



SELF STUDY REPORT

FOR

2nd CYCLE OF ACCREDITATION

R.V.R. AND J.C. COLLEGE OF ENGINEERING

CHANDRAMOULIPURAM, CHOWDAVARAM

522019

www.rvrjcce.ac.in

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

Rayapati Venkata Ranga Rao and Jagarlamudi Chandramouli College of Engineering was established in 1985 by a group of Philanthropists, with a primary mission of serving the Society through education under the aegis of Nagarjuna Education Society, Guntur, affiliated to Acharya Nagarjuna University. The college offers B.Tech in eight branches, M.Tech in six branches, MBA and MCA courses. With six recognised research centers, 56 faculty are guiding 316 research scholars and 50 Ph.Ds were awarded so far.

- The college has autonomous status since 2012 and upgrading academics, research, industrial interaction, etc. Autonomous status is extended upto 2023.
- The eligible programs were Accredited five times in 1998, 2002, 2007, 2012 & 2017 by NBA.
- Accredited by NAAC with 'A' Grade with 3.19 out of 4 scaling in 2014.
- College was Ranked in between 151 to 200 in overall/engineering NIRF Rankings in 2017 and 2018.
- RVRJCCE was among the Top 100 Engineering Colleges in India as per the rankings (87th, 88th, 90th and 69th) published in "THE EDUCATION WORLD" from 2016 to 2019, AAA+ Ranking in Careers 360 Survey 2018 and 2019 and was among the Top-10 Engineering Colleges in the combined state of AP and Telangana as per the Rankings in ToI.

A built up area of 92,161sq.m.in 37.41 acres, houses spacious Class rooms, well equipped Laboratories and Computer Centers, Central library besides amenities like Canteen, Seminar Halls, Auditoriums, Open Air Theatres, e-classrooms, IITB-RC, e-Yantra Lab, Spoken Tutorials, CII, Incubation center, NPTEL LC, Sports Facilities, Cricket ground as per BCCI standards, Dispensary, stores, SDCs, Student Activity Center, NSS units, NCC units, Hostels, Solar power plants of 700 kW capacities, etc., to make life congenial in the college. Campus Bank, buses, aesthetically designed structure with roads and good landscape inspires the minds to "Think Better, Work Better and Strive to Excel".

The college gives importance to 'Donate-Serve-Provide' concept. Management, Staff and Students are donating money at the time of natural calamities and developmental activities in the country. In recognition of the service by NSS/NCC, the college received awards from the President, Governor and CM. The college provides facilities for the knowledge and skill enhancement of the students.

Vision

"To develop integrated manpower with right attitude, possessing knowledge and skills, required to make an honourable living and contribute to the socioeconomic development and welfare of the society."

Mode of attainment:

It envisions to develop integrated manpower with right attitude and to provide a holistic and comprehensive way for the well-being of the humanity. It focuses on the persistent pursuit for excellence through quality training tapped from national and international resources. It advances all-round personality improvement of the students through interactions with alumni, the scholarly world and industry. Designed curriculum meet the national and worldwide changing needs through modern techniques pertaining to student

centric learning. It reinforces academic practices regarding curriculum, pedagogy, assessment and faculty competence. It provides healthy learning environment and research culture among students and faculty through Projects and Consultancy. The campus creates an atmosphere of open inquiry and exploration so as to enhance broad skills in technical areas, writing and speaking skills, teaming skills, and problem solving which are the essential attributes to taste the fruit of success in today's competitive world. It embraces lifelong education and training that produces graduates with the skills necessary to sustain individual career success and to foster leadership qualities which are essential for the growth of the organization within a global economy. It confirms the teaching- learning process which strengthens the graduate to take a leadership position in influencing education and conducting applied research that will create the new products and services necessary for sustaining the economic health of the external community. It provides an effective, supportive, safe, accessible and affordable learning environment which created to see the students explore newer vistas with required expertise, who are not only industry ready but also human resources with holistic personality.

Mission

- *To produce globally agile graduates with value orientation, professional competency, critical and creative thinking and lifelong learning.*
- *To enrich the society through education and research by generating proficient manpower, capable of contributing to the needs of the industry.*
- *To provide conducive learning environment, encompassing knowledge, communication and soft skills that enables the students to transform themselves into global leaders*

Mode of attainment:

The institution is driven by talented faculty, staff and students who are competent to meet grand challenges with advanced technologies, sustainability, vitality, cutting edge innovations and the environment. The institution develops into an inter-disciplinary institute combining academic rigor, energy of revelation, creativity and entrepreneurship. It provides motivating and invigorating environment for various specializations of faculty and students. It develops responsible citizens through awareness and acceptance of ethical values. It ensures the academic process to uphold culture, ethics and social responsibility. It enables the students to develop their own abilities and talents in order to discover their teaming potential to the fullest under the guidance of highly qualified and dedicated faculty to get high ratings in placements. To make the students develop abilities, attitudes and other forms of behavior of the positive values.

To make the students self-motivated and self-directed learners for lifelong learning, this enhances competitiveness and employability by developing ability to skillfully conceptualize and devise new ways to carry out tasks, solve problems and meet challenges.

The institution aims to turn into a premier institute of academic greatness, institution of professional education and research by giving scholarly, technical and professional skills to the students for meeting the assorted needs of the industry, society and the country and the world at the large.

The campus creates an atmosphere of open inquiry and exploration so as to enhance the sound technical knowledge, communicative skills and soft skills which enables the students to transform themselves into global leaders.

The institution inculcates high levels of discipline, strive to set global standards, making the graduates

technologically superior and ethically strong, who in turn shall contribute to the advancement of society and humankind.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

1. Accredited five times by NBA (1998,2002,2007,2012 and 2017)
2. Accredited by NAAC with A Grade (2014)
3. ISO 9001:2015 certified (2019)
4. Accredited by TCS- B Grade (2015)
5. Listed in 87th, 88th, 90th and 69th position in Top-100 Engineering Colleges survey by 'Education World' in the years 2016,2017,2018 and 2019.
6. NIRF India Rankings within 150 to 200 position (2017,2018)
7. AAA+ Ranking by Careers 360 Survey (2018,2019)
8. One among the Top-10 Engineering Colleges in the combined state of AP and Telangana as per the Ranking by TOI
9. Second best among the Private Engineering Colleges in Andhra Pradesh in the 'Academic Audit & Grading' by APSICHE, Govt. of A.P.,(2003)
10. NPTEL Local Chapter with AA to AAA Rating
11. "Best Performing Professional College", "Best Laboratories" and "Best Eco Friendly Campus" by Acharya Nagarjuna University
12. Accolades to NSS Unit from President of India, Governor and Chief Minister
13. Dedicated qualified experienced faculty with good retention: 110Ph.D.s(40.5%)
14. 75 MOUs with premier industries and academic institutions.
15. Established APSSDC, IITB Remote Centre & e-Yantra Lab, Incubation Centre, EMD Cell, IIP Cell, CM Centre of Excellence, Dassault Systems Laboratory, APS European Centre for Mechatronics
16. Stanford University Fellows Program; Northeastern University i2e, Entrepreneurship Development Diploma and Certificate Program, MOUs with two foreign universities – New Mexico State University and Northeastern University are in place
17. Grants worth Rs.4.04crores received from AICTE, UGC, DST etc.
18. Excellent infrastructure
19. Handling large training programs for Faculty and Students in diverse fields.
20. Focus on professional development programmes for faculty and staff Environmental initiatives like use of renewable energy, rain water harvesting, Zero water discharge, waste management system etc.,
21. ICT infrastructure for smooth conduct of academic, examination and administrative processes
22. Curriculum up-gradation at regular intervals
23. Exclusive Training and Placement Cell and excellent track record of placements in Campus Recruitment
24. Continuous support from Alumni in all aspects.
25. Continuous Poor & Merit Scholarships for 150 – 200 deserving students worth Rs.30 to 40 lakhs
26. Appreciations from Central & State Governments for contributions during disaster management

Institutional Weakness

The Institute makes every effort to minimize the below listed weaknesses in all aspects through continuous and comprehensive long term strategies for development.

1. Non availability of major Industries locally for Industry Institute interaction
2. Limited Industrial Consultancy work
3. Difficulty to grab sizeable research funds from Government & Non Government funding agencies being a private College
4. Nominal Centers of Excellence in emerging areas
5. Absence of adequate collaborative approach among the Institutions and with Industries
6. Budding Entrepreneurship initiatives & activities

Institutional Opportunity

1. Close Industry Interaction with comprehensive understanding of Industry needs
2. Competent Training and Placements
3. Incorporating skill based training and certifications in curriculum for enhanced employability
4. Customized and need based courses as per industry /society requirements
5. Strengthening positive attitude and human values
6. Strong and supportive alma matter
7. Collaboration with Government of India for different National Missions such as Startup India, Digital India, Make in India, Swachh Bharat, Accessible India campaign etc.
8. International MoUs for enhancing joint and collaborative research
9. Global collaborations for research and education projects
10. Global exposure to Faculty and Students
11. Rural upliftment and societal development through villages adoption
12. Utilization of MHRDS wayam portal for MOOCs certification
13. Global impact on society through education, research, innovation and philanthropic activities
14. Green energy initiatives for sustainable development of nation and society
15. Developing leadership qualities in the students
16. Expanding the resource base through exploring Government and Non Government schemes
17. Continuous review/revision and reconstruction of programs to update the courses at par with the global demand
18. Using latest technology and resources for efficient and effective teaching learning process
19. Imbibing leadership skills among students by representing students on academic and administrative committees
20. Close to capital city Amaravathi with an envisaged vertical and horizontal institutional growth.
21. Quality enhancement and development leading to Quality Education
22. Active student participation on National and Global level platforms in design competitions / contests / hackathons
23. Quality research contribution in high impact factory journals by faculty
24. Credit based online courses in curriculum

Institutional Challenge

1. 100% Placements
2. Bridging the gap between Academia and Industry
3. Work strategically on key requirements of Industry to mobilize income from consultation
4. The new millennial mind set and life style differences
5. Collaboration with foreign universities to start new programmes.

6. Industry recession and uncertainties
7. Adaption to fast changing technology and pedagogical innovations
8. Keeping on pace with global developments in higher education and research
9. Reducing the Institute's carbon foot print implementing sustainable measures to minimize on resource use
10. Paperless Office
11. Patent standard Research contribution
12. Holistic development of youth
13. Reduced student inclination towards PG and research activities
14. Introducing subjects in curriculum to match the Government initiatives like Make in India, Smart Cities, Skill Development, Digital India etc.
15. Academic exchange of faculty and students on local and global platforms

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

- The Institution has a clear Vision, Mission and Quality Policy which spells the core Goals & Objectives of the Institution. All the programmes run in the Institution are oriented and planned to achieve the goals.
- The Institution has academic autonomy, and hence has the responsibility of designing the curriculum.
- This enables us to design the curriculum which helps to attain the Program Outcomes (POs) defined by NBA, the recommended content by Program Specific Outcomes (PSOs) of professional bodies, the model curriculum and credit structure as suggested by All India Council for Technical Education (AICTE), the content of prominent competitive examinations, the autonomous guidelines by the affiliating university together with suggestions from various stakeholders.
- The Institution ensures that curriculum is not only mere syllabus but it also includes various means which enable learners to achieve their learning goals to cope up with global competition. It comprises of teaching – learning support, guidance, coaching, peer and collaborative learning, feedback and assessment, personal development planning, skills development from value added courses beyond curriculum.
- Inbuilt procedures are in place for academic audits and feedback from stakeholders towards continuous improvements in Curriculum, design and delivery.

Teaching-learning and Evaluation

- The Institution ensures all round development of the students by personal counseling, remedial measures and guidance.
- The Institution has an integrated approach towards teaching, learning and evaluation. Continuous and comprehensive evaluation makes teaching and learning more flexible and effective.
- The faculty members of the Institution concentrate on teaching in addition to research & extension services and have evolved the best possible strategies and techniques of teaching to sustain the quality of student centric teaching-learning processes. Effective use of technology in teaching, learning and evaluation makes it more contemporary, impactful and updated.
- The Institution considers Co-curricular and Extra-curricular activities as an important aspect for overall grooming of the students. Hence special emphasis is given to them.

- The Institution has formulated innovative evaluation methods which involve formative and summative assessment of student's achievements throughout the academic year.
- Self and diversified learning methodologies like MOOC courses and Internships are made compulsory.
- Value added courses are introduced to meet the industrial and societal needs.
- Enhancement of Technical knowledge through participation in national level symposium / conferences and presenting papers, working models, exhibits, etc.
- Innovation and incubation centres are developed to stimulate thinking and problem solving capabilities.

Research, Innovations and Extension

- A Research committee is established in the Institution to create and monitor research interests among faculty members and students.
- 56 Senior Faculty members of the Institution are giving guidance to 320 Ph.D. scholars registered at Affiliating University and other Universities and 50 Degrees were awarded in last Five Years.
- Each Department was recognized as Research Centre by affiliated Acharya Nagarjuna University. The research Centers are giving support to the staff and students towards their research work and also to the staff and students of other Institutions and generate consultancy.
- The Institution offers consultancy services to provide technical expertise to the Industries nearby and to the society.
- The entrepreneurship development cell and industry Institution interaction cell encourages forging collaborations with outside world.
- Various extension programmes for social sensitization are conducted which include Environmental Protection and Energy Conservation awareness programmes, organizing Blood Donation Camps, conducting health check up programmes, village adoption, Literacy Campaigns and so on. n>Nagarjuna University. The research Centers are giving support to the staff and students towards their research work and also to the staff and students of other Institutions and generate consultancy.
- The Institution has signed MOUs with different Industries/professional bodies/academia to pool up the knowledge and expertise of the technical people of the industry and the college for mutually agreed execution of joint activities.

Infrastructure and Learning Resources

- The Institution has a sprawling area of 37.41 acres with built up infrastructure of 92161 sq.m.
- The infrastructure comprises of separate building for each block/building, with a total no of 94 class rooms, 10 drawing halls, state of the art laboratories, fully furnished 7 seminar halls and one open air theatre with good public addressing system, 300 Mbps dedicated leased line internet facility through BSNL and 40 Mbps bundled bandwidth through BSNL under NMEICT of MHRD, Gov. of India to cater to the academic and research needs in the campus.
- Generator facility is available for uninterrupted power supply, adequate fire fighting facilities, extensive parking space, separate sections one taking care of construction maintenance and beautification and other taking care of electrical supplies and related problems.
- Central library consists of 5 floors to cater the need of the staff and students of the college with national and international journal subscription and large number of book volumes.
 - All Volumes 121798
 - Total Titles 30312
 - ISI Standard Books 1852

| | |
|---------------------------|-------|
| ◦ Hand Books | 978 |
| ◦ Data Books | 795 |
| ◦ Encyclopedias | 110 |
| ◦ Back Volumes | 4784 |
| ◦ Project Reports | 3000 |
| ◦ Total CDs | 4214 |
| ◦ Journals And Magazines | 154 |
| ◦ E-Journals(Open access) | 5000+ |
| ◦ NPTEL Video Lectures | 700 |

- In addition every department has its own independent library facilities for ready reference.
- Institution had earmarked five acres of land for outdoor games such as Cricket, Volley Ball, Basket Ball, Ball Badminton, Throw Ball, Kabadi, Tennycoit and multipurpose ground for Soft Ball, Foot Ball and Hockey along with nearly 300 sq.m2 Indoor games area furnished with Gymnasium and accommodating the indoor games like Table Tennis, Caroms, and Chess etc. Institution has excellent placement and Training Centre.
- Institution continuously strives to focus on creation and expansion of infrastructure to enrich teaching and learning process, ensuring that the infrastructure is in line with its academic growth and is optimally utilized.

Student Support and Progression

- The Institution provides equal opportunity to each and every student for participation in all the activities.
- Apart from the Government student welfare schemes, the Institution also gives poor and merit scholarships to the deserving students.
- Staff counselors assist students on personal, educational, psychological and career aspects.
- Training and Placement cell provides placement and career guidance to enhance the career opportunities.
- Grievance Redressal Committee (GRC) looks after the grievances of the students in the college.
- The Institution makes serious efforts to increase the employability skills of the student, by conducting a series of student enrichment programmes. These activities also help the students to get admissions into higher education and research.
- The Institution encourages participation of student representatives in various decisions making, academic and administrative committees.
- The college has necessary infrastructure to inculcate good habit of playing games and sports.
- The Institution has Literary and Cultural committee with a number of student initiative clubs to coordinate the active participation of students in various co-curricular and extracurricular activities.
- The Institution has a registered alumni Association for building strong bond between alumni and present students. The alumni give support to the students through interaction, guidance and placement.

Governance, Leadership and Management

- The leadership in the college always looks for Vision and Mission of the Institution which are in tune with the objectives of higher education policy of the Nation, the aim of which is to provide high quality

education to the utmost satisfaction of all stakeholders.

- The Institution takes measures in grooming leadership at all levels for creating empowerment and sense of responsibility among staff and students.
- The college strives for excellence by adopting changes that helps the Institution to improve the defined systems, practices and performance.
- The organizational structure of the Institution indicates clarity in authority-responsibility structure and participative decision making at all the levels.
- Main focus of the college is to develop freedom to carry out various activities independently at the level of Institution, HOD, Faculty and students.
- Various statutory and non statutory committees work with pre defined objectives. The decisions taken are communicated to the Governing Body.
- There is a close coordination among various departments and sections for exchange of information. Information flows across the organizational hierarchy as well as the personnel.
- The Institution provides effective welfare measures to both teaching and non-teaching staff. statutory welfare, monetary and non-monetary measures towards personal and professional growth are being followed to the satisfaction of the employees.
- Financial planning is done by the Finance Committee headed by the Principal in consultation with all the related committees.
- Internal Quality Assurance Cell (IQAC) plans and coordinates the execution of all the requisite procedures for academic audit of the courses and redesign, if any.

Institutional Values and Best Practices

The RVR&JCCE stands tall among the fraternity of Engineering Institutions on account of its well established work culture and adherence to core principles. A number of gender equity and sensitization programs are conducted every year to overcome gender disparity and social discrimination. Safety and security of every individual is given utmost importance.

Good waste management steps are taken to safe guard the environment from the malicious impact of the waste generated from the campus. The Institute boasts of a zero water discharge campus. As an environmentally conscious Institute, eco friendly practices go hand in hand with the academics in the campus.

Many green campus initiatives are taken to make the campus conducive for Teaching-Learning process. Quality audits on environment and energy are regularly undertaken for monitoring quality.

The friendly ambience and the infrastructural facilities such as ramps, rails, lifts etc provided for the specially abled students in the campus makes the Institute a disabled-friendly, Barrier free and one of the better options for pursuing their graduation. Inclusive practices are carried out on the campus to fully serve the needs of all the students.

A number of activities are organized to increase consciousness about constitutional obligations. The code of conduct which provides a framework to guide every person in the Institute in meeting their obligations and responsibilities exists and it is incumbent upon every individual involved in the academic eco-system to abide by it. With the motto of Nation building and to inculcate patriotism among the students all national festivals are celebrated.

The Institute promotes many best practices to improve the quality of education and teaching-learning process. It

leaves no stone unturned to make the future of the students bright and excellent. Two of its best practices are “RAJCAMS – RVR And JC College Academic Management System” and “Digital Learning by Students and Staff”.

The Institute stands out tall in its distinctiveness and feels proud of its charitable endeavors. The Institute adopts “**Donate-Service-Provide**” motto in order to fulfill its role of social responsibility and inspires the students to understand and contribute to the socio-economic development & welfare of the society.

NAAC

2. PROFILE

2.1 BASIC INFORMATION

| Name and Address of the College | |
|---------------------------------|--|
| Name | R.V.R. AND J.C. COLLEGE OF ENGINEERING |
| Address | Chandramoulipuram, Chowdavaram |
| City | GUNTUR |
| State | Andhra Pradesh |
| Pin | 522019 |
| Website | www.rvrjce.ac.in |

| Contacts for Communication | | | | | |
|----------------------------|--------------|-------------------------|------------|--------------|---------------------------|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Principal | K. Srinivasu | 0863-2288201 | 9492940860 | 0863-2350343 | rvrjce@hotmail.com |
| Professor | K.Ravindra | 0863-2232505 | 9849660254 | 0863-2351160 | deanacademics@rvrjc.ac.in |

| Status of the Institution | |
|---------------------------|----------------------------|
| Institution Status | Private and Self Financing |

| Type of Institution | |
|---------------------|--------------|
| By Gender | Co-education |
| By Shift | Regular |

| Recognized Minority institution | |
|--|----|
| If it is a recognized minority institution | No |

| Establishment Details | |
|---|------------|
| Date of Establishment, Prior to the Grant of 'Autonomy' | 29-12-1985 |

| | | | | |
|--|--|---------------------------------------|---------------------------|---------------------------------------|
| Date of grant of 'Autonomy' to the College by UGC | | 17-01-2012 | | |
| University to which the college is affiliated | | | | |
| State | University name | Document | | |
| Andhra Pradesh | Acharya Nagarjuna University | View Document | | |
| Details of UGC recognition | | | | |
| Under Section | Date | View Document | | |
| 2f of UGC | 07-02-1992 | View Document | | |
| 12B of UGC | 07-02-1992 | View Document | | |
| Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC) | | | | |
| Statutory Regulatory Authority | Recognition/Approval details Institution/Department programme | Day,Month and year(dd-mm-yyyy) | Validity in months | Remarks |
| AICTE | View Document | 25-04-2019 | 12 | AICTE extends the Approval every year |

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

| | | | | |
|------------------------------------|--------------------------------|------------------|-----------------------------|---------------------------------|
| Location and Area of Campus | | | | |
| Campus Type | Address | Location* | Campus Area in Acres | Built up Area in sq.mts. |
| Main campus area | Chandramoulipuram, Chowdavaram | Rural | 37.41 | 92161 |

2.2 ACADEMIC INFORMATION

| Details of Programmes Offered by the College (Give Data for Current Academic year) | | | | | | |
|---|---|---------------------------|--|------------------------------|----------------------------|--------------------------------|
| Programme Level | Name of Programme/Course | Duration in Months | Entry Qualification | Medium of Instruction | Sanctioned Strength | No.of Students Admitted |
| UG | BTech,Chemical Engineering | 48 | Ten plus two or its equivalent | English | 60 | 53 |
| UG | BTech,Civil Engineering | 48 | Ten plus two or its equivalent | English | 180 | 149 |
| UG | BTech,Computer Science And Engineering | 48 | Ten plus two or its equivalent | English | 180 | 180 |
| UG | BTech,Electronics And Communication Engineering | 48 | Ten plus two or its equivalent | English | 180 | 180 |
| UG | BTech,Electrical And Electronics Engineering | 48 | Ten plus two or its equivalent | English | 180 | 147 |
| UG | BTech,Information Technology | 48 | Ten plus two or its equivalent | English | 120 | 120 |
| UG | BTech,Mechanical Engineering | 48 | Ten plus two or its equivalent | English | 180 | 150 |
| UG | BTech,Computer Science And Business Systems | 48 | Ten plus two or its equivalent | English | 60 | 60 |
| PG | Mtech,Civil Engineering | 24 | Bachelors in Civil Engg. or its equivalent | English | 18 | 15 |
| PG | Mtech,Computer Science | 24 | Bachelors in CSE or its | English | 18 | 14 |

| | | | | | | |
|----|---|----|--|---------|-----|-----|
| | And Engineering | | equivalent | | | |
| PG | Mtech,Electronics And Communication Engineering | 24 | Bachelors in ECE or its equivalent | English | 18 | 3 |
| PG | Mtech,Electrical And Electronics Engineering | 24 | Bachelors in EEE or its equivalent | English | 18 | 6 |
| PG | Mtech,Information Technology | 24 | Bachelors in CSE or IT or its equivalent | English | 18 | 1 |
| PG | Mtech,Mechanical Engineering | 24 | Bachelors in ME or its equivalent | English | 18 | 7 |
| PG | MBA,Management Sciences | 24 | Bachelors degree or its equivalent | English | 120 | 109 |
| PG | MCA,Computer Applications | 36 | Bachelors degree or its equivalent | English | 60 | 45 |

Position Details of Faculty & Staff in the College

| Teaching Faculty | | | | | | | | | | | | |
|---|------------------|--------|--------|-------|----------------------------|--------|--------|-------|----------------------------|--------|--------|-------|
| | Professor | | | | Associate Professor | | | | Assistant Professor | | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | 0 | | | | 0 | | | | 0 | | | |
| Recruited | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Yet to Recruit | 0 | | | | 0 | | | | 0 | | | |
| Sanctioned by the Management/Society or Other Authorized Bodies | 32 | | | | 66 | | | | 171 | | | |
| Recruited | 26 | 6 | 0 | 32 | 55 | 11 | 0 | 66 | 106 | 65 | 0 | 171 |
| Yet to Recruit | 0 | | | | 0 | | | | 0 | | | |

| Non-Teaching Staff | | | | |
|---|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 105 |
| Recruited | 75 | 30 | 0 | 105 |
| Yet to Recruit | | | | 0 |

| Technical Staff | | | | |
|---|-------------|---------------|---------------|--------------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 0 |
| Recruited | 0 | 0 | 0 | 0 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 53 |
| Recruited | 48 | 5 | 0 | 53 |
| Yet to Recruit | | | | 0 |

Qualification Details of the Teaching Staff

| Permanent Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 26 | 6 | 0 | 45 | 8 | 0 | 14 | 11 | 0 | 110 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 2 |
| PG | 0 | 0 | 0 | 10 | 3 | 0 | 92 | 52 | 0 | 157 |

| Temporary Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Part Time Teachers | | | | | | | | | | |
|------------------------------|------------------|--------|--------|----------------------------|--------|--------|----------------------------|--------|--------|--------------|
| Highest Qualification | Professor | | | Associate Professor | | | Assistant Professor | | | Total |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ph.D. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| PG | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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

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

| Programme | | From the State Where College is Located | From Other States of India | NRI Students | Foreign Students | Total |
|-----------|--------|---|----------------------------|--------------|------------------|-------|
| UG | Male | 3087 | 13 | 0 | 0 | 3100 |
| | Female | 1490 | 6 | 0 | 0 | 1496 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| PG | Male | 300 | 0 | 0 | 0 | 300 |
| | Female | 263 | 2 | 0 | 0 | 265 |
| | Others | 0 | 0 | 0 | 0 | 0 |

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

| Programme | | Year 1 | Year 2 | Year 3 | Year 4 |
|-----------|--------|--------|--------|--------|--------|
| SC | Male | 104 | 106 | 116 | 95 |
| | Female | 65 | 63 | 61 | 55 |
| | Others | 0 | 0 | 0 | 0 |
| ST | Male | 40 | 34 | 30 | 35 |
| | Female | 11 | 11 | 13 | 13 |
| | Others | 0 | 0 | 0 | 0 |
| OBC | Male | 288 | 340 | 307 | 286 |
| | Female | 104 | 103 | 128 | 136 |
| | Others | 0 | 0 | 0 | 0 |
| General | Male | 395 | 386 | 424 | 440 |
| | Female | 271 | 307 | 266 | 291 |
| | Others | 0 | 0 | 0 | 0 |
| Others | Male | 0 | 0 | 0 | 0 |
| | Female | 0 | 0 | 0 | 0 |
| | Others | 0 | 0 | 0 | 0 |
| Total | | 1278 | 1350 | 1345 | 1351 |

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

| Department Name | Upload Report |
|---|-------------------------------|
| Chemical Engineering | View Document |
| Civil Engineering | View Document |
| Computer Applications | View Document |
| Computer Science And Business Systems | View Document |
| Computer Science And Engineering | View Document |
| Electrical And Electronics Engineering | View Document |
| Electronics And Communication Engineering | View Document |
| Information Technology | View Document |
| Management Sciences | View Document |
| Mechanical Engineering | View Document |

3. Extended Profile

3.1 Program

Number of programs offered year-wise for last five years?

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---|---------|-------------------------------|---------|---------|
| 15 | 15 | 15 | 15 | 15 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Number of departments offering academic programmes

Response: 9

3.2 Students

Number of students year-wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---|---------|-------------------------------|---------|---------|
| 5265 | 5314 | 5397 | 5231 | 4972 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Number of outgoing / final year students year-wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---|---------|-------------------------------|---------|---------|
| 1386 | 1405 | 1390 | 1230 | 1137 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Number of students appeared in the examination conducted by the Institution, year-wise during the last five years

| | | | | |
|---|---------|-------------------------------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 15393 | 15185 | 14516 | 13407 | 12271 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Number of revaluation applications year-wise during last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 2063 | 1952 | 1961 | 2060 | 1300 |

3.3 Teachers

Number of courses in all programs year-wise during last five years

| | | | | |
|---|---------|-------------------------------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 839 | 845 | 814 | 791 | 783 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Number of full time teachers year-wise during the last five years

| | | | | |
|---|---------|-------------------------------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 269 | 349 | 347 | 340 | 315 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Number of sanctioned posts year-wise during last five years

| | | | | |
|---|---------|-------------------------------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 264 | 340 | 340 | 340 | 315 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

3.4 Institution

Number of eligible applications received for admissions to all the programs year-wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---|---------|-------------------------------|---------|---------|
| 87430 | 37450 | 102199 | 104104 | 121545 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

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

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---|---------|-------------------------------|---------|---------|
| 619 | 607 | 607 | 609 | 609 |
| File Description | | Document | | |
| Institutional data in prescribed format | | View Document | | |

Total number of classrooms and seminar halls

Response: 102

Total number of computers in the campus for academic purpose

Response: 2170

Total Expenditure excluding salary year-wise during last five years (INR in Lakhs)

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 2681.79 | 2271.96 | 2334.79 | 2001.97 | 2276.15 |

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1 Curricula developed and implemented have relevance to the local, national, regional and global developmental needs which is reflected in Programme outcomes (POs), Programme Specific Outcomes(PSOs) and Course Outcomes(COs) of the Programmes offered by the Institution.

Response:

The Institute has the systematic procedure for development, revision and implementation of curriculum of all the departments. The Primary objective of the institute is to create Techno-Managerial power for the global needs. The curriculum is designed carefully by addressing the recent technologies and the opportunities existing in regional and global level with all necessary fundamentals.

Factors for Curriculum Design:

The Curriculum is designed to ensure that the students have the required domain knowledge, skills and attitude. The factors considered for design of curriculum are: (i) Syllabus of various reputed Indian and International Universities (ii) Model curriculum prescribed by AICTE, (iii) The Program Specific Outcomes of professional bodies, (iv) Suggestions by industry experts and alumni, (v) Syllabi of various competitive exams like GATE, IES, etc,

Implementation of Outcome Based Education (OBE) in the Curriculum:

- The initial phase for ensuring academic quality is the design of the curriculum, in particular, the types of courses, the number of electives, and the curricular structure, with complete details of the course title and course contents as per the regulations.
- The next phase, the Course Outcomes (COs) for every course is mapped with the Program Outcomes (POs) of NBA and the Program Specific Outcomes (PSOs) of the program.
- An effective implementation of this Outcomes Based Education (OBE) ensures that our graduating engineers have all the 12 POs defined by NBA, and hence can compete on a global platform, and have expected global attributes. Specific to every program, we have 3-5 Program Educational Objectives (PEOs) that are measured through the performance of the alumni.

The Institute keenly observes the attainments of PEO, PO and PSO for the respective programs which intern relates to Vision and Mission of the institution and Department as well.

Process for Curriculum Design:

The initial version of the curriculum is prepared by having the above design criteria, through discussions with stakeholders. The proposed curriculum is then discussed in DAB (Department Advisory Board) and is put forth to BOS (Board of Studies) where the experts from industry, academia, Alumni in addition to senior faculty members. The curriculum is then placed for approval during the Academic Council (AC). Curriculum is finally evolved and published in RAJCAMS (RVR&JC Academic Management System).

The academic autonomy of the Institution provides the opportunity to frequently revise the curriculum based on needs and suggestions from various stake holders. In last five years the syllabus of UG programmes was revised in 2016 and 2018 and for PG in 2017. Since the institution is situated in the rural area, revision of the curriculum focuses mainly on introducing new courses with multiple facets for improving the soft skills, general aptitude and technical aptitude.

The students are made mandatory to upgrade their knowledge by undergoing MOOCS courses through NPTEL. Further the Internship made compulsory for all the students and as a result the student can upgrade the knowledge base in diversified fields. In addition to the curriculum, student's skills are upgraded by conducting various value added courses and become industry ready.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

1.1.2 Percentage of Programmes where syllabus revision was carried out during the last five years.

Response: 100

1.1.2.1 Number of all Programmes offered by the institution during the last five years.

Response: 15

1.1.2.2 How many Programmes were revised out of total number of Programmes offered during the last five years

Response: 15

| File Description | Document |
|---|-------------------------------|
| Minutes of relevant Academic Council/BOS meeting | View Document |
| Details of program syllabus revision in last 5 years(Data Template) | View Document |
| Link for Additional Information | View Document |

1.1.3 Average percentage of courses having focus on employability/ entrepreneurship/ skill development offered by the institution.

Response: 100

1.1.3.1 Number of courses having focus on employability/ entrepreneurship/ skill development year-wise during the last five years..

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 839 | 845 | 814 | 791 | 783 |

| File Description | Document |
|--|-------------------------------|
| Programme / Curriculum/ Syllabus of the courses | View Document |
| MoU's with relevant organizations for these courses, if any | View Document |
| Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses | View Document |
| Average percentage of courses having focus on employability/ entrepreneurship(Data Template) | View Document |

1.2 Academic Flexibility

| <p>1.2.1 Percentage of new courses introduced of the total number of courses across all programs offered during the last five years.</p> <p>Response: 30.94</p> | |
|--|-------------------------------|
| <p>1.2.1.1 How many new courses are introduced within the last five years</p> <p>Response: 474</p> | |
| <p>1.2.1.2 Number of courses offered by the institution across all programmes during the last five years.</p> <p>Response: 1532</p> | |
| File Description | Document |
| Minutes of relevant Academic Council/BOS meetings | View Document |
| Institutional data in prescribed format | View Document |
| <p>1.2.2 Percentage of Programmes in which Choice Based Credit System (CBCS) / elective course system has been implemented (Data for the latest completed academic year).</p> <p>Response: 100</p> | |
| <p>1.2.2.1 Number of Programmes in which CBCS / Elective course system implemented.</p> <p>Response: 15</p> | |

| File Description | Document |
|---|-------------------------------|
| Minutes of relevant Academic Council/BOS meetings | View Document |
| Institutional data in prescribed format | View Document |

1.3 Curriculum Enrichment

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

Response:

In order to integrate the cross cutting issues relevant to gender, environment and sustainability, human values and professional ethics, The College has imbibed different types of courses in the curriculum, some enhance professional competencies while others aim to inculcate general competencies like social ðical values, human values, environment sensitivity etc., thereby leading to the holistic development of students.

The courses on Ethics, Human Values, Human Resources & Organizational Behaviour and Community Outreach (HVCO) through NSS and NCC, Environmental Studies are embedded in the curriculum of all programmes.

1. Gender Sensitivity:

Gender sensitivity and gender sensitization is accomplished through amalgamation of theory and practice. Gender related course titled “Women Entrepreneurship” is introduced in MBA. In the present curricular structure, specific course to address gender is not included in UG. There are many platforms for hands-on experiences related to gender sensitivity which enable students to interface with real life situations such as field work, community outreach, and gender sensitization activities under Lady Advisory Committee (LAC).

The LAC (Lady Advisory Committee) was constituted and has been functioning in formal sense since 2003. It is reconstituted as LA & ICC (Lady Advisory and Internal Complaints Committee) from 2019. The cell aims to enable lady faculty and girl students to explore their imminent potential in all aspects, providing a congenial working environment for them.

The events such as Quiz, Miss-Ethnic, Role-Play and Elocution Competitions on Women Empowerment and Great Women Personalities are conducted. The programme on “Gender Sensitization and Social Responsibility” was conducted. Around 20 programmes like “Awareness on Sexual Harassment at Work Place”, “Theme: Laws related to Women”, “Cervical Cancer Awareness, “An Orientation on Behavior and Discipline of Girl Students”, “Violence against women-Safeguards-awareness of women laws” were conducted in last five years,

2. Human Values and Professional Ethics

A course of one credit on human values “Professional Ethics and Human Values” is offered as Subject / open elective to all the students to take at least once during the programme of study. IN view of Social

development activities like working in NGOs, organizing blood donation camps, health check-up camps, hygiene and health workshops, environment awareness camps, river cleanliness drive, workshops on social issues, public health, gender issues etc. All the activities of are monitored by faculty in-charge at each institution/campus.

As an integral part of student engagement in social activities during their programme of study, college also mandates all the students to enroll as NSS/NCC Volunteers. It aims at inculcating values, ethics and socially responsible qualities. Students organize street plays, awareness campaigns, debates etc. Human values activities by students are being conducted since inception.

3. Environment studies:

Course of 3- 4 credits is included in all UG programmes. In order to sensitize students about the environment and sustainability issues, a number of activities such as seminars, workshops, guest lectures, industry visits and field excursions were organized for students of all programmes. Environment Day, Earth Day, Water Day are celebrated every year, where students actively participate. Workshops and seminars on various aspects of environment sustainability are organized periodically.

| File Description | Document |
|---|-------------------------------|
| Upload the list and description of the courses which address the Gender, Environment and Sustainability, Human Values and Professional Ethics into the Curriculum | View Document |

1.3.2 Number of value-added courses for imparting transferable and life skills offered during last five years.

Response: 86

1.3.2.1 How many new value-added courses are added within the last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 28 | 20 | 22 | 6 | 10 |

| File Description | Document |
|--|-------------------------------|
| List of value added courses (Data Template) | View Document |
| Brochure or any other document relating to value added courses | View Document |

1.3.3 Average Percentage of students enrolled in the courses under 1.3.2 above.

Response: 96.1

1.3.3.1 Number of students enrolled in value added courses (beyond the curriculum) offered year-wise during last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 9346 | 6377 | 7697 | 1219 | 848 |

| File Description | Document |
|----------------------------|-------------------------------|
| List of students enrolled | View Document |
| Any additional information | View Document |

1.3.4 Percentage of students undertaking field projects/ internships / student projects (Data for the latest completed academic year)

Response: 22.53

1.3.4.1 Number of students undertaking field projects / internships / student projects

Response: 1186

| File Description | Document |
|---|-------------------------------|
| List of programs and number of students undertaking field projects / internships / student projects (Data Template) | View Document |

1.4 Feedback System

1.4.1 Structured feedback for design and review of syllabus – semester-wise / year-wise is received from 1) Students, 2) Teachers, 3) Employers, 4) Alumni

E. None of the above

D. Any 1 of the above

C. Any 2 of the above

B. Any 3 of the above

Response: A. All 4 of the above

| File Description | Document |
|---|-------------------------------|
| Action taken report of the Institution on feedback report as minuted by the Governing Council, Syndicate, Board of Management | View Document |
| URL for stakeholder feedback report | View Document |

1.4.2 The feedback system of the Institution comprises of the following :

E. Feedback not obtained

D. Feedback collected

C. Feedback collected and analysed

B. Feedback collected, analysed and action taken

Response: A. Feedback collected, analysed and action taken and report made available on website

| File Description | Document |
|-------------------------------------|-------------------------------|
| Any additional information | View Document |
| URL for stakeholder feedback report | View Document |

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 93.24

2.1.1.1 Number of students admitted year-wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 1503 | 1540 | 1560 | 1543 | 1553 |

2.1.1.2 Number of sanctioned seats year wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 1668 | 1644 | 1644 | 1651 | 1651 |

File Description

Document

Institutional data in prescribed format (Data Template)

[View Document](#)

Any additional information

[View Document](#)

2.1.2 Average percentage of seats filled against seats reserved for various categories (SC, ST, OBC, Divyangjan, etc. as per applicable reservation policy) during the last five years (exclusive of supernumerary seats)

Response: 119.26

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 716 | 740 | 756 | 713 | 713 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |

2.2 Catering to Student Diversity

2.2.1 The institution assesses the learning levels of the students and organises special Programmes for advanced learners and slow learners

Response:

The institution has well-planned multi-level strategies that are implemented from time to time to address the issues of diversity in students' learning levels. Initial cues of the students' learning abilities are obtained from their performance in the qualifying examination, entrance examination and the induction training program conducted immediately after the admission. Since then, the students are trained by the respective faculty members during their course work, catering to their needs and putting conscious effort to remove their difficulties.

The actual stratification of students into slow, average and advanced learners is based on their performance in the I series of internal examinations and a continuous follow-up taken up thereafter till the course completion by the concerted efforts of teaching faculty, course coordinator and Head of the department.

- Special remedial classes are arranged for the slow learners before or beyond the regular class schedule on specific days for each course and individual attention is paid for improving the students' level of learning, problem solving and presentation.
- Simultaneously, the needs of the average, progressive and advanced learners are taken care of by the concerned faculty through assignments, seminars, and more importantly peer-group discussions. Peer group learning is always found to yield good results as all the members are benefited. The advanced learners will derive satisfaction and get motivated for further in depth learning while the slow and progressive, average learners get their doubts clarified with the lucid, hesitance-free academic discussions.
- Slow learners are further assisted through individualized counseling by the resident faculty in Educational Psychology of the institution and the regular counseling sessions by the class in-charges. Most of the students' problems resolved by these efforts and if felt necessary, the parents are called in for additional help to their ward.

Slow learners are given special attention to improve their performance through one or more of the following:

- Slow learners are paired with good performers to enhance their learning abilities (Peer group learning)
- The soft and communication skills are given special emphasis for the students from rural background to improve these skills and thereby bring them at par with regular learners.

To support the advanced learners, college conducts /encourages

- Programs like coding contests, special training programs on problem solving approaches, campus specific training etc.
- To take up additional courses like NPTEL - MOOCs, ORACLE & JAVA certification (by APITA), learning tools like Android OS, PYTHON, MATLAB, Mi-Power, PSPICE, CATIA certification under CAD/CAM, CLAD OF LABVIEW and APSSDC programs covering cutting edge technologies.

It is quite often noted that the slow and average learners become more motivated and start performing well in academics after participation in the technical, sport and cultural activities. The feel of 'recognition and appreciation' of their efforts and skills put them in a good stead.

2.2.2 Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 19.57

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences

Response:

The teaching-learning process is one major objective and the strength of our college. Students are given a right blend of traditional and modern methods to make learning student-centric and a rewarding experience. *Experiential learning, participative learning and problem solving methodologies* are well adopted to ensure the holistic development of students and facilitate life-long learning and knowledge management.

Participative learning

- 1.Design/development of solutions: Students attempt to develop solutions for complex engineering problems and design system components/processes that meet the specified needs of real-time cases through group analysis, brainstorming etc.
- 2.Mind Maps for creativity: Teachers create a central node on a Mind Map and provide students the freedom to expand and develop novel ideas.
- 3.Flipped Classes, blended learning and model making methods are introduced for selected topics to enhance participative learning.
- 4.Students are encouraged and presently made mandatory to take (Massive Open Online Courses) MOOCs offered by premier institutions of the country. They include online lectures, demonstrations and interaction through skype sessions.
- 5.Project works involving latest technologies and use of advanced soft-wares like Aspen, CAD etc. are encouraged. On an average, 40 to 50 different problems are investigated to a reasonable level

by final year students under the supervision of project guides, within the constraints of time and resources in each department.

6. Participation in professional societal activities of IChE, IEEE, ISTE, ACM, CSI, IETE, SAE India, etc. are encouraged.
7. Proficiency in soft and communication skills through lab sessions.

Industry interaction and summer training

1. Industrial / field visits, Practical training / internship at Industry and/or renowned institutions like TCS, Infosys, ONGC, IISc etc. are mandatory at present.
2. Industry projects and collaborations are undertaken to enrich students with pre-employment training.
3. Periodical Guest lectures on topics relevant to employment skills by personnel from respective organizations / industry.

Experiential learning

1. Practical courses (laboratory) including virtual labs (Ex: IITB spoken tutorial etc) are made compulsory in the curriculum.
2. Technical know – how regarding maintenance and repairing activities of various lab equipment.
3. Different learning methods viz. problem-based, case-based, project-based, inquiry-based, computation-based, co-operative (work- or community-based) are implemented wherever feasible.
4. Students are encouraged to take up innovative projects and mini projects.
5. Organization of exhibitions and open houses projecting senior students' achievements on regular basis are a source of motivation for younger students of the college
6. Conducting investigations for solving complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
7. Studio performances are practised to facilitate learners understand the deficiencies, leading to improvement in further endeavours. These sessions remove fear, tension, and deterring emotions.

Problem solving methodologies adopted are

1. Giving assignments and quizzes at the end of instruction of each unit.
2. Case Study Analysis and Discussion.
3. Product Design and development.

All academic activities are aimed at elevating the students' knowledge, skills and build confidence in them.

| File Description | Document |
|----------------------------|-------------------------------|
| Any additional information | View Document |

2.3.2 Teachers use ICT enabled tools including online resources for effective teaching and learning

processes

Response:

Effective content delivery by using ICT tools in the class room for better understanding and reinforcement of the concepts and problem-solving is adopted by all the faculty of the institution. ICT tools complement the traditional teaching-learning methods, and the institute is highly interested in providing innovative methods for enriching the learning experience. The institution has the needed resources which include wide availability of computers in engineering departments and library, high speed internet access and general ICT knowhow among the students and the faculty. The faculty are trained for the efficient use of tools through training sessions at the institute and/or faculty development programmes conducted by IITB, Mumbai. Teaching/Learning methodologies include the use of ICT tools for illustrations and special lectures, field study, case-studies, project-based-methods, experimental methods, flipped class room sessions etc.

The conventional lecture method facilitates the teacher to interpret, explain and revise the content of a topic, only for better understanding of the subject by the learners. At the end of instruction of each unit, the students are given specific assignment which enriches their learning. To enhance the effectiveness, lectures are presented as 'learning dialogues' including short intermissions facilitating the students to recapitulate the acquired knowledge by way of answering a few questions or a brief peer group discussion or a think-pair-share activity or any other relevant interactive session. Thus, the blended mode of learning which combines direct tutor-taught interaction with the online learning is largely implemented.

ICT components are embedded in the course contents of all relevant engineering disciplines which include free / commercial software used for computation / simulation such as the use of MATLAB for solving linear or differential equations and statistical analysis of experimental results in project works. ICT for course delivery includes power point presentation, video conferencing or educational websites. MOODLE on our college website is a mandatory ICT tool for learning process and resource management, and it also enables monitoring of students' learning process through online quizzes, submission of online assignments etc. It helps our students in blended learning, flipped classroom and other e-learning projects.

ICT enabled Teaching-Learning Process is supported with Regular Practical Sessions, access to Digital Library, Online Courses (MOOCS, NPTEL etc.), online journals, Online tests, Use of LCD projectors for seminars and workshops, productive use of educational videos, and accessibility of non-print material for students of different disciplines. Communication skills training facility is enriched with ICT tools to make the students acquire proficiency in listening, speaking, reading and writing skills.

The case study and the project-based learning methods, which are participatory, discussion/demonstration based ways of learning, enable students gain the skills in critical thinking, communication, and group dynamics and reflect appropriate integration of direct and online interaction of the participating members. As engineering courses are of quantitative nature, embedded with step by step solving of innumerable problems, hands-on sessions in the labs and internships at work places, faculty and students find ICT tools indispensable.

| File Description | Document |
|--|-------------------------------|
| Any additional information | View Document |
| Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process | View Document |
| Link for Additional Information | View Document |

2.3.3 Ratio of mentor to students for academic and other related issues (Data for the latest completed academic year)

Response: 24.83

2.3.3.1 Number of mentors

Response: 212

| File Description | Document |
|--|-------------------------------|
| Upload year wise, number of students enrolled and full time teachers on roll | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

2.3.4 Preparation and adherence of Academic Calendar and Teaching plans by the institution

Response:

1. Academic calendar

Academic Committee (AC) collects the plan of action from Department and Section heads and puts forth in the Academic Committee that prepares a well-planned Academic calendar. It is printed and displayed in the notice boards, and kept in the college website. The calendar, made available to the students before the commencement of classwork, includes:

1. First and last day of instruction, schedules of internal and external exams, preparation holidays for final examinations, and vacation periods.
2. Academic calendar is strictly adhered to. However, in case of any unforeseen situations which are beyond the control of the institution, necessary change is made by the authorities and the same is displayed in notice boards and websites.

2. Teaching Plan

Heads of the departments conduct meeting with their respective faculty well in-advance of commencement of the semester course work, and allocate subjects. A unit-wise teaching plan of the course content, spread

over the allotted lecture hours, is prepared to ensure a uniform pace of teaching. Course-coverage is monitored by the concerned HOD once in a fortnight and deviations if any, are clarified with the concerned faculty and special class work is planned.

Faculty member (s) prepares a 'Lecture schedule' for every theory subject which is duly approved by the Head of the department. This schedule is placed in the course file at the beginning of the semester. The number of hours in the teaching plan is framed depending on the credits of the course and made available to the students. Effective implementation of the lesson and lecture schedules is monitored by the Head of the Department as well as academic auditors. Also, at the beginning of the academic year, every Programme coordinator prepares the calendar of academic events like Workshops, Conferences, Visiting faculty lectures, Industrial visits etc. and submits for academic audit.

The academic plan is structured in accordance with the needs of Outcome Based Education prescribed by National Board of Accreditation (NBA). The contents of the plan include:

- Course pre-requisites
- Course objectives and outcomes
- Mapping of course outcomes with program outcomes
- Learning resources
- Delivery methodologies – LBD (Learning by Design), WIT& WIL (Why I am Teaching) & (Why I am Learning), POGIL (Process Oriented Guided Inquiry Learning) etc.
- Assessment methods
- Detailed unit wise lecture plan
- Assignment and tutorial questions
- Model question paper
- Link to the video lectures
- Additional information over and above the curriculum

The copies of the same are maintained in the department and also in the Academic section. The web link for the teaching plan is available at <http://rvrjcce.ac.in/>. Adherence to the academic plan is followed by the faculty and details are recorded in the Attendance and Evaluation Records hosted on the academic activity portal of the institute. Academic Audit Cell will audit the Academic plans of each faculty and the audit reports are submitted to the Heads of the departments for necessary follow up action.

| File Description | Document |
|--|-------------------------------|
| Upload Academic Calendar and Teaching plans for five years | View Document |
| Link for Additional Information | View Document |

2.4 Teacher Profile and Quality

2.4.1 Average percentage of full time teachers against sanctioned posts during the last five years

Response: 101.32

| File Description | Document |
|--|-------------------------------|
| Year wise full time teachers and sanctioned posts for 5 years(Data Template) | View Document |
| List of the faculty members authenticated by the Head of HEI | View Document |

2.4.2 Average percentage of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. during the last five years (consider only highest degree for count)

Response: 25.89

2.4.2.1 Number of full time teachers with *Ph.D./D.M/M.Ch./D.N.B Superspeciality/D.Sc./D’Lit.* year wise during the last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 102 | 91 | 83 | 71 | 65 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format (Data Template) | View Document |
| Link for Additional Information | View Document |

2.4.3 Average teaching experience of full time teachers in the same institution (Data for the latest completed academic year in number of years)

Response: 10.52

2.4.3.1 Total experience of full-time teachers

Response: 2830

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |

2.5 Evaluation Process and Reforms

2.5.1 Average number of days from the date of last semester-end/ year- end examination till the declaration of results year-wise during the last five years

Response: 14.1

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the declaration of results year wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 12.65 | 16.37 | 14.37 | 13.62 | 13.5 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format (Data Template) | View Document |
| Any additional information | View Document |

2.5.2 Average percentage of student complaints/grievances about evaluation against total number appeared in the examinations during the last five years

Response: 0.07

2.5.2.1 Number of complaints/grievances about evaluation year wise during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 4 | 1 | 9 | 15 | 16 |

| File Description | Document |
|--|-------------------------------|
| Number of complaints and total number of students appeared year wise | View Document |

2.5.3 IT integration and reforms in the examination procedures and processes including Continuous Internal Assessment (CIA) have brought in considerable improvement in Examination Management System (EMS) of the Institution

Response:

Examination reforms by the College

The college keeps its examination system open for modifications and thus strengthens it from time to time, ensuring the system fool proof and address the grievances of students, if any. The institutional reforms in all the activities of the examination system are kept at par with the reforms pushed by the AICTE for various engineering disciplines. The drivers for reforms in examination system of Indian engineering education taken up by the premier technical institutions have been incorporated into our examination system and they include OBE- frame work for assessment process, evaluation of higher order abilities and

professional skills in different forms like MOOCs, internship experience and project works, Bloom's taxonomy for assessment design etc.

The following significant reforms were effected in the Examination system.

- Credit system was introduced for the benefit of the students.
- Quizzes / Surprise Test(s) /Project works and assignments are made part of evaluation.
- Tools of information technology are utilized for most of the activities associated with the conduct of examinations, evaluation and declaration of results.
- Continuous Internal Assessment (CIA) includes Mid examinations twice in a semester for each course, periodical assignments/tests/quizzes etc. to keep the students meaningfully engaged with the subject content throughout the semester.

| Reform(s) | Positive impact(s) |
|---|--|
| 4 sets of question papers are maintained for each subject /course | Confidentiality in the question paper selection |
| Setting the question papers from all the units with internal choice and moderation of question papers. | <ol style="list-style-type: none"> 1. Maintain standards and coverage of syllabus in all the units 2. Students are required to study all the units in a course 3. Improve the course outcomes by implementing internal choice |
| Preparation of detailed scheme of evaluation by internal subject / course experts | <ol style="list-style-type: none"> 1. Uniformity in the evaluation among the evaluators 2. Fair judgment for the students |
| Appointment of squad consisting of senior faculty members of other reputed institutions and internal faculty to monitor the semester end examinations | Strict vigilance for smooth conduct of examination |
| Establishment of Spot evaluation center | <ol style="list-style-type: none"> 1. Confidentiality and custody of answer booklets ensured 2. Declaration of results within the stipulated time |
| Establishment of CCTV Surveillance System | <ol style="list-style-type: none"> 1. Continuous monitoring of activities of examination section and spot evaluation process 2. Restricted entry and surveillance of the entrance by authorized persons into the examination section 3. CCTVs in the vicinity of the examination section to prevent untoward incidents of malpractice |
| Encoding and decoding of answer booklets | Provides confidentiality and unbiased evaluation. |
| Evaluation of 5 answer booklets by all the examiners of the concerned board at the beginning of evaluation | <ol style="list-style-type: none"> 1. Ensure uniform evaluation |
| Automation of examination management system | <ol style="list-style-type: none"> 1. Improvement in reliability, efficiency, security, transparency, confidentiality and accuracy of the examination process 2. Software developed by the institute provides a platform to incorporate autonomous curriculum requirements |
| Personal verification and revaluation system | Accountability of the evaluation process and improved transparency in the evaluation |

| | |
|---|---|
| Advance Supplementary examinations and timely publication of results & issuing necessary certificates in time. | Provides more scope to final year students for the and higher studies |
| Inclusion of security features in grade sheets as well as in answer booklets | Chances of manipulations are nullified. |
| <p>The College has initiated major reforms in evaluation. Five marks are allotted for attendance in the respective theory subjects in a graded manner. Five more marks are earmarked for quiz/online examination/surprise class tests by the concerned teacher in the respective theory subjects so that the students update themselves with the subject content regularly. Implementation of these measures created a positive impact on students' attendance and the results.</p> | |
| File Description | Document |
| Any additional information | View Document |

2.6 Student Performance and Learning Outcomes

2.6.1 Programme and course outcomes for all Programmes offered by the institution are stated and displayed on website and communicated to teachers and students.

Response:

In strict compliance with the objectives of Outcome Based Education (OBE), the Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs) are framed by the department offering the concerned program after rigorous consultation with all faculty and the stakeholders. After attainment of consensus, the same are widely propagated and publicized through various means such as *display and/or communication specified hereunder.*

- Website
- Curriculum /regulations books
- Class rooms
- Department Notice Boards
- Laboratories
- Student Induction Programs
- Meetings/ Interactions with employers
- Parent meet
- Faculty meetings
- Alumni meetings
- Professional Body meetings
- Library

While addressing the students, the HODs create awareness on POs, PSOs and COs. The faculty members, class teachers, mentors, course coordinators, program/ISO coordinators also inform the students and create awareness and emphasize the need to attain the outcomes.

Program specific outcomes (PSOs) are the specific skill requirements and accomplishments to be fulfilled by the students at micro level and by the end of the program. The programme co-ordinators prepare the PSOs, usually two to four in number, in consultation with course coordinators. The BOS, including Head of the Department and subject experts, of the individual departments will discuss the same and approve it after endorsement by the Principal.

Program Outcomes (POs) are broad statements that describe the professional accomplishments which the program aims at, and these are to be attained by the students by the time they complete the program. POs incorporate many areas of inter-related knowledge, skills and personality traits that are to be acquired by the students during their graduation.

Course outcomes (COs) are direct statements that describe the essential and enduring disciplinary knowledge, abilities that students should possess and the depth of learning that is expected upon completion of a course. They are clearly specified and communicated. The Course Outcomes are prepared by the course coordinator in consultation with concerned faculty members teaching the same course. The Module coordinator will verify it. Finally, they are discussed in the concerned department's BOS meeting course-wise and approved.

The POs/PSOs of the programme are published through electronic media at individual Department site located on the college website <http://www.rvrjc.ac.in/>. The COs of the courses are also published through electronic media at the Department site located on the college website: <http://www.rvrjc.ac.in/>.

In all the interactions with the students, awareness on POs, PSOs and COs is consciously promoted.

| File Description | Document |
|--|-------------------------------|
| Upload COs for all courses (exemplars from Glossary) | View Document |
| Any additional information | View Document |
| Link for Additional Information | View Document |

2.6.2 Attainment of programme outcomes and course outcomes are evaluated by the institution.

Response:

Each course has a defined set of course outcomes and corresponding evaluation criteria. The course outcomes are mapped to the program outcomes which are used to provide the quantitative measurement of how well the program outcomes are achieved. The performance of the students in the examinations during the semester in each course is used to compute the level of attainment of the POs and PSOs through the mapping of questions to COs and COs to POs and PSOs. CO-PO & PSO mapping for all the courses in the program is prepared by the program coordinator in consultation with other faculty members.

CO Attainment

Assessment methods include direct and indirect methods. The process of course outcome assessment by

direct method is based on mid examinations, semester end examination and quiz. Each question in mid/semester end/assignment/quiz is tagged to the corresponding CO and the overall attainment of that CO is based on average mark set as target for final attainment.

1. **Mid Examinations** are conducted twice a semester and each of them covers the evaluation of all therelevant COs attainment.
2. **Semester End Examination** is descriptive, and a metric for assessing whether all the COs are attained.
3. he indirect assessment is done through the course end survey.

Rubrics

Rubrics are formulated for the assessment of Laboratory, Mini Project, Major Project, Seminar and Internship courses. The attainment of Course Outcomes of all courses with respect to set attainment levels are given under.

| % of CO attainment | $\geq 70\%$ | $\geq 60\% \ \&\lt; \ 70\%$ | $\geq 50\% \ \&\lt; \ 60\%$ |
|---------------------|-------------|-----------------------------|-----------------------------|
| CO attainment level | 3 | 2 | 1 |

The attainment of each CO is computed by setting the class average mark as the target. The COs of each course are mapped to POs & PSOs with weightages of 3 (Strong), 2 (Medium) and 1(Weak). The value obtained for CO attainment is multiplied by 1 for strong, 0.8 for medium and 0.6 for low correlation with the PO.

Assessment of Course outcomes of Lab courses

The course outcomes of a practical course should satisfy at least any one or more of the defined program outcomes. These describe what students are able to demonstrate in terms of knowledge, skills, and values upon completion of the said course. Percentage of students who score more than 80% marks in each measured criterion is taken for calculating CO attainment.

Attainment of Program Outcomes and Program Specific Outcomes

All the courses which contribute to the PO are identified and these courses are evaluated through the Course Outcomes using direct (Internal (20% weightage) and External exam (80% weightage) and indirect (Course end survey) assessments. The overall results from the assessments of the PO are compared with the expected attainment. The PO is considered satisfied on attainment of the expected level.

For each course, the level of attainment of each CO is compared with the predefined targets, and if not attained, the course coordinator takes necessary steps for improvement. If the target criterion level is not reached, then faculty suggest for improvement to attain the same.

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for Additional Information | View Document |

| | |
|---|-------------------------------|
| 2.6.3 Pass Percentage of students | |
| Response: 96.87 | |
| 2.6.3.1 Total number of final year students who passed the examination conducted by Institution. | |
| Response: 1393 | |
| 2.6.3.2 Total number of final year students who appeared for the examination conducted by the Institution. | |
| Response: 1438 | |
| File Description | Document |
| Upload List of Programmes and number of students passed and appeared in the final year examination(Data Template) | View Document |
| Any additional information | View Document |

2.7 Student Satisfaction Survey

| | |
|---|-------------------------------|
| 2.7.1 Online student satisfaction survey regarding teaching learning process | |
| Response: 3.94 | |
| File Description | Document |
| Upload database of all currently enrolled students | View Document |
| Link for any additional information | View Document |

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1 The institution Research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

The institute provides all necessary infrastructural facilities and a conducive environment to promote research activity in the campus. Due to limited resources, the institute may not be able to fund all the research activities taken up by the faculty and students. Faculty are encouraged to apply for various funding agencies and pursue their research. However, the institute is ready to provide seed funding or partial funding based on the merit of proposals submitted by faculty or student. The faculty and students are encouraged to present their ideas / project proposals before the research committee for getting the sanction of seed funding in accordance with institute guidelines.

The faculty and students are given freedom to choose the research area of their choice and guidance is given to seek funding from various funding agencies and industries. The institute encourages the faculty by providing incentives for peer reviewed publications, writing books and filing patents. The institute takes care of patent filing process, which is governed by the Research policy of the institute.

The institute gives a free hand to report research results and findings. However, a thorough review is done for all research proposals seeking funding from various funding agencies by consulting the research committee comprising the Director R& D, Head of respective department and subject expert(s) of the department. This committee also monitors the impact of research and consultancy and ensures non-violation of research & consultancy ethics, professional ethics, privacy of the people, human rights, causing problems to health & safety of human beings and damage of the property.

Research Centers are established in various departments of the institute with necessary software and computing facilities for carrying out research activities. Five Research Centers are recognized by Acharya Nagarjuna University and fulltime research scholars are allotted by the University to pursue their research work in these centers under the guidance of the college faculty.

| File Description | Document |
|---|-------------------------------|
| Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption | View Document |
| Any additional information | View Document |
| URL of Policy document on promotion of research uploaded on website | View Document |

3.1.2 The institution provides seed money to its teachers for research (average per year, INR in Lakhs)

Response: 20.19

3.1.2.1 The amount of seed money provided by institution to its faculty year-wise during the last five years (INR in lakhs).

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 20.90 | 28.85 | 24.70 | 10.46 | 16.04 |

| File Description | Document |
|---|-------------------------------|
| List of teachers receiving grant and details of grant received | View Document |
| Budget and expenditure statements signed by the Finance Officer indicating seed money provided and utilized | View Document |

3.1.3 Percentage of teachers awarded national / international fellowship for advanced studies/research during the last five years

Response: 2.28

3.1.3.1 The number of teachers awarded national / international fellowship for advanced studies / research year wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 8 | 8 | 7 | 7 | 7 |

| File Description | Document |
|---|-------------------------------|
| List of teachers and their international fellowship details | View Document |
| e-copies of the award letters of the teachers | View Document |

3.2 Resource Mobilization for Research

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

Response: 108.98

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

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 35.79 | 29.89 | 9.79 | 13.80 | 19.71 |

| File Description | Document |
|---|-------------------------------|
| List of project and grant details | View Document |
| e-copies of the grant award letters for research projects sponsored by non-government | View Document |
| Any additional information | View Document |

3.2.2 Percentage of teachers having research projects during the last five years

Response: 1.91

3.2.2.1 Number of teachers having research projects during the last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 8 | 8 | 3 | 5 | 7 |

| File Description | Document |
|--|-------------------------------|
| Names of teachers having research projects | View Document |
| Any additional information | View Document |
| Link for additional information | View Document |

3.2.3 Percentage of teachers recognised as research guides

Response: 20.82

3.2.3.1 Number of teachers recognized as research guides

Response: 56

| File Description | Document |
|--|-------------------------------|
| Upload copies of the letter of the university recognizing faculty as research guides | View Document |
| Link for additional information | View Document |

3.2.4 Average percentage of departments having Research projects funded by government and non-government agencies during the last five years

Response: 44.44

3.2.4.1 Number of departments having Research projects funded by government and non-government agencies during the last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 6 | 3 | 3 | 3 | 5 |

3.2.4.2 Number of departments offering academic programmes

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 9 | 9 | 9 | 9 | 9 |

| File Description | Document |
|---|-------------------------------|
| Supporting document from Funding Agency | View Document |
| List of research projects and funding details | View Document |
| Paste link to funding agency website | View Document |

3.3 Innovation Ecosystem

3.3.1 Institution has created an eco system for innovations, creation and transfer of knowledge supported by dedicated centers for research, entrepreneurship, community orientation, Incubation etc.

Response:

The Institution provides a conducive environment for promotion of Innovation and Incubation. All required facilities are provided and Guidance is extended to the students. Students are encouraged to actively involve in the application of Technology for societal needs. Necessary support is provided for

Documentation, Publication of Research Papers and also for obtaining patents.

Awareness meets, workshops, seminars and guest lectures on Entrepreneurship are organized. Students are provided opportunities to directly interact with outstanding entrepreneurs excelling in their field. Product service Training is provided for creating awareness on marketing the products.

The sole objective of the Incubation Center is to facilitate students to convert their Ideas into Technological Innovations. Students are provided facilities to build prototypes useful for promotion of Agriculture and Rural Development. Financial Assistance is provided for major and minor Research Projects. Workshops on emerging trends in Technology are held. Model Expos are held. Students are awarded cash prizes for best models. Students are encouraged to gain hands on experience and better Industrial Exposure.

College has recognized Research Centers in the departments and this would be an added advantage to the students to develop their Prototypes.

One Patent was got awarded to the Faculty in the year 2019 for the innovation "I-SWITCH: INTELLIGENT SWITCH USING IR RECEIVER AND IR TRANSMITTER."

Ideas and innovations flow steadily with the startup a beginning was done to nurture our students and transform, innovations in to a vital force for economic growth. Startup were initiated by the students for the latest innovations.

Students carried out their innovations in designing and fabricating the alterine vehicles and ev vehicles and participated in various competitions organized by SAE India. The team Falcon Racers performed well and secured good prizes.

During the last five years 50 PhD's are produced by the research centers established in the college and 320 research scholars are working actively in these research centers under 56 recognised guides.

College is recognized as a host centre of Micro, Small and Medium Enterprises - MSME, development of cost effective society related projects are encouraged. Other Initiatives for creation and transfer of knowledge include.

College conducts coding contest and HACKTHONS through EMD CELL and SDC Cell of the college. College is having e-yantra Lab (supported by IIT Bombay) and ARC Robotics Lab (Supported by APSSDC and ARC, Germany). Through this activities students will be exposed to national and international environments and get inspiration about innovations.

Financial support is extended to the students for exhibiting their models at the Idea Generation Contests, Competitions held by other organizations. Students are provided with an opportunity to acquire skills for commercialization of their product. The Local Entrepreneurs are invited to address the students and inspire them.

| | |
|---------------------------------------|-------------------------------|
| File Description | Document |
| Upload any additional information | View Document |
| Paste link for additional information | View Document |

3.3.2 Number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development during the last five years.

Response: 41

3.3.2.1 Total number of workshops/seminars conducted on Research methodology, Intellectual Property Rights (IPR), entrepreneurship, skill development year-wise during the last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 25 | 6 | 4 | 4 | 2 |

| | |
|--|-------------------------------|
| File Description | Document |
| Report of the event | View Document |
| List of workshops/seminars during last 5 years | View Document |

3.4 Research Publications and Awards

3.4.1 The institution ensures implementation of its stated Code of Ethics for research through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc)**
- 3. Plagiarism check**
- 4. Research Advisory Committee**

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

| File Description | Document |
|---------------------------------|-------------------------------|
| Any additional information | View Document |
| Link for additional information | View Document |

3.4.2 Number of Ph.D's registered per teacher (as per the data given w.r.t recognized Ph.D guides/supervisors provided at 3.2.3 metric) during the last five years

Response: 0.89

3.4.2.1 How many Ph.Ds are awarded within last 5 years

Response: 50

3.4.2.2 Number of teachers recognized as guides during the last five years

Response: 56

| File Description | Document |
|--|-------------------------------|
| List of PhD scholars and their details like name of the guide , title of thesis, year of award etc | View Document |
| URL to the research page on HEI web site | View Document |

3.4.3 Number of research papers per teachers in the Journals notified on UGC website during the last five years

Response: 2.65

3.4.3.1 Number of research papers in the Journals notified on UGC website during the last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 196 | 200 | 142 | 173 | 148 |

| File Description | Document |
|--|-------------------------------|
| List of research papers by title, author, department, name and year of publication | View Document |
| Any additional information | View Document |

3.4.4 Number of books and chapters in edited volumes published per teacher during the last five years.

Response: 0.75

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

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 54 | 61 | 52 | 48 | 29 |

| File Description | Document |
|---|-------------------------------|
| List books and chapters in edited volumes / books published | View Document |
| Any additional information | View Document |

3.4.5 Bibliometrics of the publications during the last five years based on average Citation Index in Scopus / Web of Science / PubMed

Response: 0

| File Description | Document |
|--|-------------------------------|
| Bibliometrics of the publications during the last five years | View Document |

3.4.6 Bibliometrics of the publications during the last five years based on Scopus / Web of Science – h-Index of the institution.

Response: 0

| File Description | Document |
|--|-------------------------------|
| Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution | View Document |

3.5 Consultancy

3.5.1 Revenue generated from consultancy and corporate training during the last five years (INR in Lakhs).

Response: 73.61

3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).

| | | | | |
|-------------|-------------|----------|-------------|-------------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 14.11522522 | 15.84979979 | 12.56908 | 14.27642642 | 16.80022022 |

| File Description | Document |
|--|-------------------------------|
| List of consultants and revenue generated by them | View Document |
| Audited statements of accounts indicating the revenue generated through consultancy and corporate training | View Document |
| Any additional information | View Document |

3.5.2 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs).

Response: 33.48

3.5.2.1 Total amount spent on developing facilities, training teachers and staff for undertaking consultancy during the last five years (INR in Lakhs)

| | | | | |
|----------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 18.30008 | 6.20384 | 7.83325 | 0.04852 | 1.09439 |

| File Description | Document |
|---|-------------------------------|
| List of training programmes, teachers and staff trained for undertaking consultancy | View Document |
| List of facilities and staff available for undertaking consultancy | View Document |
| Audited statements of accounts indicating the expenditure incurred on developing facilities and training teachers and staff for undertaking consultancy | View Document |

3.6 Extension Activities

3.6.1 Extension activities are carried out in the neighbourhood community, sensitising students to social issues, for their holistic development, and impact thereof during the last five years

Response:

The College was allotted a National Service Scheme (NSS) Unit by Acharya Nagarjuna University. About 500 students have enrolled their names as NSS Volunteers. The motto of NSS is "Not Me But You". Service to mankind is service to god. Imparting such values and attitude in to students is the motive of the institution. Believing in this, the institute carries out a number of extension activities in the neighbourhood community. Our NSS club received most prestigious awards at international level, national level, state level, and at university level with more than 80 awards in community service through NSS since its inspection.

The NSS units concentrates on the welfare of the neighbourhood community and sensitizes their social problems and takes necessary steps for the betterment of the society. These social outreach programmes brought a great impact on the holistic development of the students as they come across different categories of the people and their living standards. Every year during Independence Day and Republic day, the NSS students coordinate with the other clubs of the institute to demonstrate on a current social problem through parades, rallies.

Extension activities in the neighbourhood community during the accreditation period:

Activities like Swatch Bharath (2015-2019) is conducted in OBULANAIDU PALEM, POTHUR, NAIDUPETA, CHOWDAWARAM, DASARIPALEM, DHARMAVARAM, DURGI. Importance of cleanliness and its impact on health is delivered to villagers.

Created awareness on Rain water harvesting pits to the villagers in OBULANAIDU PALEM and observed ground water level have improved.

Medical camp was conducted in NALLACHERUVU, CHUTTUGUNTA areas IN GUNTUR, DHARMAVARAM - DURGI MANDAL. After the survey in the village, ortho problems and body pains are identified as the major problems. Medical camp with orthopedic doctors is arranged and medicines are distributed by Dr. Ramesh hospitals.

Career guidance and Goal setting was carried out at Z P HIGH SCHOOL YANAMADALA. High school children are given career guidance. Students gained knowledge of various competitive exams.

Tree plantation was done at OBULANAIDUPALEM FOREST ZONE, POTHUR, GUNTUR & NAMBUR CITY. Planted thousands of samplings to make green & clean guntur. Due to this tree plantation air pollution is reduced and residents are benefited.

Campaign was conducted Digital literacy and training on cashless transactions is done in and out of college area Different types of easy cashless transactions are familiarized by the students, to the villagers.

An awareness campaign on Plastic pollution and the ill effects of plastic usage and plastic waste was carried out in Guntur city & villages in guntur rural. Usage of paper bags and jute bags are increased.

| File Description | Document |
|---------------------------------------|-------------------------------|
| Upload Any additional information | View Document |
| Paste link for additional information | View Document |

3.6.2 Number of awards and recognition received by the Institution, its teachers and students for extension activities from Government / Government recognised bodies during last five years

Response: 107

3.6.2.1 Total number of awards and recognition received for extension activities from Government/ Government recognised bodies year-wise during the last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 85 | 4 | 13 | 3 | 2 |

| File Description | Document |
|--|-------------------------------|
| Number of awards for extension activities in last 5 year | View Document |
| e-copy of the award letters | View Document |

3.6.3 Number of extension and outreach Programmes conducted by the institution through NSS/ NCC/ Red Cross/ YRC etc., (including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc.) and / or those organised in collaboration with industry, community and NGOs during the last five years.

Response: 71

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

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 23 | 12 | 15 | 12 | 9 |

| File Description | Document |
|--|-------------------------------|
| Reports of the event organized | View Document |
| Number of extension and outreach Programmes conducted with industry, community etc for the last five years | View Document |

3.6.4 Average percentage of students participating in extension activities listed at 3.6.3 above during the last five years

Response: 131.77

3.6.4.1 Total number of students participating in extension activities listed at 3.6.3 above year-wise during the last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 8560 | 5675 | 11545 | 5802 | 3213 |

| File Description | Document |
|---|-------------------------------|
| Reports of the event | View Document |
| Average percentage of students participating in extension activities with Govt or NGO etc | View Document |

3.7 Collaboration

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Response: 713

3.7.1.1 Total number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 1443 | 701 | 466 | 599 | 356 |

| File Description | Document |
|--|-------------------------------|
| Number of Collaborative activities for research, faculty etc | View Document |
| Copies of collaboration | View Document |

3.7.2 Number of functional MoUs with institutions of national, international importance, other institutions, industries, corporate houses etc. during the last five years (only functional MoUs with ongoing activities to be considered)

Response: 179

3.7.2.1 Number of functional MoUs with institutions of national, international importance, other Institutions, industries, corporate houses etc. year wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 34 | 35 | 39 | 37 | 34 |

| File Description | Document |
|---|-------------------------------|
| e-copies of the MoUs with institution/ industry/ corporate house | View Document |
| Details of functional MoUs with institutions of national, international importance, other Institutions etc during the last five years | View Document |

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1 The Institution has adequate infrastructure and physical facilities for teaching- learning. viz., classrooms, laboratories, computing equipment etc.

Response:

Total Built-up Area in the institution is 92161 Sq.m. The institute has the excellent infrastructure facilities. Adequate facilities for teaching learning process are available. Laboratories are well established with sophisticated equipment. English language communication skills laboratory and e-learning centers for attending remote courses are available. Central library is with national and international journal subscription and large number of book volumes. Fully furnished seven number seminar halls and one open air theatre with good public addressing system, Wi-Fi and different seating capacities for conducting seminars/workshops/FDP and guest lectures are available. The institution has research centers to cater the needs of research scholars.

There are 2170 number of computers available in the institution for the benefit of students and staff. All faculty rooms, administrative offices and department offices are provided with computer systems. Free wi-fi facility is provided in the campus. All the class rooms and seminar halls are provided with LCDs, Wi-Fi as ICT facility. Generator facility is available for uninterrupted power supply. There are 94 class rooms, 79 laboratories and 10 drawing halls in the institution.

| File Description | Document |
|---------------------------------------|-------------------------------|
| Upload Any additional information | View Document |
| Paste link for additional information | View Document |

4.1.2 The institution has adequate facilities for cultural activities, yoga, games (indoor, outdoor) and sports. (gymnasium, yoga centre, auditorium, etc.)

Response:

Cultural:

College has provided a number of facilities for supporting extracurricular activities related to culture, creativity, arts and recreation. Two auditoriums (GRR auditorium with 743 m2 and SAC with 743 m2) with a seating capacity of 600 and 1000 respectively and one open air theatre(with 1860 m2)with 3000 seating capacity was established for conducting Literary and cultural events. College will encourage students to participate in various college level, state level and national level competitions by providing financial support. On an average Rs.24,00,000/- per year was spent on arrangements and support for all the events carried out by Literary and cultural Club.

College has established Literary and cultural committee (L&CC) headed by Dean of Student Affairs comprises of a committee including staff and student members. The student members are formed in to a

group named “SICO”.

The L&CC is having different clubs such as CLUB WALTZ, CLUB INSPIRAZE, CLUB ENDEAVOUR, CLUB SPARK, etc. The SICO team actively organize different events under different clubs throughout the year. Apart from club events the L&CC organizes Student-Parent meet, Freshers’ day celebrations, National level technical, cultural and sports fest and Annual day celebrations every year.

Other than organizing events students are allowed to learn western dance, classical dance, Music (vocal and instrumental) in Student Activity Centre (SAC) weekly twice by the concerned persons recruited by college at free of cost for the UG and PG students. YOGA classes were arranged every day at GRR Auditorium for the students by yoga teacher.

Sports and Games:

The Physical Education Department of RVR&JC college of engineering has been established in 1985. It took the responsibility not only to provide the necessary infrastructure that helps the students to inculcate good habit of playing games but also to develop the sportsmanship and comradeship.

- The college had demarked 13.5 acres of land for Outdoor games namely: Cricket, Volleyball, Basketball, Ballbadminton, Throw Ball, Tennikoit and multi purpose ground for Softball, Football and Hockey.
- The college is provided with Indoor games also in an area of nearly **17,120 Sq. ft**, which is furnished with Gymnasium and accommodating the indoor games like Table Tennis, Carroms, Chess etc., to enhance the physical fitness of the students and faculty.
- Annual Intramural Tournaments in various games and sports are being conducted for the students as well as for the staff . Routinely and the Prizes will be distributed on the Annual day celebrations. From the inception of the college, the Department is proudly associated in helping to conduct the Acharya Nagarjuna University (ANU) Inter Collegiate Tournaments.
- The college teams in Cricket, Basketball, Volleyball, Badminton and Tennis etc., won in most of the tournaments respectively . Till date, over 110 students of the college represented the ANU Inter University Tournaments and brought laurels to the Institute.
- The Physical Directors of the Department has been consistently appointed as Manager cum Coaches for ANU Inter University Tournaments. They have been regularly appointed as members of the Advisor Committee for the ANU and other Tournaments held in our State, Andhra pradesh.

| File Description | Document |
|---------------------------------------|-------------------------------|
| Paste link for additional information | View Document |

4.1.3 Percentage of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc. (Data for the latest completed academic year)

Response: 100

4.1.3.1 Number of classrooms and seminar halls with ICT facilities

Response: 102

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Paste link for additional information | View Document |

4.1.4 Average percentage of expenditure excluding salary for infrastructure augmentation during the last five years (INR in Lakhs)

Response: 31.63

4.1.4.1 Expenditure for infrastructure augmentation, excluding salary year-wise during last five years (INR in lakhs)

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 513.97 | 640.17 | 686.53 | 675.13 | 1084.73 |

| File Description | Document |
|---|-------------------------------|
| Upload Details of Expenditure , excluding salary during the last five years | View Document |
| Upload audited utilization statements | View Document |

4.2 Library as a Learning Resource

4.2.1 Library is automated using Integrated Library Management System (ILMS)

Response:

- The Central Library plays an important role in the college, it has situated to the north side of the main building.
- It had a separate building consists of 5 floors It caters to the needs of the staff and students of the college.
- The Library will consist of a Circulation section, Lending Books Section, Reference Section, Book bankSection, Periodical Section and Digital Library.

Library Services fully Automated with Bar-Code Technology in the year 2002

Name of the Software : LIB SOFT SOFTWARE from Environ Software, Bangalore

Nature of Automation : Fully

Version : 9.8

Year of Automation : 2002

LIBRARY INFORMATION :

| | | |
|----|---------------------------|-----------|
| 1 | Total Library Plinth Area | 1600 sq.m |
| 2 | TOTAL VOLUMES | 121798 |
| 3 | TOTAL TITLES | 30312 |
| 4 | ISI STANDARD BOOKS | 1852 |
| 5 | HAND BOOKS | 978 |
| 6 | DATA BOOKS | 795 |
| 7 | ENCYCLOPEDIAS | 110 |
| 8 | BACK VOLUMES | 4784 |
| 9 | PROJECT REPORTS | 3000 |
| 10 | TOTAL CDS | 4214 |
| 11 | JOURNALS AND MAGAZINES | 154 |
| 12 | E-Journals | 5000 |
| 13 | NPTEL Video Lectures | 699 |

File Description

Document

Paste Link for additional information

[View Document](#)

4.2.2 Institution has subscription for e-Library resources Library has regular subscription for the following:

- 1.e – journals
- 2.e-books
- 3.e-ShodhSindhu
- 4.Shodhganga
- 5.Databases

E. None of the above

D. Any 1 of the above

C. Any 2 of the above

B. Any 3 of the above

Response: B. Any 3 of the above

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |

4.2.3 Average annual expenditure for purchase of books/ e-books and subscription to journals/e-journals during the last five years (INR in Lakhs)

Response: 37.58

4.2.3.1 Annual expenditure of purchase of books/e-books and subscription to journals/e-journals year wise during last five years (INR in Lakhs)

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 42.97 | 51.67 | 37.95 | 31.06 | 24.24 |

| File Description | Document |
|--|-------------------------------|
| Details of annual expenditure for purchase of and subscription to journals/e-journals during the last five years | View Document |
| Audited statements of accounts | View Document |

4.2.4 Percentage per day usage of library by teachers and students during the last completed academic year

Response: 9.07

4.2.4.1 Number of teachers and students using library per day over last one year

Response: 502

4.3 IT Infrastructure

4.3.1 Institution has an IT policy covering wi-fi, cyber security, etc., and allocated budget for updating its IT facilities

Response:

The institution frequently updates its IT facilities including Wi-Fi. In total there are 2170 computers and the entire campus network is connected through 60 CISCO switches. IT facilities are updated from time to time. The CAMPUS IS Wi-Fi enabled. 300 Mbps dedicated leased line internet facility through BSNL and 40 Mbps bundled bandwidth through BSNL under NMEICT of MHRD, Gov. of India to cater to the academic and research needs in the Campus.

The college has entered into an agreement with Microsoft for faculty count of 110 and windows permanent Licenses are purchased on regular basis.Each department has its own labs and servers.

Digital signages are placed at the major junctions in the institute that continuously displays information regarding any upcoming events, campus news and awardee photographs. These systems will be continuously running during the working hours. The activity in the institute is under video surveillance with 175 CC cameras and 16 video recorders.

Video-conference and A-View facility is also available within the institute. The periodical updates and maintenance is done by the qualified in-house personnel.

| File Description | Document |
|-----------------------------------|-------------------------------|
| Upload any additional information | View Document |

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

Response: 2.43

| File Description | Document |
|-----------------------------------|-------------------------------|
| Upload any additional information | View Document |
| Student - computer ratio | View Document |

4.3.3 Bandwidth of internet connection in the Institution. <5 MBPS

5 MBPS - 20 MBPS

20 MBPS - 35 MBPS

35 MBPS - 50 MBPS

Response: 35 MBPS - 50 MBPS

| File Description | Document |
|--|-------------------------------|
| Upload any additional information | View Document |
| Details of available bandwidth of internet connection in the Institution | View Document |

4.3.4 Institution has the following Facilities for e-content development

1. Media centre

- 2. Audio visual centre
- 3. Lecture Capturing System(LCS)
- 4. Mixing equipments and softwares for editing

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component during the last five years

Response: 68.37

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

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 2167.82 | 1631.79 | 1648.26 | 1326.83 | 1191.42 |

| File Description | Document |
|--|-------------------------------|
| Details about assigned budget and expenditure on physical facilities and academic facilities | View Document |
| Audited statements of accounts | View Document |

4.4.2 There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc.

Response:

4.4.2.1. Civil Maintenance

Maintenance of civil works is needed for getting uninterrupted services which facilitate smooth and efficient functioning of the institution. The maintenance of civil works include

- Maintaining cleanliness and sanitation in the campus.
- Repair of frequently damaging components like window glasses, plumbing components, sanitary ware, floor tiles, doors, classrooms, benches, boards, furniture, faculty rooms etc
- Internal roads maintenance.
- Water supply and over head/underground water tank maintenance.

.Course of action:

- A request comprising the problem, through HOD and the Principal, has to be received.
- As per the stock availability the problem is attended and resolved
- If any material is required to purchase, to get the approval from the principal for purchase of the same.
- If the cost of the requirement exceeds Rs.10,000/-, approval must be obtained from the management.
- If the work involves more financial support, quotations are invited from the vendors.
- Preparation of the comparative statement and placing purchase order.
- On receiving material, resolving the problem.

4.4.2.2 .MECHANICAL MAINTENANCE

The standard procedure followed for service and maintenance of equipment/machinery as follows

- If the equipment/machinery is to be serviced during the warrantee period, the supplier of the equipment/machinery will be intimated about the repair and it will be serviced either in-house or in the supplier premises based on the nature of defect.
- After warrantee period if the equipment/machinery demands service, the technical staff attached to the respective laboratories service the equipment/machinery to the extent possible.
- If not, identify the persons outside the organization who repair the equipment, if necessary contact the supplier of the equipment.
- If no items are required to purchase for repairing the equipment, the equipment is repaired immediately.
- If items are required then send a proposal to the purchase incharge through proper channel (concerned HOD).
- After the items are purchased the equipment will be repaired by the person.
- The remuneration bill (cost of Maintenance) will be sent to the accounts department through proper channel.

4.4.2.3. Power supply and Maintenance:

Department of electrical engineering deals with power supply and maintenance. Following SOP is followed for uninterrupted power supply in college premises.

- Checking diesel in storage tank daily and Replenishing stock of diesel

- Checking distilled water level in radiator daily, and if any shortage is found, it is refilled.
- Checking lubricant oil and specific gravity of distilled water of batteries daily
- Cleaning the Radiator fan belt, generators daily
- Maintaining load balance in three phases of generators, painting plinths and machines for every one year
- Registering the number of working hours of each generator.
- Checking earth resistance and watering the earth pits weekly

4.4.2.4. Laboratory maintenance

Regular Upkeep and maintenance of equipment as well as repair of equipment is important for proper functioning of any engineering laboratory. As soon as the complaint is received with details, (including Guarantee Period etc.) following procedure is followed.

If the equipment/machinery is to be serviced during the warranty period, the supplier of the equipment/machinery will be intimated about the repair and it will be serviced either in-house or in the supplier premises based on the nature of defect. After warranty period if the equipment/machinery demands service, the technical staff attached to the respective laboratories service the equipment/machinery to the extent possible. If repair cannot be done by technicians of institution, then it is repaired by the persons outside the organization. If no items are required to purchase for repairing the equipment, the equipment is repaired immediately. If items are required then a proposal is sent to the purchase incharge through proper channel (concerned HOD). After the items are purchased the equipment will be repaired by the respective person. The remuneration bill (cost of Maintenance) will be sent to the accounts department through proper channel.

4.4.2.5.CENTRAL LIBRARY

PROCUREMENT AND STOCKING OF BOOKS:

- The order list shall be prepared on the basis of suggestions of the faculty
- The list shall be forwarded to the principal for approval who makes any necessary changes, approves it and forwards the same to Library for procurement.
- The books are received by librarian from the supplier. An inspection activity will be carried out by librarian to check quantity, Title, Author, etc, as per the invoice.
- The books received by the librarian are entered in the Accession Register (AR).
- After the completion of Accession, due date slip, numbering shall be pasted on internal Title Page of the Book.
- One copy of each title is kept in REFERENCE SECTION duly stamped as REFERENCE copy.

4.4.2.6. Sports

The sports committee conducts timely meetings for the purpose of discussing about budget proposal, conduct of Intramural and Inter collegiate tournaments for each academic year.

The order is placed with prior approval of the purchase committee.

The sports related materials are issued to the students by maintaining an issue/return register which reflects

the utility and demand of the items along with the students interests. Subsequently it facilitates the proposals to be made for the next academic years.

Students who are selected for the college teams of various events are provided with uniform to participate in the same.

Equipment related to various physical activities and sports are updated on a regular basis. The up keeping of the sports items in an efficient way is done through regular monitoring using required work force. This includes all the sports facilities like Gym, Cricket ground, Tennis, Volleyball, Basketball courts etc.,

4.4.2.7. Repairs and maintenance of Computer / Network (LAN) / Projector / UPS / WiFi/EPABX:

- Service / repair request is placed through RVR & JC Campus Academic Management System (RAJCAMS), Software developed in house.
- The request will be processed by Incharge, RAJCAMS.
- Appropriate personnel will be allotted to take up the service / repair work by the Incharge.
- Service request status can be checked through the same system.

| File Description | Document |
|---------------------------------------|-------------------------------|
| Paste link for additional information | View Document |

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1 Average percentage of students benefited by scholarships and freeships provided by the Government during last five years

Response: 57.5

5.1.1.1 Number of students benefited by scholarships and freeships provided by the Government year-wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 3156 | 3113 | 3084 | 2922 | 2784 |

File Description

Institutional data in prescribed format

Document

[View Document](#)

5.1.2 Average percentage of students benefited by scholarships, freeships, etc. provided by the institution and non-government agencies during the last five years

Response: 5.86

5.1.2.1 Total number of students benefited by scholarships, freeships, etc provided by the institution / non- government agencies year-wise during last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 356 | 327 | 319 | 304 | 232 |

File Description

Institutional data in prescribed format

Document

[View Document](#)

5.1.3 Following Capacity development and skills enhancement initiatives are taken by the institution
1. Soft skills 2. Language and communication skills 3. Life skills (Yoga, physical fitness, health and hygiene) 4. Awareness of trends in technology
E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Details of capability enhancement and development schemes | View Document |
| Link to Institutional website | View Document |

5.1.4 Average percentage of students benefited by career counseling and guidance for competitive examinations offered by the Institution during the last five years.

Response: 100

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

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 5265 | 5314 | 5397 | 5231 | 4972 |

| File Description | Document |
|---|-------------------------------|
| Number of students benefited by guidance for competitive examinations and career counselling during the last five years | View Document |
| Any additional information | View Document |

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

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

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

| File Description | Document |
|--|-------------------------------|
| Upload any additional information | View Document |
| Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee | View Document |
| Details of student grievances including sexual harassment and ragging cases | View Document |

5.2 Student Progression

5.2.1 Average percentage of placement of outgoing students during the last five years

Response: 41.58

5.2.1.1 Number of outgoing students placed year - wise during the last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 866 | 612 | 633 | 588 | 423 |

| File Description | Document |
|---|-------------------------------|
| Self attested list of students placed | View Document |
| Details of student placement during the last five years | View Document |

5.2.2 Percentage of recently graduated students who have progressed to higher education (previous graduating batch).

Response: 5.7

5.2.2.1 Number of outgoing students progressing to higher education.

Response: 79

| File Description | Document |
|--|-------------------------------|
| Upload supporting data for student/alumni | View Document |
| Details of student progression to higher education | View Document |

5.2.3 Average percentage of students qualifying in state/national/ international level examinations

during the last five years (eg: IIT/JAM/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 94.53

5.2.3.1 Number of students qualifying in state/ national/ international level examinations (eg: IIT/JAM/ NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations, etc.)) year-wise during last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 161 | 151 | 147 | 207 | 148 |

5.2.3.2 Number of students appearing in state/ national/ international level examinations (eg: IIT/JAM/ NET / SLET/ GATE/ GMAT/CAT,GRE/ TOEFL/ Civil Services/ State government examinations) year-wise during last five years

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 165 | 160 | 158 | 215 | 162 |

| File Description | Document |
|---|-------------------------------|
| Upload supporting data for student/alumni | View Document |
| Number of students qualifying in state/ national/ international level examinations during the last five years | View Document |

5.3 Student Participation and Activities

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

Response: 387

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports / cultural activities at inter-university / state / national / international events (award for a team event should be counted as one) year - wise during the last five years.

| | | | | |
|---------|---------|---------|---------|---------|
| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
| 81 | 62 | 103 | 77 | 64 |

| File Description | Document |
|--|-------------------------------|
| Number of awards/medals for outstanding performance in sports/ cultural activities at inter-university / state / national / international level during the last five years | View Document |
| e-copies of award letters and certificates | View Document |

5.3.2 Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution

Response:

The Institute has a student council constituted with academically strong students as its body. It operates with a sense of responsibility in dealing with the student concerned activities. The Institute also encourages participation of student representatives in various decisions making, academic and administrative committees, this enable them in acquiring better academic environment. Student opinions and suggestions are considered to take measures in view of students' perception. Institute puts efforts for the all-round development of a student. They take part in various professional society chapters like IEEE, ISTE, CSI, and ACM. Also student members are involved in several Institute and Department level committees with active participation. They are explained below.

Internal Quality Assurance Cell (IQAC): Student representatives are nominated for this cell, who participate in the decisions regarding the quality initiatives of the institute. (Web site)

Lady Advisory Committee: The girl students are part of the committee to address issues on women welfare.

Student Amenities Committee: The quality and hygiene of the canteen is monitored by student representatives along with the other nominated faculty members. They visit frequently and collect feedback from peers and also continuously monitor the quality and quantity of the food served.

Hostel Committee: They play major role regarding food quality, hygiene and other general facilities. They voluntarily monitor day to day activities and bring to the notice of the warden immediately.

L&C Committee: Students clubs like Literary club, Music club, Creative arts club, Dramatics club, Photography & short film shooting club and Classical dance club are involved in this committee.

Class Interaction Committee (CIC): It consists of HOD, faculty handling the particular section and student representatives in each class. They discuss the conduct of class work, delivery of lecture and overall discipline. Based on the minutes of the CIC meeting, action is initiated to improve the academic performance of the class.

The National Cadet Corps (NCC) is encouraged in the institute aiming at the development of leadership,

character, comradeship, spirit of sportsmanship and the ideal of service, among the youth. NCC Activities

NSS is also encouraged in the institute enabling the student to participate in service activities like organizing blood donation, rural health & sanitation, adult education, and environmental awareness camps in the neighbouring areas as a social responsibility. NSS Activities

In addition to the above, the students are involved in organizing Technical fest, Cultural fest and National Level Sports fest. Student members of all professional societies and student clubs actively take part in hosting their respective events.

| File Description | Document |
|---------------------------------------|-------------------------------|
| Paste link for Additional Information | View Document |

5.3.3 Average number of sports and cultural events / competitions organised by the institution per year

Response: 44

5.3.3.1 Number of sports and cultural events / competitions organised by the institution year - wise during the last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 72 | 35 | 39 | 34 | 40 |

| File Description | Document |
|--|-------------------------------|
| Report of the event | View Document |
| Number of sports and cultural events / competitions organised per year | View Document |

5.4 Alumni Engagement

5.4.1 The Alumni Association / Chapters (registered and functional) contributes significantly to the development of the institution through financial and other support services.

Response:

The Institute has a registered Alumni Association for building strong bond between alumni and present students. The alumni give support to the students through interaction, financial funding, guidance and placement. The Alumni Association of the Institute is called as RAJCEAA i.e. RVR & JC College of Engineering Alumni Association. This was registered under Societies Act XXI of 1860 with Society No.

140 in 1998. The office headquarters of RAJCEAA is in the premises of RVR & JC College of Engineering, Chowdavaram, Guntur-522019, A.P., India.

The mission of the Alumni Association is to foster a mutually beneficial relationship between the Institute and its alumni. Alumni meet is arranged on third Saturday of December of every year.

Objectives of the Alumni association:

- To encourage and promote close relations between the Institution and its alumni and among the alumni themselves.
- To promote and encourage friendly relations between all members of the alumni body, an interest in the affairs and well-being of the Institution.
- To provide and disseminate information regarding their Alma Matter, its graduates, Faculties and students, to the alumni.
- To initiate and develop programs for the benefit of the alumni.
- To assist and supporting the efforts of the Institution in obtaining funds for development
- To serve as a forum through which alumni may support and advance the pursuit of academic excellence at the Institution.
- To guide and assist alumni who have recently completed their courses to obtain employment and engage in productive pursuits useful to society.
- To organize and co-ordinate reunion activities of the Alumni and let the Alumni acknowledge their gratitude to their Alma Matter.
- To collect, publish and distribute such information as may be useful to the alumni and their Alma Mater.

Activities and Contributions:

- Alumni have donated funds to assist the Poor & Merit students of the Institution.
- Alumni are included as members in the Board of studies of all departments. They are invited for meetings at the college and they interact with their teachers and express their suggestions on curriculum revision.
- Few Alumni gave Guest lecturers to the existing students on some contemporary technological developments and career guiding focuses.

Alumni meets are arranged in December 2015, 2017 and 2018.

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

5.4.2 Alumni financial contribution during the last five years (in INR).

E. <2 Lakhs

D. 2 Lakhs - 5 Lakhs

C. 5 Lakhs - 10 Lakhs

B. 10 Lakhs - 15 Lakhs

Response: C. 5 Lakhs - 10 Lakhs

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

NAAC

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of an effective leadership in tune with the vision and mission of the Institution

Response:

VISION:

To develop integrated manpower with right attitude, possessing knowledge and skills, required to make an honourable living and contribute to the socioeconomic development and welfare of the society.

MISSION:

- To produce globally agile graduates with value orientation, professional competency, critical and creative thinking and lifelong learning.
- To enrich the society through education and research by generating proficient manpower, capable of contributing to the needs of the industry.
- To provide conducive learning environment, encompassing knowledge, communication and soft skills that enables the students to transform themselves into global leaders.

The Mission Statement proposed by the Institute accommodates the new paradigm - "Education for total transformation" with a commitment for excellence in all that we do. The keywords "knowledge and skills", "honourable living" and "socioeconomic development" speak the strategy of the Institute in training the students.

The Institute is committed to accomplish its mission in all its endeavours. It has well defined policies and very good mechanism in implementing the policies. The goal of the perspective plan of the institute mainly includes.

To create a conducive and enabling academic environment for the students which reinforces commitment/dedication, discipline and diligence.

To mould the students to become good human beings and good citizens of the nation.

In order to achieve its mission, the faculty members are given due place of involvement in all important decisions as part of governing and executing the plans of the institution. The institution has qualified and competent administrators to provide effective leadership and management at various levels.

The involvement of Leadership is achieved through well-defined systems and organizational structure consistent with AICTE norms, UGC Autonomous Policies, Acharya Nagarjuna University Rules and Regulations, and with the Vision and Mission of the Institution in general.

Various committees such as Governing Body, Academic Council, Finance Committee, Boards of studies etc., are constituted as per UGC Guidelines

The institute has various bodies for governance through development of policies, regulations & guidelines, their implementation and continuous improvement. Institution Regulations & Policy Guidelines are the instruments through which all the academic, research & administrative activities are administered and monitored for effective implementation, thus ensuring quality and continuous improvement at every level.

The faculty and staff members are involved by the institution leadership in developing and implementing the management system at various levels. The faculty members are nominated in various statutory bodies and committees for decision making and managing the various functions of the institute. Ideas are invited from alumni and other stakeholders for innovation and improvement in various functions such as Academics, Industry Interaction and Placements etc.

The Leadership ensures the compliance of academic and administrative processes and procedures along with the continual improvement through regular systematic audits, checks and monitoring by well-defined Quality Assurance Framework towards the achievement of Vision and Mission of the institute.

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

6.1.2 The effective leadership is reflected in various institutional practices such as decentralization and participative management.

Response:

Decentralization and Participative Management:

The institution has decentralized and transparent mechanism in management, administration, financial and academic affairs. This mechanism is delegating appropriate responsibilities from the top level management to low level and allows the top management to focus on policy making and major decisions.

The constitution of statutory committees like Governing Body, Academic Council, Finance Committee, Board of Studies are systematically carried out with specified functions and responsibilities as per the requirements to the regulatory bodies. These committees play a major role in policy making of governance, academics, finance, research, teaching and learning.

The Principal provides leadership for the academic administration and creates an effective environment conducive for learning. He ensures that quality education is imparted to the students that foster the holistic development of the students. He also ensures all-round development of the Institute and achievement of strategic plans of the institution. He ensures the smooth functioning of the institution with the support of Director, Deans, HODs and Conveners. There are several committees working hand in hand in planning, organizing, implementing and monitoring all the activities of the institution.

The decentralized mechanism exists even at the department levels. Every department has Program coordinators at UG and PG level to look after the activities of each program. Decisions at department levels are taken by well-structured committees like Department Advisory Board, Program Assessment Committee, Academic Audit Committee and Department Development Committee.

All Stakeholders of the institution have participative roles in various decision-making committees. The Management has brought out a handbook to ensure transparency and guide the staff to discharge their responsibilities with ease and efficiency. The Management and all the stakeholders including Head of the Departments, Faculty, Students, Alumni, Employers, State government Nominees, University nominees, Industry experts, Educationalists, Scientists, Community representatives are involved in various functional committees of the institution.

Case Study: Organizing Management Meet - ‘MANMEET 2019’

The Bi-Decennial (20th) Ramarayudu Memorial Management Meet (National Level B-Schools Meet) was organized by the Department of Management Sciences, on 23rd March, 2019, practicing participative management as under

- As a part of exchange and sharing of ideas of students and providing a common platform, head of department, all the faculty members and student representatives discussed to conduct MANMEET in 2019 and the same is intimated to the Principal
- Academic committee meeting is convened by the principal to decide the planning and implementation of MANMEET
- Proposal of conducting MANMEET is submitted to the Management for budget approval
- Once accepted, involving students & staff, various committees have been constituted at the institute level and further activities were planned by the faculty members. The following are the committees formed
- Brochure Preparation
- Registration and Kit
- Guest, Speaker Invitation and Escorting
- Stage Decoration
- Hospitality and Catering
- Report, Media and Photographs
- Accounts

Students from more than 30 colleges participated and Prof.G.Singaiah, Pro-Vice Chancellor, North Eastern Hill University, Meghalaya was the chief guest at inaugural function. Hence, all the teaching staff and non-teaching staff including students involved in successfully conducting the event practicing decentralization participative management.

| File Description | Document |
|---|-------------------------------|
| Link for strategic plan and deployment documents on the website | View Document |
| Link for additional information | View Document |

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

Yes, the Institute has a perspective strategic plan and deployment.

Institution has a strong Strategic plan aiming at clearly formulated objectives.

1. Achieving Academic excellence by curriculum design.
2. Exploration of Knowledge through Innovation and Research providing inclusiveness to societal needs.
3. Improving all round Personality of the students with Global Vision & Social responsibility.
4. Establishing Centre of Excellence at each department
5. Student Development including physical and emotional health and well-being.
6. Excellence in Research, Innovation and Creativity for high impact.
7. Enhancement of quality of staff for outstanding performance.
8. Enhancing relations with industry, alumni and society.
9. Enhancing employability and promote entrepreneurial initiatives.
10. Committing to all aspects of social, economic and environmental sustainability.
11. Ensuring excellence in Organizational Leadership and governance.

The plan is deployed through regular plan of actions, day-to-day-activities, resource-allocation and involving all stakeholders at various levels. Performance, quality indexes, measured from time to time, provide clarity in achieving strategic-plan.

The Institute has IQAC to review the progress of implementation of Strategic Plan and Policies of the Institute and take corrective action to achieve long term goals. The perspective plan is developed keeping in mind the vision, mission and objectives of the institution.

The strategic plan is developed for every five years, which is reviewed every year before finalizing the annual plan for next academic session. A few long term and short term goals, set for the development of the institute are attached as an additional information.

The Strategic Plan ensures that the set targets are achieved through accountability process, comprising of review, evaluation, reporting and re-planning. The Perspective plan for the development of the institute is presented in additional information link.

Case Study: Revision of B.Tech Curriculum as per AICTE Model Curriculum was implemented as per the strategic plan

B.Tech curriculum was revised as per AICTE Model Curriculum for the students admitted from the Academic Year 2018 - 19. RVR & JC College of Engineering has undertaken the process of revising structure and syllabus of undergraduate programmes as per the AICTE model curriculum. The revised curriculum will be expressed in terms of outcomes related to knowledge, understanding, skill, attitudes and values. It aims to foster quality higher education in academic research, contributing to society. The revised courses are scheduled to be implemented from the 2018-19 academic year.

The process of revision of undergraduate courses began by inviting all deans and heads for a detailed consultative meeting. Consensus emerged on the need to revise the curriculum without any further delay. Feedback of students and alumni in the curriculum revision process has also been considered. Proposed

Course structure and credits are finalized in the common BOS meeting.

Semester wise proposed courses and syllabus of each course were prepared considering the industrial needs and feedback of teachers & students. Proposals are thoroughly discussed in department development committees and approved in meeting of BOS at department level. Finally revised curriculum and syllabus is approved in academic council on 03/08/2018.

| File Description | Document |
|---|-------------------------------|
| Link for Strategic Plan and deployment documents on the website | View Document |

6.2.2 The functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment and service rules, procedures, etc.

Response:

The institute has a clearly defined organizational hierarchy and structure to support decision making processes that are clear and consistent with its purposes and supports effective decision making. The organizational structure lends itself to sustaining institutional capacity and education effectiveness through involvement of stakeholders in various Boards.

The UGC/University provides guidelines for various Statutory Bodies for the functioning of the institute to fulfil its objectives:

Governing Body:

The administration is overseen by the Governing Body, which meets regularly and approves the strategic plan and the budget. The institution is well known for its good administrative practices and work culture.

Academic Council:

The Academic Council is the highest academic body which decides and advises on all academic matters. Academic proposals of BoS from each department are scrutinized and approved with or without modifications by the academic council. It also recommends/advise the Governing Body on proposals for new programme of study and other academic matters. Academic council performs such other functions as may be assigned by the Governing Body.

Functions of Board of Studies:

Prepare syllabi for various courses keeping in view the objectives of the college, interest of the stakeholders and national requirement for consideration and approval of the Academic Council;

Functions of the Finance Committee:

The Finance Committee will be an advisory body to the Governing Body, to consider Budget estimates

relating to the grant received/receivable from various funding agencies, and income from fees, etc. collected for the activities to undertake the scheme of autonomy and audited accounts for the above.

The organization has a well-structured administrative setup with Governing Body as the highest decision making body and other functional bodies and committees. The administrative setup is provided in the organogram in the **link to organogram of the Institution webpage**. The functions of various bodies are given in the link for **additional information**.

Service rules, Procedures, Recruitment and Promotional Policies:

The Institute has a set of well-established rules, policies and regulations within the frame work of AICTE, State Govt. and the affiliating university, which are approved by the Governing Body of the Institute. The rules and regulations of the institute were first published in Nov 1985 and are revised periodically. The documents are published and are made available in the institute library and in all departments to create awareness among the employees and students. The same is also available in the college website. The copies of the institute Administrative Manual containing service rules, Procedures, Recruitment and Promotion Policies are circulated among all the staff (both Teaching and Non-Teaching) for their information. The standard operating procedure manual in which all the functional aspects of day to day activities are provided for the development of the institute is presented in additional information link and made available to all in the college website.

| File Description | Document |
|---|-------------------------------|
| Link to Organogram of the Institution webpage | View Document |
| Link for additional information | View Document |

6.2.3 Implementation of e-governance in areas of operation

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

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

| File Description | Document |
|---|-------------------------------|
| Screen shots of user interfaces | View Document |
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff and avenues for career development/ progression

Response:

The Institution provides effective welfare measures to both teaching and non-teaching staff. Statutory welfare measures are implemented. Various monetary, non-monetary measures towards personal and professional growth are being followed to the satisfaction of the employees.

1. As per the norms of AICTE, Pay commission recommendations are implemented.
2. Employees are covered under EPF and Gratuity.
3. Study, Maternity and Medical leaves are sanctioned for the required staff.
4. Non-teaching staff are provided with ESI facilities.
5. Concessional on Transport and Medical facilities for all the staff.
6. Full time Medical facility with qualified Doctor and nurse are available in the institution.
7. Sports, gym and yoga facilities are provided for staff.
8. ATM facilities are available in the campus.
9. Group Insurance.

The following are the amounts spent for the welfare measures for teaching and non-teaching staff

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

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

Response: 16.07

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

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 58 | 42 | 72 | 41 | 44 |

| | |
|---|-------------------------------|
| File Description | Document |
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |

6.3.3 Average number of professional development / administrative training Programmes organized by the institution for teaching and non-teaching staff during the last five years.

Response: 23.6

6.3.3.1 Total number of professional development /administrative training Programmes organized by the institution for teaching and non teaching staff year-wise during the last five years

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 26 | 29 | 26 | 14 | 23 |

| | |
|---|-------------------------------|
| File Description | Document |
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |

6.3.4 Average percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP)during the last five years (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course).

Response: 91.3

6.3.4.1 Total number of teachers undergoing online/ face-to-face Faculty Development Programmes (FDP) (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course) year-wise during the last five years.

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 381 | 302 | 235 | 247 | 277 |

| | |
|---|-------------------------------|
| File Description | Document |
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

Financial planning ensures consistency of goals, aligning the growth objectives of the institute with its financial requirements. It also supports the strategic growth of the organization. To Begin with the End in Mind, the institute plans and accumulates the right amount of funds by gathering the inputs and requirements from its associated departments.

- Financial Planning is exercised well in advance for the organization and efficient Budgeting & Controlled mechanism is done by involving the various Academic Departments and Administrative Sections of the Institute.
- Financial planning and review is done in periodic intervals through statutory - Finance Committee headed by Principal, Management representative, Senior Professor and Account Personnel as members.
- Finance Committee meets 4 times a year and reviews the income- expenditure statements and suggest further action plan. Management through Governing Body looks in to income and expenditure pattern and pragmatic recommendations are given.
- Well-structured financial section is in place and every financial transaction is recorded through software.
- Financial Rules are in place in the Institute and “No- Cash” Transaction System is followed. Optimal utilization and execution of the budget is monitored through internal and external auditing. Internal audit is conducted on half yearly basis and the statutory external audit is conducted annually by chartered accountants.
- All funds received from government are audited separately by the Auditor appointed by government.
- Audited financial statements are made public by placing it on institute website and are sent to the statutory and regulatory bodies.

An effective financial management system is in place and is helping the institution in overall growth.

After completion, the final statutory audit report shall be submitted to the Governing body for approval in the month of June/July every year. After approval, the financial accounts, documents could be used for all statutory purposes.

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropists during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V) (INR in Lakhs).

Response: 14.15

6.4.2.1 Total Grants received from non-government bodies, individuals, Philanthropers year-wise during the last five years (INR in Lakhs)

| 2018-19 | 2017-18 | 2016-17 | 2015-16 | 2014-15 |
|---------|---------|---------|---------|---------|
| 2.35 | 2.44 | 2.14 | 3.05 | 4.17 |

| File Description | Document |
|---|-------------------------------|
| Institutional data in prescribed format | View Document |
| Link for additional information | View Document |

6.4.3 Institutional strategies for mobilisation of funds and the optimal utilisation of resources

Response:

Mobilization of Funds:

- The major source of revenue for the college is the Annual fee collected from students. The fee is collected as per the fee & guidelines fixed by the AP State fee regulatory authority. The fee is converted into fixed deposits and withdrawn periodically as per the requirements of the institute. The fixed deposits are withdrawn and used for the expenditure of the college. The interest earned on these fixed deposits is also being utilized for the needs of the institution.
- Mobilization of funds is also done through sponsored projects from DST, FIST, DRDO, AICTE, UGC, Industry sponsored projects by the faculty. Faculty will purchase the equipment, meets expenditure for travel and stipend for research associates. Funds are also mobilized through consultancy and philanthropic contribution.

Strategies for optimal utilization of financial resources:

- During the budget preparation in the institution all the academic and section heads are requested to provide the annual budget requirements keeping in view of development and updating of laboratories, computing facilities, library, teaching-learning process, training, extension activities, software etc.
- The budget will be utilised to meet day-to-day operational and administrative expenses and maintenance of the fixed assets.
- Department/ Section wise budget estimations are collected and Budget is prepared. The same is placed before the Finance committee and the committee in turn will deliberate and makes necessary changes for a proper balance of receipts and expenditure. The same will be submitted to Governing Body for approval.
- The Governing Body further approves the budget and forwards to the Executive Committee of the management for perusal.
- Budget approvals will be communicated to the departments and sections.

- Adequate funds are utilized for development and maintenance of infrastructure of the institute.
- Some funds are allocated for social service activities as a part of social responsibility.
- The institution keeps track of the budget. In any unforeseen circumstances, non-budgeted amount is considered and allotted depending on the merit of the case.

The budget utilization from the past years speaks out the efficient budgeting and optimal utilization in the institution

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

6.5 Internal Quality Assurance System

6.5.1 Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of – Incremental improvements made for the preceding five years with regard to quality (in case of first cycle) Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)

Response:

The following are the incremental improvements in quality made during the last five years

- CSE, IT, ECE, EEE and ME departments are accredited by NBA in year 2017.
- Institution is obtained ISO certification in year 2019.
- Introduced new UG program B.Tech (Computer Science and Business Systems) from the academic year 2019 in partnership with TCS
- Curriculum has been revised in 2016 and 2018 introducing outcome based frame work
- Use of ICT based learning
- Encouraging the faculty to attend faculty development programmes/training programmes refreshing/updating the knowledge
- Promoting research by faculty
- Internal Academic Audit is initiated

Practices institutionalized as a result of IQAC

Promoting Research by Faculty

- Financial support is extended partially to those faculty who are pursuing research for purchase of equipment, materials required and for attending workshops /conferences
- Incentives are provided for the faculty publishing research articles in reputed journals
- Due weightage is given for research in performance appraisal system

Encouraging faculty awareness and the use of ICT based learning tools /updating of knowledge and skills

- All the faculty are encouraged to attend workshops on use of ICT based learning tools and implement it in regular class work
- Faculty are encouraged to participate FDP/Refresher courses/NPTEL courses
- Travelling and other expenses of participants are borne by the institution

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

6.5.2 The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities (For first cycle - Incremental improvements made for the preceding five years with regard to quality For second and subsequent cycles - Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives)

Response:

TEACHING LEARNING PROCESS

IQAC reviews academic progress by conducting annual academic audit and the following are the innovative processes adopted by the institution in Teaching and Learning:

- Lesson Plans are prepared by the concerned teachers prior to the beginning of the semester and are notified through MOODLE to the students at the commencement of the semester.
- The faculties are using web resources such as MOODLE effectively to upload course materials and to conduct online quizzes etc.
- A good numbers of video lessons (NPTEL & MIT) are available on our server and they are being used by the teachers and students for the better understanding of the subjects.
- Lecture material is prepared and is given to the students as reading material and LCDs are used in all the class rooms for teaching.
- HOD periodically monitors teacher's diary, lesson plans and suggests corrective measures if needed.
- Analysis of results and CO-PO attainments are carried out at the end of semester and scope for further improvements are discussed.
- Student feedback is taken at the end of each course for better performance in teaching-learning process

Enhancing Student Skill Set

Institution collects exit feedback from students regarding the overall satisfaction during their stay in the institution and the following are the measures adopted for improvement of skills needed for employability/entrepreneurship

- CRT programs are conducted for increasing the chances of employability
- Students are encouraged to participate in competitive examinations like GATE/GRE/ILETS and

coaching is given

- APSSDC/IIP/EMD cell programs are conducted for improving their entrepreneur skills.
- Venture Development Centre is created and interested students are pursuing Venture Development Diploma program offered by Northeastern University, Boston.
- The students are encouraged to make use of available services like Games and Sports, Healthcare, Computing, Internet facilities, NSS, NCC etc

| File Description | Document |
|---------------------------------|-------------------------------|
| Link for additional information | View Document |

6.5.3 Quality assurance initiatives of the institution include:

1. Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analysed and used for improvements
2. Collaborative quality initiatives with other institution(s)
3. Participation in NIRF
4. Any other quality audit recognized by state, national or international agencies (ISO Certification)

None of the above

1 of the above

2 of the above

3 of the above

Response: 3 of the above

| File Description | Document |
|--|-------------------------------|
| Upload e-copies of the accreditations and certifications | View Document |
| Institutional data in prescribed format | View Document |
| Any additional information | View Document |
| Paste web link of Annual reports of Institution | View Document |

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1 Measures initiated by the Institution for the promotion of gender equity during the last five years.

Response:

RVR & JC College of Engineering sensitizes students and employees regarding gender equity and takes the social responsibility of reacting to the events happened in the society by various activities. The institute promotes gender equity in admissions, recruitment, administrative functionality and academic activities.

Measures initiated by the institution for the promotion of gender equity during last five years:

- Separate NCC wing is created to encourage girl students and a women faculty member is nominated as in charge for the wing. Girls, as NCC cadets, are participating in various activities.
- Separate NSS unit is started exclusively to encourage the girl students and the unit is successfully conducting various activities to serve the society.
- Girls waiting halls are provided in each block in the campus with required facilities. Two girl's hostels are provided with gym facility and dispensary with lady doctor and a nurse.
- Health centre is provided in the campus with qualified physician and male & female nurses with separate treatment rooms for girls and boys.
- Separate space is provided for girls in the central library and the college canteen to avoid inconvenience.
- Student Activity Centre (SAC) is established with instruments JAZZ set, Veena, Tabla, Keyboard, Congo drums, Guitar, Flute, Saxophone and Violin composure set to train the students. Resource persons for music and dance are provided to train the girls and the boys.
- The girl students are nominated as members of various committees at department, institute levels and the institute encourages their participation in co-curricular and extra-curricular activities.
- The institute sponsored two girls and two boys to USA for Stanford "University Innovation fellows program" in association with APSSDC to provide access to a global network of students and faculty.
- During orientation programs and other events, awareness is created on gender equity among the students. Boys are sensitized to participate in Rangoli competitions or to respond to Nirbhaya and Disha incidents.
- The institute celebrates Women's day in a grand manner and presents success stories of famous women to inspire the girl students and to make them understand their potential.
- Lady Advisory & Internal Complaints Committee (LA&ICC) is organising various events including guest lectures to empower and support young minds in achieving their goals.
- The institute has a policy of appreciating faculty without gender bias. Women faculty are nominated, based on their ability, as heads of the departments and conveners of various committees and discharging their duties efficiently.

Annual Gender Sensitization Action Plan:

<http://rvrjce.ac.in/naac/documents/c7/7.1.1-Annual-gender-sensitization-action-plan.pdf>

Geotagged Photographs:

http://rvrjce.ac.in/naac/documents/c7/7.1.1-geotagged_photographs.pdf

7.1.2 The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. 4 or All of the above

| File Description | Document |
|--------------------------------|---|
| Geotagged Photographs | View Document |
| Any other relevant information | View Document |

7.1.3 Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- Solid waste management
- Liquid waste management
- Biomedical waste management
- E-waste management
- Waste recycling system
- Hazardous chemicals and radioactive waste management

Response:

R.V.R & J.C. College of engineering has designed methods for the management of waste generated in the campus using the basic waste management strategy of 3R's: Reduce, Reuse and Recycle i.e., Reduce the amount of waste generated, Reuse everything to its maximum after proper segregation and cleaning and

keeping things which can be Recycled aside and handed over to appropriate agencies. The waste generated in the campus include liquid waste and solid waste- both of biodegradable and non-biodegradable nature & chemical waste. No classified hazardous waste is generated in the campus. The environmental policy of the institute is to achieve zero discharge and complete utilization of waste with well-designed strategies to make campus clean, hygienic and healthy.

The waste generated is classified into the following types:

1. Solid waste Management

Solid waste includes both biodegradable and non-biodegradable components. The non-biodegradable solid waste generated in the campus include, paper, plastics, metal cans etc. Biodegradable waste includes food waste, vegetable peels, leaves etc.

'Use and throw' items like plastic cups, plates etc. used in the college canteen are replaced by reusable items steel glasses and plates. Glass, paper and metal waste is sold for recyclers.

Food waste and non-biodegradable waste are collected in separate bins. Biodegradable waste is disposed off in four dumping yards of size 3m x 3m x 2m, specially earmarked for the purpose.

2. Liquid waste Management

Liquid waste that is generated in the institute falls into three following categories.

1. Septic tank effluents from various sanitary blocks, water used for washing and cleaning of utensils etc. from canteen
2. Wastewater from laboratories using chemicals
3. Wastewater from RO plant

As the college is located in rural un-sewered area, waste water generated from the sanitary facilities is disposed off into septic tanks located at different places in the campus and their effluents combined with canteen waste water is used for gardening, watering trees etc. The excess wastewater will be directed into natural drain passing near by the college campus.

Waste water generated from the laboratories is very small in quantity; hence they are handled along with septic sewage.

RO plant wastewater is diluted with canteen wastewater and used for gardening, watering trees etc.

The future vision of the college is to establish full-fledged sewage treatment plant for sewage treatment and recycling the same fully within the campus, thus achieving the goal of zero discharge campus.

3. E-waste Management

E-waste or electronic waste is created when an electronic product is discarded after the end of its useful life. E-waste mainly includes obsolete electronic devices, such as computer systems, servers, monitors, compact discs (CDs), printers, scanners, copiers, calculators, fax machines, battery cells etc. E-waste is disposed off through vendors. There is a buy back policy for UPS and Xerox machines.

| File Description | Document |
|---|-------------------------------|
| Geotagged photographs of the facilities | View Document |
| Any other relevant information | View Document |

7.1.4 Water conservation facilities available in the Institution:

- 1. Rain water harvesting**
- 2. Borewell /Open well recharge**
- 3. Construction of tanks and bunds**
- 4. Waste water recycling**
- 5. Maintenance of water bodies and distribution system in the campus**

E. None of the above

D.1 of the above

C. 2 of the above

B. 3 of the above

Response: A. Any 4 or all of the above

| File Description | Document |
|--|-------------------------------|
| Geotagged photographs / videos of the facilities | View Document |
| Any other relevant information | View Document |
| Link for any additional information | View Document |

7.1.5 Green campus initiatives include:

- 1. Restricted entry of automobiles**
- 2. Use of Bicycles/ Battery powered vehicles**
- 3. Pedestrian Friendly pathways**
- 4. Ban on use of Plastic**
- 5. landscaping with trees and plants**

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: Any 4 or All of the above

| File Description | Document |
|--|-------------------------------|
| Various policy documents / decisions circulated for implementation | View Document |
| Geotagged photos / videos of the facilities | View Document |
| Any other relevant documents | View Document |

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution

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

E. None of the above

D.1 of the above

C. 2 of the above

B. 3 of the above

Response: A. Any 4 or all of the above

| File Description | Document |
|---|-------------------------------|
| Reports on environment and energy audits submitted by the auditing agency | View Document |
| Certification by the auditing agency | View Document |
| Certificates of the awards received | View Document |
| Any other relevant information | View Document |

7.1.7 The Institution has disabled-friendly, barrier free environment

- 1.Built environment with ramps/lifts for easy access to classrooms.**
- 2.Disabled-friendly washrooms**
- 3.Signage including tactile path, lights, display boards and signposts**
- 4.Assistive technology and facilities for persons with disabilities (Divyangjan) accessible**

website, screen-reading software, mechanized equipment
5.Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

E. None of the above

D.1 of the above

C. 2 of the above

B. 3 of the above

Response: A. Any 4 or all of the above

| File Description | Document |
|--|-------------------------------|
| Policy documents and information brochures on the support to be provided | View Document |
| Geotagged photographs / videos of the facilities | View Document |
| Details of the Software procured for providing the assistance | View Document |
| Any other relevant information | View Document |

7.1.8 Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities (within 500 words).

Response:

RVR&JC College of engineering is always at the forefront of inviting diversity, eradicate stereotypes, enhance self-esteem, encourage students to have a voice and demand educational achievement.

To achieve these objectives, courses like Constitution of India, Essence of Indian Traditional Knowledge, three weeks Orientation Program are incorporated as a small step to imbibe and inculcate these traits among the students.

Teachers deliver lectures with an acceptance and appreciation for different ideas, opinions, and learning styles of the students and make an earnest effort to understand the racial and cultural characteristics of students.

Along with curriculum, additional communication and soft skills classes are conducted to make the students from different backgrounds communicate effectively.

Social Protection cell, Grievance Redressal cell and Lady Advisory Committee aims at social protection, ensuring tolerance and harmony, reducing vulnerability, building human capital, empowering women and

girls, cultural, regional inclusion.

Industrial visits expose students to the practical challenges and also make the students from different backgrounds adapt to one another to create a tolerance and harmony in the organization.

During national festivals and other events of the college, eminent personalities are invited to emphasize the importance of tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities

NSS and NCC activities of our institution mitigate the socioeconomic diversities and progress them towards leading to a tolerant and harmonious living.

Cultural and Literary committee, through various clubs organizes plays, skits, competitions and invited lectures, educates the students and makes them aware of their social responsibilities and understand the implications of their actions. In cultural programs, traditions of various regions are respected.

Students are involved and encouraged to participate in various co-curricular and extracurricular activities to make them mingle with one another and share their opinions and disagreements in a harmonious manner.

The institute provides poor and merit scholarships as financial support and conducts aptitude and general knowledge classes for the interested students to help them for their competitive exams.

Central Library has a facility to issue books from Book Bank to students belonging to SC/ST communities supplied by the social welfare department for upliftment of the SC/ST students.

AICTE sanctioned grant-in-aid of Rs.13,83,000/- to Dr. Srinivasu Kota, under the scheme Skill and Personality Development Programme(SPDP) centre for SC/ST students for the year 2017-18 to empower the SC and ST students by providing special skill trainings apart from regular study.

Out of the total grant of Rs.13,83,000/- for SPDP, an amount of Rs.6,91,500/- is released as the 1st instalment and three programmes were conducted. A two day workshop on 'Career Guidance for Govt. and Private Jobs' was conducted during 19th & 20th July inviting experts from different domains. A guest lecture was conducted on 9th September, 2019 by an IAS officer and resource material is distributed to SC/ST students by APSCH Chair Person.

AICTE released an amount of Rs.8,00,000/- for the year 2018-19 to Dr.Praveen Kumar Kancharla under Prerana - scheme for preparing SC/ST students for higher education.

| File Description | Document |
|--|-------------------------------|
| Supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | View Document |

7.1.9 Sensitization of students and employees of the Institution to the constitutional obligations:

values, rights, duties and responsibilities of citizens (within 500 words).

Response:

India is a vast country with many languages, subcultures, religions and ethnic diversities governed and guided by the Constitution irrespective of caste, religion, race sex.

RVR&JC College of engineering sensitizes the students and the employees of the institution to the constitutional obligations about values, rights, duties and responsibilities of citizens which enables them to conduct as a responsible citizen.

The vision of the institute is "To develop integrated manpower with right attitude, possessing knowledge and skills, required to make an honourable living and contribute to the socioeconomic development and welfare of the society". These elements are inculcated in the value system of the college community.

The institute hoists the flag during national festivals and invites eminent persons to inspire students and staff by informing the qualities of freedom fighters and to emphasize the duties and responsibilities of citizens.

The students are inspired by conducting various programs on culture, traditions, values, duties and responsibilities by inviting people from SPIC MACAY, ISKCON, Isha foundation etc. and competitions are conducted among students for Rangoli and ancient technologies.

The personality development of the citizen in the aspects intellectual, mental, physical and spiritual is a rich heritage of our composite culture and is a panacea for all social ills. As an initiative of this, the institute conducts yoga, dance and music classes.

The college establishes policies that reflect core values. Code of conduct is prepared for students and staff and every one should obey the conduct rules.

The college curriculum is framed with mandatory courses like Professional ethics and human values, Constitution of India, Essence of Indian Traditional Knowledge, three weeks Orientation Program as a small step to inculcate constitutional obligations among the students.

Two Day National Seminar is conducted on "Ethics and Human values in Engineering" for both students and staff to strengthen the roots of values, duties and responsibilities.

A faculty member gave an APICTEE webinar on "Issues in implementing Engineering program Outcomes" related to professional ethics on 24th October 2018. Students are inspired through lectures by internal faculty.

Guest lectures are arranged by eminent personalities to deliver lectures on ethics, values, duties and responsibilities and on saving environment.

The institute organized awareness program on "Traffic rules and regulations" by Pioneer Automobiles and traffic DSP is invited to give guidelines to students on road safety and to emphasize their responsibility of following rules.

Ethical Values, rights, duties and responsibilities of citizens are some of the topics that are enlisted in Elocution, Debates or in Communication lab activities.

NSS and NCC activities of our institution has the affinity for Philanthropic initiatives which include donation of time or resources to government, charities and organizations at local, national levels to help victims during natural disasters.

The institute conducted awareness programs and rallies on ban on plastics, cleanliness, Swachh Bharat etc. involving students.

On Orientation day and fresher's day, reputed persons from police department and legal cell authorities are invited to speak about the duties and responsibilities of citizens and consequences of ragging.

| File Description | Document |
|--|-------------------------------|
| <ul style="list-style-type: none"> • Details of activities that inculcate values; necessary to render students in to responsible citizens | View Document |

7.1.10 The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The Code of Conduct is displayed on the website**
- 2. There is a committee to monitor adherence to the Code of Conduct**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

E. None of the above

D. 1 of the above

C. 2 of the above

B. 3 of the above

Response: A. All of the above

| File Description | Document |
|--|-------------------------------|
| Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims | View Document |
| Code of ethics policy document | View Document |

7.1.11 Institution celebrates / organizes national and international commemorative days, events and festivals (within 500 words).

Response:

The institute aims to inculcate values and nationalism in the students by celebrating the national festivals and birth anniversaries of great Indian personalities in the college campus every year. The celebrations include flag-hoisting, Project Exhibitions, Poster Presentations, Walks, Essay Writing, and Elocution. Eminent personalities are invited to motivate staff and students by their inspirational speeches on those days.

Republic Day and Independence Day:

Every year the Institution celebrates Republic Day and Independence Day hoisting the national flag by Chief Guest of the Programme and presents medals and certificates to the NCC cadets for their best performance. Students and staff salutes the flag and then sang the National Anthem.

Gandhi Jayanthi :

Gandhi Jayanthi is celebrated in memory of the Father of the Nation, who devoted his whole life preaching Truth and following Ahimsa. The NSS unit organized mass pledge in accordance with the Prime Ministers' urge for 'Swachh Bharat Abhiyaan'.

Teachers Day :

The Institution celebrates Teacher's Day commemorating the birthday of Dr. Sarvepalli RadhaKrishnan, a great teacher. On that day the Institution felicitates eminent personalities from the educational field.

Youth Day:

National Youth Day is celebrated on 12th January on the college campus with the aim of motivating the youth through the way of life and ideas of Swami Vivekananda to generate a positive attitude towards the people to provide them with every knowledge about how to behave in a proper way in the society.

Engineer's day :

The organization celebrates Engineer's Day on 15th September to mark the birth anniversary of Sir Mokshagundam Visvesvaraya by project exhibitions. Different project models are developed and exhibited by the students.

National Unity Day :

National Unity day is celebrated on 31st October, the birth anniversary of Sardar Valla Bhai Patel. All students and staff take part in the Run for Unity followed by the National Unity pledge.

Netaji Subhas Chandra Bose birth Anniversary:

Netaji Subhas Chandra Bose birth Anniversary was celebrated on 23rd January. to pay Tributes to Netaji Subhas Chandra Bose. The college management arranged Inspirational speeches by eminent Speakers.

Martyrs Day :

Mahatma Gandhi Death Day is celebrated as a Martyrs day on 30th January. On this day all Students and Staff pay homage to the victims who fought for the freedom, welfare and progress of the India and sacrificed their lives.

Women's Day:

Lady Advisory Committee organizes Women's Day on 8th March for the girl students and lady staff members in the college and conducts various events and competitions.

National Voters Day:

National Voters Day is celebrated every year on 25th January to spread awareness about the necessity of voting and to encourage young generation towards the voting rights.

International Yoga Day:

International Yoga day is celebrated on 21st June every year in the campus. The sessions include orientation on Yoga, its mental and physical benefits and actual performance of some yoga asanas.

Peter Ferdinand Drucker Memorial Day:

Peter Ferdinand Drucker, American management consultant, educator, philosophical author, memorial day is celebrated by the department of MBA.

| File Description | Document |
|--|-------------------------------|
| Annual report of the celebrations and commemorative events for the last five years | View Document |

7.2 Best Practices

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

Response:

BEST PRACTICE-1

Title:

RAJCAMs - RVR And JC College Academic Management System

Objectives:

1. To maintain regular academic activity efficiently.
2. To ensure availability of data to the stake holders.
3. To monitor the student progress in every semester.
4. To reduce paper work and improve ease and efficiency in processing the data.
5. To provide transparency of the data and the activities

The Context:

Digital transformation refers to the use of digital technology to better serve the stake holders. Managing the activities of the Institution in a technology-enabled way will ensure effective functioning of the Institution. Electronic data management provides ready and relevant information to stake holders for decision making. For any educational Institute, academic activity is the major decision making component and proper maintenance & process of this data leads to success of the Institute. In this direction, the college has a well-established system to standardize and automate various processes across all the departments to ensure availability and transparency of data.

The Practice:

- RAJCAMS, the college academic management system streamlines the regular academic activity of the Institution. It is an intranet based application and can be accessed from anywhere in the Institution. Instead of maintaining student data partially and redundantly at different places, RAJCAMS was created to maintain the information properly and efficiently. The system is developed to maintain and provide information on the fly regarding academic activity of the Institution. Authenticated users have access to the system and authorized users are permitted to enter/modify the data. RAJCAMS provides information to all levels of administration/management for decision making.
- **RAJCAMS is completely developed by a team of staff members of the Institute which is working towards making it as a College Management System to include every activity of the Institute.**

Activities supported:

- Student's personal information and academic history is maintained through this academic management system.
- Faculty member, after each class, enters the attendance in the portal. If the student is absent for any class on that day, message will be sent to parent about his absence by evening.
- Class in-charge prepares monthly attendance using RAJCAMS and sends as message to parents.
- Sessional and assignment marks will be sent to parents. Final marks and attendance will be prepared based on the weightages given to two sessional and assignment tests.
- Reports of poor performers and irregular students are available to HoD/ class in-charges and they counsel those students and intimate the parents, if required.
- Teacher's diary showing what is taught in each class is available through RAJCAMS. Proper delivery of courses can be ensured and teachers can be counseled regarding the course delivery.
- Feedback on teachers regarding courses taught can be taken through the portal. Summary report can be generated for each teacher, section and semester.
- Faculty profile can be maintained and updated including their achievements, papers published and workshops attended.

- Dash board gives information to the Principal and the HoD regarding students and staff absent on that day.
- Options for provided for student, faculty, course and enrollment management.
- Attendance, marks reports, teacher's diary, detention and condonation lists are available for printing.
- Biometric daily and monthly reports of students and staff are available.

Evidence of Success:

- Transparency of data and activities provided.
- Well-managed, non-redundant and Instant information for decision making.
- Efficient monitoring of regular academic activity of the Institute.
- Right information at right time is available to right persons.
- Satisfaction of the stake holders regarding availability and efficiency.

Previously, Student Information System (SIS) was used to maintain student marks for assignment, sessional tests and to generate detention and condonation reports. Attendance was maintained and entered by the teachers manually to generate monthly reports which was tedious. RAJCAMS manages entire academic activity efficiently and generates instant reports.

Problems Encountered/ Resources Required:

Resources required:

- Sophisticated Server required to store & maintain the data.
- Provision required in each department for entering data after the classwork.

The required resources are immediately provided by the management to enable the stakeholders to utilize the system effectively.

Problems encountered:

- Student and faculty personal information need to be entered in server.
- Faculty should enter the data regularly after the class.
- Department in-charge should monitor the locking and unlocking of data.

Initially, it took some time to make the staff adapt and utilize the system for the benefit of better functioning. Later, they realized the advantage and started using it without any problem.

Notes (Optional)

An autonomous Institute has freedom to change rules, regulations and curriculum. Customized college management system is required for autonomous Institutions. Every Institute should develop it's own system.

BEST PRACTICE-2

Title:

DIGITAL LEARNING BY STUDENTS AND STAFF

Digital learning is any type of learning that is accompanied by technology or by instructional practice which makes effective use of technology. Digital learning enhances the learning experience rather than replacing traditional methods altogether.

Objectives are:

- To make learning with no restrictions of time, place, path and pace.
- To make students as self-directed learners.
- To gain knowledge of the latest trends and technologies.
- To learn concepts from faculty of prestigious Institutions to become globally competent.
- To do research work in the thrust areas.

The Context:

Digital Learning is learning facilitated by technology that gives students some control over time, place, path and/or pace of learning. Digital learning strategies include online learning, blended learning, flipped learning, e-learning, mobile learning etc. or a combination of them. Digital learning is one of the crosscutting missions of the college. Students from different levels & backgrounds need training to improve their skills in addition to traditional classroom teaching. The college has been working with the aim of making it a centre of excellence. Considering these requirements, the Institute encourages students and staff to do online/blended courses offered by various prestigious Institutions.

The Practice:

1. Online Learning

Online learning enables students to learn anywhere, anytime and any subject using ICT. The college NPTEL local chapter is ranked in top 30 colleges in the country among 3300 NPTEL local chapters. Students are motivated to do NPTEL online courses with the help of video lessons and web content in addition to their regular classes to improve learning and in turn to enhance their skills. The faculty members are also encouraged to do online courses to improve teaching-learning process. NPTEL local chapter monitors the entire process.

2. Blended Learning

Blended learning combines face-to-face interactions with online activities. RVR&JCCE is one of the few technical Institutes in AP to act as Remote Centre (RCID:1353) to IIT Bombay and conducts MOOC courses and FDPs. Participating teachers attend live lectures, tutorial and lab sessions at remote centre The lecture transmission and live interaction takes place in distance mode using A-VIEW technology through Internet. The Institute organized various workshops/fdps in association with NITTR. The Institute became member of the IUCEE College Consortium and students and staff are encouraged to complete blended courses offered by IUCEE.

3. E-learning

E-Learning is a learning system based on formalized teaching with the help of electronic resources. E-learning is used for training staff and students. The Institute organized training programs like C, C++, Python, Rivet structure etc. for students of all branches, in association with APSSDC as part of skill

development. The Institute conducted training program on RPA (Robotic Process Automation) tool by AAI in association with TCS. 8 weeks internship training program was conducted in the campus by creating a BOT lab in 2019. Various other training programs are conducted to enhance technical skills of students and staff.

Evidence of Success:

- 68 students received gold certificate, 118 students received topper certificate and 3, 211 NPTEL certifications done by students and staff.
- Received AAA Rating once and AA rating 4 times for NPTEL local chapter of the Institute.
- Other achievements by the students in model building etc.
- Rate of placements increased from 41% to 76%.
- 4 faculty members received class A award by IIT Bombay for task based training conducted through e-Yantra Lab Setup.
- In design and fabrication of vehicle contests, students received 11 prizes.
- Received prize money/vouchers in hackathons, topcoder challenges and in finding bugs in applications.
- Faculty received top performer/SAP Excellence/top performing mentor certificates from IIT Bombay/Madras.

Problems Encountered and Resources Required:

Problems Encountered:

- Providing lab slots to accommodate extra lab hours for online training.
- Providing slots in the time-table to give training in regular time.
- Motivating the students to stay beyond working hours.

Resources Required:

- Transport required for learning beyond working hours.
- Hardware and software required for face to face interaction

The college management provided the required resources and the problems are solved with co-operation of staff and students by providing suitable slots and staying beyond the working hours, if required.

| File Description | Document |
|--|-------------------------------|
| Best practices in the Institutional web site | View Document |

7.3 Institutional Distinctiveness

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

Response:

DISTINCTIVENESS

The driving force, the vision of the Institute is "To develop integrated manpower with right attitude, possessing knowledge and skills, required to make an honourable living and contribute to the socioeconomic development and welfare of the society".

In addition to preparing the students with core competencies to face the global challenges, believing that **“skills are of less value in the absence of appropriate value systems”**, the Institute strives in making students adopt right attitude, understand and contribute to the socio-economic development & welfare of the society. The Institute is contributing to the development of the nation by capacity and character building of the students. The Institute takes lead in serving the society and in inculcating those values in the minds of young generations and imbibing in them, the required qualities to make an honorable living in the society.

The Institute adopts **“Donate-Service-Provide” (D-S-P)** motto in order to fulfil its role of social responsibility and inspires the students to follow the same in their lives.

Donate in D-S-P

- Donated Rs.1.00 crore in association with staff and students for the capital of Navya Andhra Pradesh.
- Contributed Rs.10.00 lakhs to the Chief Minister Relief fund in association with students & faculty for the victims of Hudhud.
- Contributed to the welfare of the victims of natural disasters in association with students & faculty.
- Offers **“POOR & MERIT Scholarships”** to help the students in pursuing graduation. They are, in turn, requested to help the poor, in future.

Service in D-S-P

S.1. NSS activities:

The Institute, through NSS unit and blood donors club, organized various activities to help the society and to inculcate the service motto in the students.

Some of the activities during last 5 years:

- Conducted number of Blood donation camps and medical camps.
- Provided services to the victims of natural calamities.
- Participated in Plantation programs organized by the college or the government.
- Conducted awareness programs on **“Swachh Bharat Mission”** theme & rally on swachh Bharat, **“Swachhtha Hi Seva”** programs, voter enrollment, no plastics, cashless transactions etc.
- Rendered services in Krishna pushkar-2016 and in general elections doing webcasting
- Distributed books to school children
- Rendered services at Obulunaidupalem and Dharmavaram villages

In autonomous regulations, participation and NSS/NCC is made mandatory for all students. Initial NSS units expanded to 4 units in 2017-18 to involve entire student community in serving the society.

S.2. NCC activities:

The NCC unit takes lead in national festivals to hoist the flag and provides services to the society through various activities, grooming the cadets into disciplined and patriotic citizens.

NCC cadets participated in

- Awareness programs on plantation, swachhBharat, Yoga day.
- Blood donation camps to donate blood and helped the people during natural calamities
- Cleaning of streets, drains, statues, wall paintings and monuments
- Cleaning of public parks, hospitals, bus stands and railway stations

An additional unit has been started for girls from 2018-19. The two units are conducting various activities, preparing cadets to serve the society.

S.3. Literary and Cultural Committee(L&CC):

Helping hands, a student initiated club of **L&CC** organized many activities like distribution of fruits, sweets etc. to blind and poor people.

S.4. Departments and Institute activities:

- The Institute organized ISRO space week, project exhibitions in the campus and invited students from various schools to visit the exhibitions. The students as technical volunteers actively involved in explaining the concepts.
- The departments organized awareness programs on energy conservation and the use of technology in nearby villages and conducted power point presentations to explain the concepts.

Provide in D-S-P

P.1. Within campus:

- The Institute, as a remote centre of IIT Bombay, organized FDPs providing infrastructure and services to the faculty, from various colleges, attended these programs.
- Guntur district youth parliament selections are conducted in the Institute through Youth affairs and Sports, Government of India in January, 2019.
- Infrastructure and equipment were provided to the certificate verification program organized in the Institute by the government.
- 35 signboards with radium background were provided on national highway for displaying “Speed limit 90 kmph”, “you are under surveillance”, “Guntur urban police dial 100”.
- Provided free transport during EAMCET, JEE exams and provided food for the parents waiting for their wards.

- The Institute is cooperating the state government in making the state “a skilled Andhra Pradesh”, by **providing space and infrastructure for various kinds of skill centres** sanctioned by APSSDC (Andhra Pradesh State Skill Development Centre) to the Institute.

APSSDC sanctioned

- “CM’s Skill Excellence Center” in collaboration with Siemens, 3D-EXPERIENCE software Lab in collaboration with Dassault Systems and an Indo-European skilling Centre for Mechatronics and Industrial Robotics lab in collaboration with European Centre for Mechatronics.
- TSDI (Technical Skill Development Institute) to promote skill development in the state with six laboratories - CBT, Auto 2-wheeler, Auto 4-wheeler, Electrical Home, R&AC, and Agricultural farming machinery. Foundation level and expert level training programs are conducted for Social welfare students, polytechnic, ITI and engineering students of various colleges.

4279 students are trained in various skills including our own students, till now from initiation of labs.

P.2. City Computer Centre:

- A computer centre is established in the city to provide computing facility beyond working hours. AP state government conducted skill tests for Kiosk operators, test for computer operator’s posts, Linking Epic ID with AADHAR, training programs etc. in it.

1. *NSS Unit, NSS officer and student volunteers received awards at district, state and national levels for active involvement in social activities.*
2. *NSS unit and NSS officer received the prestigious INDIRA GANDHI NATIONAL service scheme awards in 2014 from the president of India for stupendous services rendered to the society*
3. *Students are responding to the problems in the society and contributing in providing solutions to those problems.*
4. *Alumni of civil sponsored poor & merit scholarships to civil students.*
5. *The Institute is enriching the society through education and skilling programs*

The successful career of the students, the name and fame of the Institute, public opinion and the demand of the college are testimonies for the distinctiveness of the Institute.

| File Description | Document |
|--|-------------------------------|
| Appropriate web in the Institutional website | View Document |

5. CONCLUSION

Additional Information :

The Institution is established in the year 1985, presently offers 8 UG, 6 PG and 6 PhD programmes in Engineering, PG & PhD Programmes in Computer Applications and Management Sciences, Ph.D Programmes in Chemistry and Ph.D Programmes in Mathematics & Humanities

Apart from handling UG and PG classes, faculty are also guiding research scholars. Ph.Ds guided and the scholars working at present under the guidance of 56 faculty members are given below. 320 scholars are working under 61 faculty members. So far 51 Ph.Ds were awarded under the guidance of faculty of RVR&JCCE during the last 5 years.

The departments of Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Information Technology and Mechanical Engineering were awarded with recognized research centers by Archarya Nagarjuna University.

In addition to the faculty of the above departments Chemical Engineering, Computer Applications and Management Sciences are also guiding Ph.Ds.

Ph.D Programmes:

| Si.No. | Name of the Department(s) offering PhD programme | Duration | Duration | No of Scholars |
|--------|--|-----------|-----------|----------------|
| | | Part Time | Full Time | |
| 1 | Chemical Engineering | 4 Years | 3 Years | 4 |
| 2 | Civil Engineering | 4 Years | 3 Years | 13 |
| 3 | Computer Science & Engineering | 4 Years | 3 Years | 28 |
| 4 | Electronics & Communication Engineering | 4 Years | 3 Years | 51 |
| 5 | Electrical & Electronics Engineering | 4 Years | 3 Years | 31 |
| 6 | Information Technology | 4 Years | 3 Years | 34 |
| 7 | Mechanical Engineering | 4 Years | 3 Years | 83 |
| 8 | Management Sciences | 4 Years | 3 Years | 25 |
| 9 | Computer Applications | 4 Years | 3 Years | 20 |
| 10 | Chemistry | 4 Years | 3 Years | 10 |
| 11 | Mathematics | 4 Years | 3 Years | 17 |

Concluding Remarks :

Established with a Vision of developing integrated technical manpower to contribute to the socio economic development of the region in 1985, RVR&JC College of Engineering was established by Nagrajuna Education Society. In the journey of past 35 years, it has become feather in the cap of Guntur City. Started with a modest intake of 180 now rose to 1428 and strength is more than 5000. NBA Accreditation for 5times, Autonomy, NAAC 'A' Grade, ISO certification, TCS accreditation speaks the Management commitment and vision. Highly motivated 269 teaching faculty with 110 PhDs, supporting staff and competent student fraternity placed the institution in National rankings and grading given by The Education World, Careers 360, ToI, NIRF and NPTEL. Many awards at University, State and National level are fortifying its strength.

The green and serene campus spread in 37.41 acres provides the required ambience. ICT enabled classrooms, AC seminar halls in all Buildings, laboratories and 6 university recognized research centers are making learners proficient who are capable of contributing to the needs of the industry. Student activity center, professional and non- professional student clubs, sports facilities, NCC/NSS activities in the campus are helping for all round development of the student. Experimental and experiential based learning practices are in place. Organizing Coding contests, Technical quizzes, Student meets, Expert lectures, Industrial visits, Workshops, Design contests, Soft skills & Placement training are helping our students to transform themselves into global leaders. Global opportunities for the students and faculty are opened by various programs with Stanford University Fellowship program, Northeastern University i2E, New Mexico state University. APSSDC, Incubation centre, EMD cell, Dassault systems laboratory, CM CoE, APState European center for Mechatronics, MSME and CII activities are creating next level learning opportunities. APSSDC alone trained 10,023 students during the assessment period in above programs. Institution maintains Alumni networking and they are extending where ever support required.

Faculty stay upto date through Research, workshops, conferences, IITB remote centre programs and SWAYAM courses. Highly positive Management, committed leadership, highly learnt faculty and motivated students always strive to achieve excellence.