 %

2.11 Course/Programme wise distribution of pass percentage :

FET

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
B.TECH.(AERO)	21	3	10	3	0	76.19
B.TECH.(AUTO)	32	3	18	1	0	68.75
B.TECH.(BT)	27	7	17	0	0	88.89
B.TECH.(Civil)	218	13	115	32	0	73.39
B.TECH.(CSE)	247	44	144	21	0	84.62
B.TECH.(ECE)	88	16	47	8	0	80.68
B.TECH.(EEE)	22	7	9	0	0	72.73
B.TECH.(IT)	8	0	7	0	0	87.50
B.TECH.(MECH) IND. INTEG.	14	2	12	0	0	100.00
B.TECH.(MECH)	282	31	160	29	0	78.01
M.TECH.(BT)	4	4	0	0	0	100.00
M.TECH.(CSE)	4	1	3	0	0	100.00
M.TECH.(CSE) (CN)	5	2	2	0	0	80.00
M.TECH.(STRUC. ENGG.)	6	2	3	0	0	83.33
M.TECH.(IND. ENGG.)	2	1	0	0	0	50.00
M.TECH.(PSED)	1	1	0	0	0	100.00
M.TECH.(CONS. MGMT.)	3	2	1	0	0	100.00
M.TECH.(VLSI D. & E.S)	1	0	1	0	0	100.00
M.Sc.(BT)	19	16	3	0	0	100.00
M.Sc.(EE)	3	3	0	0	0	100.00

FAS

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
BPT	50	9	23	14	0	92.00
B.Sc.(N&D)	33	5	25	2	0	96.97
M.Sc.(N&D)	25	5	18	2	0	100.00
MPT	7	0	6	1	0	100.00

FMS

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
MBA	97	7	50	15	0	74.23
B.Sc.(HM)	53	6	20	18	0	83.02
MA(PSYCHOLOGY)	7	6	1	0	0	100.00

FCBS

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
BBA(G)	87	5	33	26	0	73.56
BBA(BANKING)	20	4	14	1	0	95.00
BBA(G) IB	53	16	20	4	1	77.36
B.COM(HONS) IND. INTEG.	29	1	10	13	1	86.21
B.COM (HONS)	69	8	27	25	3	91.30

FMeH

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
BJMC	73	1	24	36	0	83.56
MA(JMC)	5	0	5	0	0	100.00
BA (HONS) ENGLISH	33	0	15	10	0	75.76

FCA

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
BCA	67	12	27	3	0	62.69
MCA (LATERAL)	37	10	14	3	0	72.97
B.Sc.(IT)	20	6	9	0	0	75.00

FPA

Name of the Programme	No. of students appeared for Final Exam	Distinction %	I %	II %	III %	Pass %
B.Sc.(ID)	25	5	4	0	0	36.00

2.12 How does IQAC Contribute/Monitor/Evaluate the Teaching & Learning processes :

As an apex body, the Academic Council of the University takes all the academic decisions which include those pertaining to teaching-learning processes. Depending upon the requirements of academic growth, deans of respective faculties bring forth proposals for improving teaching-learning processes which after processing by the office of the Dean-Academics, are forwarded to the Council for deliberations and decision. Decisions relating to the quality of academic processes are separately handled by IQAC the meetings of which are chaired by the Vice-Chancellor.

IQAC has representation from alumni and industry also. These members actively contribute to the discussions on quality matters relating to the university. Industry members bring in new perspectives and convey industry expectations from the university. IQAC at the university has already set up guidelines for academic audit of the various departments of the university and formal audit process will commence from the coming academic year. The respective faculties maintain mentoring and counselling systems under which all students are assisted in their academic pursuits. Many departments conduct remedial classes for needy students.

IQAC has strategized following points:

- Policy and operating procedure for the faculty development programmes has been standardised and institutionalised.
- The system of obtaining feedback from different stakeholders has been institutionalised as a quality measure.
- Choice-based credit system has been set up in all the departments.
- Faculty appraisal system has been functional in all the departments.

A number of FDPs/faculty workshops relating to the different aspects of academic quality have been conducted to strengthen teaching, learning and evaluation processes.

2.13 Initiatives undertaken towards faculty development

<i>Faculty / Staff Development Programmes</i>	<i>Number of faculty benefitted</i>
Refresher courses	NIL
UGC – Faculty Improvement Programme	NIL
HRD programmes	NIL
Orientation programmes	134
Faculty exchange programme	5
Staff training conducted by the university	126
Staff training conducted by other institutions	26
Summer / Winter schools, Workshops, etc.	43
Others	36

2.14 Details of Administrative and Technical staff

Category	Number of Permanent Employees	Number of Vacant Positions	Number of permanent positions filled during the Year	Number of positions filled temporarily
Administrative Staff	178	-	-	-
Technical Staff	52	-	5	-

Criterion – III

3. Research, Consultancy and Extension

3.1 Initiatives of the IQAC in Sensitizing/Promoting Research Climate in the institution

University has a policy for promotion of interdisciplinary research in all the faculties of the University. The interdisciplinary research work is being carried out in a number of Departments in which supervisors and co-supervisors from two different Departments / Faculty are provided. University encourages joint guidance of thesis, and encourages faculty members from different disciplines to guide them together. The following proactive mechanisms adopted by the university to facilitate the smooth implementation of research projects involving both faculty & students:

- The faculty is engaged in various other activities to promote research interests. They participate as resource persons in various workshops, seminars and conferences. They are encouraged to present papers in national and international conferences/seminars. They publish scientific articles in national and international journals. The faculty is encouraged to take up Projects and work towards fulfilling the mandate of the University.

- Student research is an important component in this and the faculty guides post graduate students for their dissertation work. The abstracts of the dissertations are brought out as research papers and published by the University biannually in MR International Journals. Besides this, faculty members are awarded by the University for publishing research papers in reputed national and international journals.

University has Innovation and Incubation Centre in the name of Manav Rachna Innovation and Incubation Centre (MRIIC). Is in the process for joint collaboration with other universities in interdisciplinary research. The Research & Innovation Clusters (RIC) and Centre of Excellence (CE) are created in the University Campus devoid of department boundaries and can have members from different disciplines, who can jointly guide student's projects at UG level. Apart from this IQAC have also organized following events for the development of faculty members:-

1. Awareness Session on Research Monographs on June 7, 2017
2. Quality Benchmarks for Academic Excellence during May 30- June 1, 2017
3. Enhancing Quality of University Research during September 16-17, 2016

3.2 Details regarding major projects

	Completed	Ongoing	Sanctioned	Submitted
Number		01		04
Outlay in Rs. Lakhs		4.92		75.91

3.3 Details regarding minor projects

	Completed	Ongoing	Sanctioned	Submitted
Number				01
Outlay in Rs. Lakhs				3.54

3.4 Details on research publications

	International	National	Others
Peer Review Journals	211	114	
Non-Peer Review Journals			
e-Journals			
Conference proceedings	121	48	

3.5 Details on Impact factor of publications:

Range Average h-index Nos. in SCOPUS

3.6 Research funds sanctioned and received from various funding agencies, industry and other organisations

Nature of the Project	Duration Year	Name of the funding Agency	Total grant sanctioned	Received
Major projects				
Minor Projects				
Interdisciplinary Projects				
Industry sponsored	2016-17	15	7270643	--
Projects sponsored by the University/ College				
Students research projects <i>(other than compulsory by the University)</i>				
Any other(Specify)				
Total				

3.7 No. of books published i) With ISBN No. Chapters in Edited Books

Total – 91 books

ii) Without ISBN No.

3.8 No. of University Departments receiving funds from **NIL**

UGC-SAP CAS DST-FIST
DPE DBT Scheme/funds

3.9 For colleges Autonomy CPE DBT Star Scheme
INSPIRE CE Any Other (specify)

3.10 Revenue generated through consultancy

3.11 No. of conferences Organized by the Institution

Level	International	National	State	University	College
Number	9	53	1	14	40
Sponsoring agencies	Gnome Foundation, USA, MOSIP, Marico Industries Pvt. Ltd., MRIU	DST, MST, Govt. of India, Mitsubishi Electric India Pvt Ltd, QCFI, MS Univ. & Pearl Academy, MRIU	MRIU	Sky Testers Pvt. Ltd., MRIU	

3.12 No. of faculty served as experts, chairpersons or resource persons

3.13 No. of collaborations International National Any other

3.14 No. of linkages created during this year

3.15 Total budget for research for current year in lakhs :

From Funding agency From Management of University/College

Total

* Total grant sanctioned from funding agency of Rs. 4.68 Cr.

3.16 No. of patents received this year

Type of Patent		Number
National	Applied	116
	Granted	0
International	Applied	0
	Granted	0
Commercialised	Applied	0
	Granted	0

3.17 No. of research awards/
recognitions received by faculty and research fellows of the institute in the year

3.18 No. of faculty from the Institution who are Ph.D. Guides

and students registered under them

3.19 No. of Ph.D. awarded by faculty from the Institution

3.20 No. of Research scholars receiving the Fellowships (Newly enrolled + existing ones)

JRF SRF Project Fellows Any other

3.21 No. of students Participated in NSS events:

University level State level

National level International level

3.22 No. of students participated in NCC events: **NIL**

University level State level
 National level International level

3.23 No. of Awards won in NSS: **NIL**

University level State level
 National level International level

3.24 No. of Awards won in NCC: **NIL**

University level State level
 National level International level

3.25 No. of Extension activities organized

University forum College forum
 NCC NSS Any other

3.26 Major Activities during the year in the sphere of extension activities and Institutional Social Responsibility

The University has organized following major activities during the 2016-17 academic year:-

Extra Curricular Activities (July 2016 - June 2017)		
S.NO	Date	Event
1	05.07.2016	Flashmob for Resurrection, Annual Cultural FEST
2	12.07.2016	FET orientation
3	13.07.2016	FET Orientation
4	14.07.2016	FCBS Orientation
5	15.07.2016	Non-FET Orientation
6	15.07.2016	Knowledge Hunt
7	26.07.2016	Road Safety Awareness programme
8	28.07.2016	FMS Orientation
9	09.08.2016	India Quiz

10	09.08.2016	Sang Gattvam
11	09.09.2016	Poster Making
12	10.08.2016	Antakshari
13	10.08.2016	Story Making
14	10.08.2016	Clay Modelling
15	11.08.2016	Pictionary
16	11.08.2016	Rangoli Competition
17	11.08.2016	Triathlon
18	12.08.2016	Grand Celebration Independence day
19	15.08.2016	Flashmob on Independence Day
20	29.08.2016	Stemcell Donation Awareness Camp
21	05.09.2016	DT Fresh Face
22	15.09.2016	Anti - Ragging Seminar
23	16.09.2016	Mega Blood Donation Drive
24	28.09.2016	Indian Idol Prelims Auditions
25	23-24.08.2016	MUN
26	06.10.2016 - 08.10.2016	Resurrection 2K16, Annual Cultural FEST
27	04.11.2016	Vigilance Awareness Seminar
28	11.11.2016	Quality Awareness related Debate Competition
29	26.11.2016	Constitution day
30	12.12.2016	Eid - E - Milad Ul Nabi
31	19.12.2016	Internal Alumni Meet
32	20.12.2016	Campaign on "Cashless Transactions"
33	22.12.2016	Session on Cashless Transactions at Mohana
34	23.12.2016	Staff Christmas Celebration
35	31.12.2016	Be A Santa - Donation Drive
36	05.01.2017	Cultural Eve at IQPROM
37	07.01.2017	Hand Lettering and Typography Workshop
38	07.01.2017	Still – Object Drawing Competition
39	12.01.2017	Swami Vivekananda Jayanti
40	13.01.2017	Lohri Celebration
41	14.01.2017	Visit to World Book Fair
42	21.01.2017	GAB Fest at GD Pro Finale
43	25.01.2017	Republic Day Celebration

44	25.01.2017	National Voters' Day
45	30.01.2017	Radio Mirchi – Fresh Face
46	01.02.2017 – 15.02.2017	Volunteers at Surajkund Crafts Mela,
47	15.02.2017 – 04.03.2017	Shooting World Cup
48	14.02.2017	Cycle Rally from Jamia Milia Islamia
49	19.02.2017	Dance performance at Faridabad Marathon
50	17.02.2017	Talent Fiesta(Supporting Staff)
51	21.02.2017	Matrabhasha Diwas
52	23.02.2017 - 24.02.2017	CU FEST
53	5.03.2017	Dance Competition in FEST at Jaipur
54	6.03.2017	Visit of German Students Delegates
55	16.03.2017	Talent Hunt of Bhutani Student Delegates
56	16.03.2017 – 18.03.2017	Manav Rachna students at Delhi Dance Fever
57	17.03.2017	Cultural Performance at visit of Shri Varun Gandhi
58	18.03.2017	Agri Leadership summit
59	21.03.2017	Hostel Eve
60	24.03.2017 - 25.03.2017	Memento Designing Competition
61	25.03.2017	Cultural performance at National Archery Championship
62	27.3.2017	Bangladesh Day
63	28.03.2017	Manav Rachna Fine Arts Society - Aarekh at BPIT FEST
64	03.04.2017	Technovogue (INNOSKILL)
65	8.04.2017	Cultural FEST at JKB School
66	22.04.2017	Project Panchi (NSS Troupe)
67	8.05.2017	Buddha Darshan Yatra
68	14.05.2017	Nukkad Natak on Mothers' Day
69	15.05.2017	Book review session by Rajya Sabha TV
70	20.05.2017	Aapki Suraksha, Aapke hath – PCR launch by Manav Rachna
71	21.06.2017	International Yoga Day

Criterion – IV

4. Infrastructure and Learning Resources

4.1 Details of increase in infrastructure facilities:

Facilities	Existing	Newly created	Source of Fund	Total
Campus area	34336 sq m	16714sq m	MRIU	51050sq m
Class rooms	124(L)+39(T)			124+39
Laboratories				
Seminar Halls	10			10
No. of important equipments purchased (\geq 1-0 lakh) during the current year.		17		
Value of the equipment purchased during the year (Rs. in Lakhs)		59.265	MRIU	
Others				

4.2 Computerization of administration and library

- *User interactive Web-based RFID enabled Library Management System, Touch Screen Kiosk for Library Portal
- * All the Library functions, operations and systems are fully automated
- * Campus wide and beyond campus access to all e-resources through cloud-based EzProxy.
- * Email Insta Alert Service for Library Transactions and eLibrary Publications like Book Alert and Article Alert Service and promoted paperless Library Transaction Operations
- * Library Portal for Single Access point for resources through Ebsco's Discovery Service, Content Management System for eResources
- *Open collection development policy and resources for overall development have been strengthened.
- * Digital Payments has been introduced campus wide

4.3 Library services:

	Existing		Newly added		Total	
	No.	Value	No.	Value	No.	Value
Text Books	104744	40362354	3996	962320	108740	41324674
Title	19406		973		20379	
Reference Books	19156		473		19629	
e-Books	178651					
Journals	188	1119994	28		216	1696386
e-Journals	26581	3985610			29313	3882550
Digital Database	15 Database		-		15 Database	
CD & DVD	3525		152		3677	
Others (specify)						
Newspapers/Project report/Thesis	22/2874/ 26		0/20/7		22/2894/50	
E-Reader- Kindles	15				15	
Library Portal	http://central-mriu.edu.in					
Library online Catalogue	http://libopac.mrei.ac.in					
Remote Access	https://mriuelibrary.informaticsglobal.com/login					
Single Window Search Solution	http://central-library.mriu.edu.in/single-window-search-for-all-library-resources					
Library Management software	Libsy Web 7.0					
Institutional membership of Developing Library Network (DELNET); eShodhSindhu, The American Library, New Delhi and promotion of Digital Learning Content like MOOC through Open Access Swayam and Swamprabha DTH Channels and leading international MOOCs platform and participation in the National Digital Library Initiative						

4.4 Technology up gradation (overall)

	Total Computers	Computer Labs	Internet	Browsing Centres	Computer Centres	Office	Departments	Others
Existing (July 2014-June 2015)	1811	1165	1811	1165	1665	189	457	
Added (July 2015-June 2016)	80	50				16	14	
Total	1891	1215				205	471	

4.5 Computer, Internet access, training to teachers and students and any other programme for technology upgradation (Networking, e-Governance etc.)

Approximately sixty four trainings and technology upgradation programmes were organized for the faculty and the students. The list of the programmes is as follows.

S. N.	TOPIC	Date(s)		No. OF BENEFECIARIES			
		From	To	Faculty	Staff	Students	Total No.
1	Mastering the Stock Market	05-01-17	05-01-17	8		90	98
2	Stock Market	03-03-17	03-03-17	2		50	52
3	Awareness Program on GST - One Tax, One Nation, One Market	06-06-17		70	30	20	120
4	Configuring Wireless Sensor Network for IOT Applications	7.6.17	7.6.17	30	NIL	NIL	30
5	Expert talk on Implementation and scope of Sap ERP system by ,Digital	27.3.17	27.3.17	20	NIL	30	50
6	Power Sector-Thermal and Hydro Power Stations	23-01-17	25-01-17	6	1	164	171
7	Benefits of IBM ICE	17.01.2017	17.01.2017	NIL	NIL	250	250
8	Introduction to IBM ICE program	17.01.2017	17.01.2017	NIL	NIL	250	250
9	Bluemix Technology of Cloud	17.01.2017	17.01.2017	NIL	NIL	250	250
10	Data Analytics	17.01.2017	17.01.2017	NIL	NIL	250	250
11	Issues of Cyber security in Live applications	17.01.2017	17.01.2017	NIL	NIL	250	250
12	ICOS Training	12.01.2017	13.01.2017	NIL	NIL	210	210
13	Challenges and Opportunities for innovation in Smart Grid	10.01.17	10.01.17	All	NIL	All Students of EEE	
14	India's International Climate Policy	13th Jan, 2017		Faculty, Students	88		
15	Panel Discussion on "Media and Indian Democracy"	16.1.17		40	20	340	400
16	Guest lecture on Crisis Communication by Ms. Anupama Chopra	17.1.17		2		50	52
17	Guest lecture by Ms. Shaheena Khan	24.1.17					
18	Guest lecture by Ms. Rakhee Bakshee	31.1.17					

19	Doping Control: Ethical Issues and International Policy Prospectus	20th Jan-17		1	30	150	181
20	Holistic Lifestyle	13-Jan-17		1	30	80	111
21	Periodization	11-Jan-17		1	30	100	131
22	Prevention of Disease	07-Jan-17		1	30	110	141
23	Nutritional Guidelines for Bariatrics	20th Jan-17		1	30	100	131
24	Webinar on Enabling Technology-related Degrees	06.09.2016	06.09.2016	15	NIL	35	50
25	Cloud Computing Reference Architecture	15.11.2016	15.11.2016	NIL	NIL	110	110
26	Introduction to IT infrastructure landscape	15.11.2016	15.11.2016	NIL	NIL	110	110
27	Advancement in Biofuel and its Research	24.10.16	24.10.16	15	1	50	66
28	Number theory and cryptology	22.12.2016	22.12.2016	60	0	0	60
29	3ST technologies:Expert talk on Entrepreneurship programme and placement opportunities in core areas like VLSI	24.10.16	24.10.16	7	NIL	50	57
30	Learn While you Earn by Reliance JIO	13.10.16	13.10.16	28	NIL	90	118
31	Interacted with all the students of ITR	12.10.16	12.10.16	4	NIL	40	44
32	Education – Industry Gap in Engineering Domain	5.10.16	5.10.16	5	NIL	68	73
33	Entrepreneurship and Goals	26.10.16	26.10.16	All		All Students of EEE	
34	Create Industry Ready Students through Industry-Academia Partnership	10.10.2016	10.10.2016	Faculty & students		150	
35	Zero Defect Zero Effect	22.11.2016	22.11.2016	Faculty & students			
36	Cancer Biology	14.10.2016		All students of Biotech along with 4 faculty members	90		
37	Current Media Scenerio	20.07.2016		2		50	52
38	Social Media in News Media and production	26.07.2016		2		50	52

	Dep. Editor, Mail Today						
39	Crisis Management, concepts and Tools	2.08.2016		2		40	42
40	Brand Management and Positioning	09.08.2016		2		40	42
41	Crisis Management	16.08.2016		2		50	52
42	National Media Conclave	30.08.2016		30	20	350	400
43	International Workshop on "Art of Writing and Future of Journalism" on 30th September, 2016.	30.09.2016		20		330	350
44	Crisis Management, Concepts and Tools	13.10.2016		2		40	42
	Guest Lecture by Mr Naresh Kumar						
	Asst. Manager, Corp. Communication, Power Grid						
45	A workshop on "Scientific Communication through Visual Media"	17.10.16		15		285	300
46	Art and Craft of Radio Guest Lecture by prof. Shaheena khan, Radio Expert	18.10.2016		2		35	37
47	Workshop on "English Language Skills"	27.12.2016		5	20	15	37
48	Oracle Apps	03-01-17	03-01-17			Student	39
49	GST	01-10-16	01-10-16			Student	45
50	Recent Developments in Wireless and Mobile Communication and its research scope	20-Sep-16	20-Sep-16			Students	100
51	Digital Marketing	03-09-16	03-09-16			Student	25
52	Systematic Investment Plan	18-10-16		7	1	80	88
53	NISCAIR activities, writing scientific papers, about JSIR and science communication'	23.08.2016		Faculty, Students	85		
54	Risks and Benefits of Nanotechnology	28.09.16	28.09.16	15	1	134	150
55	Introduction to ACM	05.10.2016	05.10.2016	20	NIL	90	110
56	Securing Digital India - Seminar on Smartphone Security and Social Networking Sites Threats	05.10.2016	05.10.2016	20	NIL	90	110
57	Technology and Entrepreneurship for social impacts	07.09.2016	07.09.2016	50	NIL	250	300

58	Cyber World – Opportunities and Challenges	12.08.2016	12.08.2016	40	NIL	110	150
59	Python Programming Language	31.08.2016	31.08.2016	30	NIL	120	150
60	Expert Talk by connexun, which is a social platform	28.9.16	28.9.16	5	NIL	50	55
61	Expert talk on Advances in Satellite Communication	27.9.16	27.9.16	6	NIL	65	70
62	Accendre group conducted a talk for all students and faculty mentors of III sem who were introduced to the subject ITR to give a brief about the work expected from them .The talk was conducted on 9.8.16	9.8.16	9.8.16	2	NIL	40	42
63	SAP (ABAP) training was imparted .Deep insight to various topics related to industrial aspects also addressed. Various opportunities for the students in the industry and various equips required by the students to grab these opportunities were discussed	27.7.16	29.7.16	3	NIL	20	23
64	Research Mentors briefing by Accendere Team This was in reference to faculty research mentors names received from different department for implementation of Accendere Research Activities for the newly introduced subject Introduction to Research	20.7.16	20.7.16	3	NIL	20	23

4.6 Amount spent on maintenance in lakhs :

i) ICT	19.19
ii) Campus Infrastructure and facilities	221.52
iii) Equipments	183.94
iv) Others	114.62
Total :	539.27

Criterion – V

5. Student Support and Progression

5.1 Contribution of IQAC in enhancing awareness about Student Support Services

IQAC is working actively on evolving internal processes for self-analysis and assessment enabling self monitoring for quality improvement. Such processes keep the university alert towards the emerging individual and collective needs and demands among its members. It also provides an opportunity for experimenting with new ideas and thoughts i.e. collective thinking and shared action. This brings in a positive ethos characterized by academic concern, technical rigour, professional development and critical appraisal of aspects, all of which is related to bring in quality in the institution.

IQAC is actively involved in enhancing awareness quality among faculty, students and other stakeholders of the University. It works in close co-ordination with all Academic departments of the University for the development and application of quality benchmarks/parameters for the various academic activities. It also facilitates, the creation of a learner-centric environment conducive for quality education and faculty maturation to adopt the required knowledge and technology for participatory teaching and learning process.

IQAC also monitors the feedback taken from the students and provides recommendations to the institutions for needful action on the same. It works in co-ordination on prevention of sexual and gender harassment committee to address any grievance received by them. It has also involves itself in the organization of inter and intra institutional workshops, seminars on quality related themes and promotion of quality circles in order to develop quality culture .

5.2 Efforts made by the institution for tracking the progression

The institution enrolls all graduates and post graduates into Alumni association in their Final semester of the Programme they are enrolled into. This enables to maintain vital Alumni connect and also track Student Progression.

Institution's efforts in tracking the progression are continuous and retrospective. It has been successful in tracking of student's progression. The approach adopted is as follows:

- 1) Regular monitoring for regularity and learning by Faculty member acting as mentors in Mentorship Programme.
- 2) Generation of daily records and monthly reviews of attendance.
- 3) Review of performance of student in Internal Assessment examination by the Departmental Committees and reporting to the Parents by mentors, followed by parent meetings(if required) with HoDs of the Department.
- 4) Monthly interaction with the CRs to understand whether the teaching-learning process is happening in the expected way and to achieve excellence in Teaching-Learning process.
- 5) Result Analysis after End semester result declaration to assess performance and arrange for Remedial classes.
- 6) Annual Feedback on facilities & infrastructure, teaching and Curriculum etc.

5.3 (a) Total Number of students

UG	PG	Ph. D.	Others
1649	311	51	0

(b) No. of Students Outside the State

891

(c) No. of International Students

20

Men	No	%	Women	No	%
	17	85		03	15

No	%
03	15

Last Year (2015-16)						This Year (2016-17)					
General	SC	ST	OBC	Physically Challenged	Total	General	SC	ST	OBC	Physically Challenged	Total
1498	56	11	313	0	1878	1583	69	15	344	0	2011

Demand ratio

Dropout %

5.4 Details of student support mechanism for coaching for competitive examinations (If any)

Though the university is not formally providing or conducting coaching classes for students appearing for Civil Services, Defence Services, NET/SET and other competitive examinations, however, guidance is provided to the students through trained personnel and University networks. Also, from time to time, the students are also helped via alumni channel and even support. Apart from this, **Career Development Centre (CDC)** is the training arm of MRIU which looks after the skill enhancement requirements of Higher Education. It works with a mission of helping students realize their full potential and help them to be employable.

It operates with the philosophy that a person's employability is:

- Ability to do Intelligent Self Assessment with an objective of exploring personal assets (Skills, Values, Strengths, motivations etc.)
- Explore opportunities in the market, make informed career related decisions.
- Identify and bridge training gaps in terms of assets required for the desired jobs and current inventory of personal assets.
- Create a compelling action plan (Effective resume, Covering letter, Preparation for Personal Interview etc.)
- Gain the first employment.
- Ensure self development throughout professional career.
- Grow in an organization.
- Gain subsequent employments.

To achieve this objective, it provides coaching on not only basic Employ-ability Skills and Business Communication but also on Personal Productivity Skills (Time Management, Problem solving, Decision making etc.), Quality (Lean, Six Sigma) and Managerial Skills (Performance Management, Effective Coaching, Team Building etc.) which are rated very highly by corporate across the world

Team

Career Development Centre operates through a team of professionals who have rich corporate experience apart from having great training skills. Some of the trainers working with Career Development Centre come from renowned organizations like Microsoft, Dell, Wipro, TCS, DLF etc. This helps the students to understand skills from two perspectives – theoretical and practical application in the corporate world. Career Development Centre is providing coaching on skills to the entire Higher Education ecosystem with an objective of enhancing employability.

Following are the activities currently being performed by Career Development Centre to achieve its employability objectives:

Coaching and Mentoring

It is providing extensive process oriented and activity driven training on Personality Development, Business English, Business Communication and Aptitude Development. These trainings are delivered in two formats – Regular Semester coaching and Crash courses.

Employability Augmentation

It is helping the placement initiates of Manav Rachna Educational Institutions by tying up with companies like Aspiring Minds, Co Cubes, E Litmus etc. These companies conduct Employability Assessments that are recognized by a wide range of corporate. This has helped students get placed with companies that do not come to campus otherwise.

Professional Enhancements

It has been instrumental in making students participate in activities that help them add more professional qualifications to their CV. Some such activities are

- Six Sigma Certification conducted by KPMG.
- Lean, Process Improvement Courses etc. offered by American Society of Quality.
- Certification courses offered by Microsoft, SAP, Oracle etc.

Employability Related Events

It organizes Employability Related Events. GD Pro 2016 was one such event organized last year which helped students improve their Group Discussion Skills.

5.5 No. of students qualified in these examinations

NET	<input type="text"/>	SET/SLET	<input type="text"/>	GATE	<input type="text"/>	CAT	<input type="text"/>
IAS/IPS etc	<input type="text"/>	State PSC	<input type="text"/>	UPSC	<input type="text"/>	Others	<input type="text"/>

5.6 Details of student counselling and career guidance

The following constituent of the University are engaged in student counselling and career guidance:

A)Corporate Resource Centre (CRC):In the institutions providing professional courses, it is the dream of every student to get a job offer through campus placement while still being in the Institution and join it immediately after passing out. Fulfilling these dreams of the students has been a constant endeavor of Corporate Resource Centre (CRC), the central placement agency of MRIU. The CRC also gathers information, through close and regular interactions with the leading recruiters, regarding the knowledge and skills requirements of the industry and advises the institutions / faculties under MRIU to incorporate them to make our students even more industry ready and job ready.

Probably, MRIU is one of those few universities in the country to have credit courses for job readiness which is ensured through imparting the right set of soft and hard skills. With 13,000+ on-campus placements, over the years, the focus of education at MRIU is on employability. The Corporate Resource Centre (CRC) is the central agency for providing placement opportunities to all students of the University. The CRC is well abreast with the industry requirements - that of the professionals with a well-rounded personality. At MRIU,

B) Career Development Centre (CDC) a constituent facilitation unit of MRIU is providing coaching on skills to the entire Higher Education ecosystem with an objective of enhancing employability. Following are the activities currently being performed by Career Development Centre to achieve its employability objectives:

- **Coaching and Mentoring:** CDC is providing extensive process oriented and activity driven training on Personality Development, Business English, Business Communication and Aptitude Development. These trainings are delivered in two formats – Regular Semester coaching and Crash courses
- **Employability Augmentation:** CDC is helping the placement initiates of Manav Rachna Educational Institutions by tying up with companies like Aspiring Minds, Co Cubes, E Litmus etc. These companies conduct Employability Assessments that are recognized by a wide range of corporate. This has helped students get placed with companies that do not come to campus otherwise.

- **Professional Enhancements** :CDC has been instrumental in making students participate in activities that help them add more professional qualifications to their CV. Some such activities are :

- Six Sigma Certification conducted by KPMG
- Lean, Process Improvement Courses etc. offered by American Society of Quality
- Certification courses offered by Microsoft, SAP, Oracle etc.
- Employability Related Events
- Career Development Centre organizes Employability Related Events. GD Pro 2016 was one such event organized last year which helped students improve their Group Discussion Skills.

No. of students benefitted

2502

5.7 Details of campus placement

<i>On campus</i>			<i>Off Campus</i>
Number of Organizations Visited	Number of Students Participated	Number of Students Placed	Number of Students Placed
55	2197	311	223

5.8 Details of gender sensitization programmes

1. **Women Empowerment:** Department of Students Welfare, MRIU organized a series of events under **Manav Rachna National Service Scheme** in the campus on the topic '**Women Empowerment**' in order to create social awareness among students on the issue of women empowerment. As a part of the event series, a **Poster making competition** in which 30 students participated. The theme of the competition was 'women empowerment'.
2. **Self -Defence Workshop:** Manav Rachna National Service Scheme under the Department of Students Welfare along with The Pehnava.com organized a Women Self Defence Awareness Programme with an aim to empower women and to introduce them to various self-defence techniques which may help them to predict, identify and avoid the awry to take place in B Block Seminar Hall. This idea was the brainchild of Dr.Aanchal Makhija, Co-founder of start up The Pehnava.com in collaboration with GOJU - RYU academy, Mr. O.P. Singh and Mr. Karan Sagar were present to inculcate the students in the self-defence activities. The event took place at B-

block seminar hall and commenced at 11:30 am. Around 50 students from Faculty of Management Studies, MRIU participated in the event.

5.9 Students Activities

5.9.1 No. of students participated in Sports, Games and other events

State/ University level National level International level

No. of students participated in cultural events

State/ University level National level International level

5.9.2 No. of medals /awards won by students in Sports, Games and other events

Sports : State/ University level National level International level

Cultural: State/ University level National level International level

5.10 Scholarships and Financial Support

	Number of students	Amount
Financial support from institution	1102	
Financial support from government (As per R&S Branch)	05	92010
Financial support from other sources		
Number of students who received International/ National recognitions		

5.11 Student organised / initiatives

Fairs : State/ University level National level International level

Exhibition: State/ University level National level International level

5.12 No. of social initiatives undertaken by the students

1. **Road Safety Awareness Programme:** Department of Students Welfare and Dr. O. P. Bhalla Foundation organized a “**One life Road Safety Awareness Programme**” in I Block Auditorium on **26th July 2016** in association with District Legal Services Authority, Faridabad.
2. Ms.Sampreet Kaur, Chief Judicial Magistrate, District Legal Services Authority (DLSA), Faridabad, Mr. Devinder Kumar Yadav, ACP Traffic, Faridabad, Mr. Prem Khilani from Indian Road Traffic Institute and Mr. Surender Sharma , Active Volunteer and Vice President, Road Safety Organization graced the occasion by their esteemed presence.
3. **Cloth Donation:** A few active members of the MANAV RACHNA SOCIAL RESPONSIBILITY SOCIETY organized a drive to distribute winter clothing to the underprivileged in various areas across Faridabad, including Sector-9, Bata circle, YMCA circle, Neelam circle, Badshah khan circle, Badhkal circle, Sec- 19 circle and Old Faridabad railway station. The distribution took place in 5 different slots from 18th Dec 2013 to 31st Jan 2014. The collection of these clothes took place all across the Manav Rachna and around 400 garments were collected from all over the campus. A few dignitaries like Dr NC Wadhwa, VC, MRIU, Prof IK Kilam, Dean Students Welfare, MRIU, etc. donated some cash which was later used by the students to buy blankets for the underprivileged.
4. **Tree Plantation:** Adopt a fruit tree 23rd and 24th July 2016 campaign in Huda Ground Sector 12, Faridabad. 48478 plants sold in two days event.
5. **Yoga Day:** International Yoga Day was celebrated on 21st June 2015 and 2016 in the Manav Rachna campus to provide a glimpse of healthy way of living. Higher level dignitaries and faculty members along with about 100 students participated in the event.
6. **Mohana Visit:** A group of students went to Mohana girls school in order to conduct a Talent Show and brief them about various technicalities of Music and Dance.
7. **National level Debate on Anti – Ragging** on 07 August 2016 and a seminar for the same is pipelined to be organized in 2016.

5.13 Major grievances of students (if any) redressed:

All Student Grievances are handled by respective Deans of Faculties. There is also a Students Grievances Redressal Committee under the Dean, Students Welfare, where two student representatives are also members. Specific Complaints on language barrier for foreign student and Hostel Food etc were redressed suitably, such as-

1. **Mess Food:** The students residing in the campus hostel frequently complain about the taste and quality of mess food being served to them. In order to eradicate the problem, a team is formed and frequent visits to hostel mess in order to check the hygiene and food quality are conducted.
 2. **Gender mistakes in Provisional Degree:** a student named Ms.Monami Chaterjee had a complaint that her provisional degree consisted of numerous gender errors. The complaint was forwarded to Dy. Registrar and other concerned authorities and a new Provisional degree was offered.
 3. **Wi – Fi problems:** A lot of students from hostels and around the campus frequently complain about the Wi –Fi problems which are then and there forwarded to the IT department and uprooted.
-

Criterion – VI

Governance, Leadership and Management

6.1 State the Vision and Mission of the institution

Mission:

Manav Rachna International University is dedicated and committed to train and equip its students with the latest knowledge and skills in the chosen fields in the backdrop of Indian ethos and values to enable them to face any global challenge with a view to transforming them into insightful, honourable and responsible citizens of this great country and imbibe a work culture of theoretical and applied research leading to creation and dissemination of knowledge.

Vision:

To provide an environment in which teachers love to facilitate and students love to learn, consisting of infrastructure facilities at par with the best institutions in India and abroad.

The aim is:

- (i) To inculcate skills and impart knowledge to the ignited minds in the fields of science and technology and soft skills including leadership, team building and communication

6.2 Does the Institution has a management Information System

- The university has a campus wide MIS which is based on Campus Management Software of TCS-iON.
- Data is generated on the real time bases and stored in the scientific manner for retrieval. This greatly increases the efficiency of academic and administrative operations.
- Campus management system takes care of applicant and student databases, time table, attendance modules, exam and grading modules

6.3 Quality improvement strategies adopted by the institution for each of the following:

Best pedagogical practices are regularly incorporated in curriculum delivery.

- Faculty is kept regularly updated on current practices and innovation in pedagogy
- Group activities, practical assignments, classrooms presentations and case discussions characterized learning methodologies.
- Expert lectures from industry experts particularly in inter-disciplines areas are important part of quality strategy in teaching.
- Students are encouraged in critical and innovative thinking and required to developed projects in concerned departments.
- Students are encouraged for discussion and raising questions.
- Industry visits are regularly conducted which are followed by experienced sharing sessions.

6.3.1 Curriculum Development

- Curriculum design and development across various departments is based on the leads and input provided by the faculty, alumni and domain experts both from industry and academia.
- The Curriculum improvement strategy of the university includes focus on industry exposure, development of critical thinking, holistic development and value orientation.
- One important component of Curriculum development strategy is that there is curriculum flexibility and provision for regular updating based on stakeholder feedback and industry trends.
- Best pedagogical practices are regularly incorporated in curriculum delivery.

6.3.3 Examination and Evaluation

- Comprehensiveness in Question Paper setting is a key part of Quality Strategy.
- Examiners are recommended by the BOS of the concerned departments.
- For fairness and objectivity, qualified external examiners are associated.
- Examination results are based on SGPA/CGPA and credits using a relative grading system.
- Both formative and summative evaluation approaches are adopted.
- An in-house developed marks rationalization, computer implemented algorithm is developed without any manual intervention based on global average of all the courses of a particular programme in a semester.
- Examination processes are computerized for better efficiency.
- Sanctity of examinations is well maintained and results are declared.
- Complete secrecy and confidentiality is maintained in the overall evaluation process.
- Internal assessment is based on sessional exams, lab work, attendance, field assignments, classroom participation, assignments and presentations, weekly tests and general conduct the marks of which are duly communicated to the students.
- There is a process of re-evaluation and re-checking of the answer books.
- Ph.D. evaluation process has stringent quality checks and conforms to the UGC standards
- A close moderation/ vetting of each single question paper is undertaken to ensure that a mistake-free question paper is administered in the examination hall.

6.3.4 Research and Development

- FDPs are regularly conducted for improving research quality.
- As quality improvement strategy R&D has been totally institutionalized its activities for continuous growth.
- Research promotional group is established to take care of the quality research, innovation and incubation centre set-up to promote innovation and start-ups and skilled development centre is established to promote technical skills.
- For quality improvement publications by faculty in high impact journals is encouraged.
- Monetary rewards are given for publication in Scopus, SCI index journals.
- As a quality improvement strategy faculty is encouraged to present papers in national and international conferences and take up innovative projects.
- Industry is associated in research activities on campus.

6.3.5 Library, ICT and physical infrastructure / instrumentation

- Centrally air-conditioned library with huge online learning resources is provided to create a quality learning environment in the library.
- Centrally air-conditioned 124 classrooms, 39 tutorial rooms , two auditoriums and 9 seminar halls are provided with ICT and modern sound system which provide quality infrastructure for teaching and learning.
- Science and technology labs are equipped with quality instruments to provide quality training to students.
- 24-hr power back-up is provided for uninterrupted learning environment.
- Web-based RFID library management system.
- It deploys OPAC- libsys Web 7.0 system OPAC Address: <http://lobopac.mrei.ac.in> offers user interactive series.
- Ebsco Host Single window search Discovery Solution as federated searching tools to search articles in multiple databases.
- The Library portal acts a single point of access for content Management System for e-learning. MOOCs, NPTEL Video Lectures and Open Access Resources.
- Insta Alert Services enables users to know immediately any transaction done to their account.

6.3.6 Human Resource Management

- Staff development programmes are conducted to improve the quality of education.
- Professional approach is adopted in the conduct of administrative functions
- Due care is taken for staff welfare
- Gender equity is maintained at all levels
- Administrative processes are well documented
- A scientific system of feedback and control is maintained for efficiency and quick response.
- Human Resource Management system takes care of employee information, leave management, performance appraisal, purchase management and inventory management.

6.3.7 Faculty and Staff recruitment

- An congenial and motivated environment has been provided to attract good faculty and staff.
- Recruitment strategy includes appointment of both academically and professionally qualified faculty as per UGC norms.
- Due emphasis is given to staff sufficiency and cadre ratio at the time of appointment.
- Better remuneration is adopted as a strategy to get highly qualified people in academics and administration.

6.3.8 Industry Interaction / Collaboration

Quality improvement strategies for industry interaction include:

- Expert lecture by industry professional
- Association of industry experts in IQAC, Board of Studies, Innovation and Incubation Centre and other bodies of the University.
- Industry visits
- Participation of industry experts in seminars and conferences.
- Association of Industry experts in curriculum design and delivery.
- Student mentorship by industry managers
- Collaborative research and consultancy projects with industry.
- Academic collaborations with industry including IBM, JBM, KPMG, NIIT, Fortis Hospitals and several others.

6.3.9 Admission of Students

- Admission is based purely on merit.
- Scholarship and free ships are provided to attract good students.
- For quality admissions, admission is through a Common Entrance Test (MR NAT) followed by group discussion and interview.
- Due consideration is given to the student diversity and safe environment on campus particularly for girls students.
- Facilities for educational loan to deserving students with limited economic resources.

7.4 Welfare schemes for

Teaching	Maternity Leaves, Grievance Redressal policy, award after successful completion of 10 years of service, Monetary incentive for quality publication, Group Medical Concessions.
Non teaching	Award after successful completion of 10 years of service, Grievance Redressal policy, Group Medical Concessions, low interest loans
Students	International student welfare committee, sports concession, eligibility relaxation for girls children

6.5 Total corpus fund generated

Total Rs 2.43 crore

6.6 Whether annual financial audit has been done

Yes

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

Audit Type	External		Internal	
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	Industry/Academia	YES(a)	Yes
Administrative	Yes	Industry/Academia	YES	Yes

NOTE: (a) Internal Audit includes one external expert

6.8 Does the University/ Autonomous College declares results within 30 days?

For UG Programmes Yes

For PG Programmes Yes

6.9 What efforts are made by the University/ Autonomous College for Examination Reforms?

Results declared on time.

Computerisation of the examination process

Sanctity of exams completely maintained.

Engagement of external experts in the evaluation process.

6.10 What efforts are made by the University to promote autonomy in the affiliated/constituent colleges?

NA

6.11 Activities and support from the Alumni Association

- Social media groups
- Regular lectures
- Social get-togethers and events
- Training programmes and short courses for alumni
- Idea meets and business sessions
- Joint publications

6.12 Activities and support from the Parent – Teacher Association

- Parent –Teacher meetings are held from time to time to obtain feedback and attempt further improvements in faculty parent relations.
- Regular contact is maintained through phone calls, letters and e-mails regarding the performance of their wards.
- Parents are encouraged to visit the departments from time to time and are also invited for the university functions.

6.13 Development programmes for support staff

- Staff development programmes are organized from time to time.
- Staff is trained in the use of IT and use of campus management software

6.14 Initiatives taken by the institution to make the campus eco-friendly

- Awareness programmes are conducted from time to time on campus greening and energy saving.
- Environment consciousness is maintained at all the levels.
- Every year the new trees are planted on the occasion of Van-Mahostav and there is active participation in tree plantation drives
- There is a separate horticulture department to take care of the campus plants and trees.
- Green audit committee has been constituted in the university to take care of green initiatives.
- Solar heaters have been installed in the hostel.
- Solar power grid of 200kW is in process in association with the Tata Solar.
- The campus has the STP Plant which processes 200 kL of water per day
- The university has MOU with ACT for re-cycling of solid waste

Criterion – VII

7. Innovations and Best Practices

7.1 Innovations introduced during this academic year which have created a positive impact on the functioning of the institution. Give details.

Electronic Pills Box:

The Pills Box is a portable medication reminding device. It provides an audio and visual alert on the scheduled time which helps patients in taking correct medicine, at correct time and in correct dosage.

- Designed to help patients take right dose at the right time.
- USB & Bluetooth Compatible.
- Scheduling can be done using Smartphone Application or PC.
- Initiates audio visual reminders to remind the patients about different medicine timings.
- Also reminds the patient about their next appointment with the Doctor.

SMART DUST BIN:

A smarter way to keep the earth clean..!!

- Produces social messages when trash is thrown inside.
- Encourages people to put all the garbage in the dustbin rather than on floor.
- Increases the waste collection.

Fun can change the behavior for better.

ALL TERRAIN VEHICLE – 2

- Best in class off road abilities.
- Three wheel self-balancing all-terrain vehicle.
- High performance shock absorption system for a smoother ride.
- High precision radial wheel in the rear for a better grip in all terrains.

EFFICYCLE

- Load bearing capacity of 700 kilograms.
- Vehicle furnishes ergonomics design.
- It has an aerodynamic design in order to run at speed of 30 kilometers per hour.
- A HYBRID vehicle having a motor of 1 horse power.

Being provided for the first time after NAAC accreditation

7.3 Give two Best Practices of the institution (*please see the format in the NAAC Self-study Manuals*)

ERP System: Enterprise Resource Planning (ERP)

Objectives of the Practice

Technology in the education system enables students, faculty and researchers with easy access to the internet and open networks, to adopt high degrees of sharing, collaboration and participation. We are fully clued up on the hypothesis that the dimensions and quality of education keep on evolving with time. In every walk of life, there has to be very copious intervention of technology in general and that of Information and Communication Technology (ICT) in particular. In consonance with this, all our essential processes which appertain to academics, examinations, student support services like hostel and transport, various human resource functions are executed through a highly sophisticated ERP platform developed by M/s Tata Consultancy Services, a leading IT company in the world.

- To provide an integrated platform for smoothly & conveniently running the various processes of the university.
- An Automated Maintenance/service facility across organization through helpdesk
- To reduce the time & efforts for maintenance of Students as well as employee records.
- To provide a single window solutions to various workflow across university

II) Industry collaborative Programmes

In order to negotiate with the oft-repeated criticism of Indian educational system that our engineering graduates are grossly lacking employability skill and there is a wide gap between what institution teaches and industry wants, we are forged knowledge partners like IBM, TCS, NDTV, ICICI Securities and JBM to enable us design and run industry-oriented academic programme. We are running five B.Tech programmes in computer science engineering with specialization in Cloud Computing, Business Analytics and Optimization, IT Infrastructure Management, Graphics & Gaming, and Cyber Security & Forensics. These programmes are based on introduction from industry through train the trainer mode. Besides an Industry-integrated B.Tech programme is run in collaboration with JBM a leading automotive company. In the vein, our B.Com, BBA and Journalism programmes are run in collaboration with ICICI Securities, KPMG, NDTV Worldwide respectively. These industry oriented programmes have been very well received by students and are bound to bring about copious quality enhancement.

7.4 Contribution to environmental awareness / protection

The institution does display sensitivity to issues like climate change and environmental issues. It adopts environment friendly practices and takes necessary actions such as – energy conservation, rain water harvesting, waste recycling, solid waste management etc.

a) **Energy Conservation**

The earth provides enough to satisfy every man's needs but not every man's greed said Gandhiji. Hard facts on why energy conservation is a must, with the present situation of energy crisis, fossil fuels (coal, oil & natural gas) potential being unable to meet the current energy demands and as we know that energy is the life line of growth in any economy that's why energy saving is very important. Our country's per capita energy consumption is 325.1 million tones oil equivalent which is very low as compared to the industrialized countries but the energy intensity is very high. We can easily narrow the gap between demand & supply and decrease the energy intensity in each sector by simple approach towards energy conservation and efficiency through energy efficient technology and housekeeping habits. True to this spirit the university has started its initiatives towards energy conservation as follows:

- Top management policy is in place which clearly indicates initiatives towards energy conservation
- Establishment of Energy management cell is in pipeline.
- Use of Energy efficient lighting
- Remote controlling of ACs in class rooms in various building in order to control wastage of electricity.
- Use of water level controllers for over head tanks in order to control wastage of power and water.
- Use of water level controllers for tube well submersible pumps. During summer the water level in borewell goes down. Due to long running hours the draw down is high and the submersible pump is subjected to dry running. This results in rubbing of impellers of pumps and burning of motor also.
- Installation of air curtains for glass doors in entrance of building. This controls the losses due to frequent opening of doors.
- Use of door closers for all AC rooms in order to prevent leakage of cool air.
- Use of sun films on widow glasses facing sun in order to prevent

- b) **Use of solar energy :**
India has a vast supply of renewable energy resources, and it has one of the largest programs in the world for deploying renewable energy products and systems. Indeed, it is the only country in the world to have an exclusive ministry for renewable energy development. Understanding the significance and importance of usage of solar energy, there has been Installation of Solar Energy based devices:
- Solar Energy panels to be installed
 - Solar heaters installed in hostel (Heaters – 1000 ltr capacity)
 - Solar lighting in campus (22 lights 12 W)
 - Solar power grid (in process 200W)
- c) **Rain water harvesting**
Provision and process in place with ongoing construction work.
- d) **Waste Management**
STP Plant in process and fully functional, 200 KL / day.
Metal and paper wastes are disposed off to recyclers.
We have installed an organic composter. It's a fully automated machine which will transform our food waste from entire campus and grass into organic compost in 24 hrs. The entire operation is fully automatic, noise-free, odor-free and does not generate any harmful gases or by-products. Its capacity is 75 Kgs per day and will produce approx 7.5 Kg of compost daily.
We have separate contracts for disposal of hazardous material such as e-waste, bulbs/tube lights, old batteries, old engine oil, old batteries etc. Vendors are approved by Haryana Pollution Control Board.
- e) **Solid waste management**
Deployment of dustbins for segregation and collection of solid waste, MOU with ACT – NGO for recycling of waste.
- f) **Plantation**
Planting one tree means planting a whole living system. Our dedicated tree plantation program works toward communicating this very idea to students and masses. Using distinct socio- cultural tools, like plantation drives, poster exhibitions, lectures, presentations, we sensitize masses on scientific, social, cultural and spiritual importance of trees. Description of this multifaceted role of trees is enough to generate that warmth within the hearts of students and their families.i.e, within the hearts of the mothers, within the hearts of fathers, within the hearts of grandparents. And then we train them in the art of caring for trees. During the orientation programme of the students for newly admitted students, one tree is planted by each student in and around the University campus following UGC campaign of 'One Student, One Tree' for the last three years.
The initiative has reached its pinnacle with organization of mega tree Plantation Drive organized on 25th July 2015 in Faridabad District with participation of Govt. of Haryana with CM Haryana and MLAs in prime role, wherein thousands of children, youth and women across the district have been trained in the art of planting trees, thousands of trees have been planted and several others are being protected.

7.5 Whether environmental audit was conducted? Yes

7.6 Any other relevant information the institution wishes to add. (for example SWOT Analysis)

Strengths

- 1). State-of-the-art facilities and infrastructure with aesthetical surroundings.
- 2). Very well equipped labs and library.
- 3). Talented and highly qualified faculty with experience from diverse backgrounds
- 4). Very Responsive and efficient support staff
- 5). Excellent student support services
- 6). Collaboration with Industrial knowledge partners
- 7). Strategically located in very eco-friendly Aravali ranges
- 8). Excellent sports infrastructure of International standards with trained Indian and foreign coaches
- 9). Student and faculty with diverse background with low employee turnover rate
- 10). Robust Internal Quality assurance system to ensure quality academic and administrative inputs.
- 11). Very efficient governance system to take care of academic and administrative needs
- 12). Lot of innovation and research activities resulting into high-end research publication, development of processes, products and start-ups.

Weakness

- 1) Low proportion of foreign students
- 2). Lack of funded research
- 3). Land constraints for campus expansion

Opportunities

- 1). Strategic alliances and partnerships
- 2). Closer networking with Alumni
- 3.) Digital and lifelong learning programmes
- 4). Contribution to new educational policies objectives
- 5). Funded research
- 6). Internationalization of academic programmes
- 7). Introduction of industry certified programmes
- 8). Emerging ICT technologies

Threats

- 1). Disruptive technology changes that effects the future growth and productivity.
- 2). Competition from free online courses
- 3). Frequent changes in regulatory requirements.
- 4). Changing industry expectations
- 5). Extensive competition in higher education in NCR
- 6). Student diversion to low cost publically funded institutions.

8.Plans of institution for next year

Forthcoming Initiatives

- Shall encourage its faculty and research scholars so as to publish an average of at least 1 paper per faculty/ scholar per year in international journals with high impact factor and grant of patents. Shall endeavour to increase h-index to 30-40 level.
- Shall aim to ensure sizeable number in-campus placement in leading organizations. It shall further strive to achieve sizeable induction in civil services, engineering services, defense service and PSUs.
- Shall develop its R&D activities to a level so as to attract a significant amount of grant from Govt. agencies, public undertakings and industry.
- Shall become a change-prime mover for societal improvements.
- Preparing plan for setting up student support mechanism for coaching for competitive examinations.
- Accreditation from international bodies
- Conduct of FDPs on quality of teaching and research

Name : Prof Suresh Bedi

Name Dr. V.K. Mahna

Signature of the Coordinator, IQAC

Signature of the Chairperson, IQAC

