

FOR 1st CYCLE OF ACCREDITATION

RCC INSTITUTE OF INFORMATION TECHNOLOGY

CANAL SOUTH ROAD, BELIAGHATA, 700015 www.rcciit.org

Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL BANGALORE

(Draft)

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

RCC Institute of Information Technology (RCCIIT) was set up in 1999 by the erstwhile Regional Computer Centre (RCC), Calcutta (in JU) as a unique joint venture of NIC, Ministry of Communication & IT, Govt. of India and Dept. of Higher Education, Govt. of West Bengal. In 2003 the lead role of management of RCCIIT was transferred to the State Govt. from Govt. of India. Since then RCCIIT is the only engineering college in the State which is run by an autonomous Society formed by the State Govt. Known as one of the oldest engineering colleges in the State it now ranks within top 10 private and govt. engineering colleges. Besides 8 govt. engineering colleges established and funded by the State, RCCIIT is the only self-financing engineering college for which the Board of Management (BOM) as well as the Governing Body (BOG) are constituted directly by the State Govt.

The State has made significant contribution in terms of land and fund for development of the institute since inception. Situated in a well-connected location of mega-metro Kolkata, spread on a sprawling 4.63 acres of land leased to the college by the State Govt., it has best-in-class infrastructure and teaching-learning resources. State Govt. pay structure for the faculty and staff and ample scope for their research and self-development ensures their dedicated service for the students.

RCCIIT comprises 2 adjacent campuses housing 6 degree offering and 2 supporting departments catering to around 2000 students. Beautiful green and eco-friendly ambience and the culture of traditional academic practices with modern technology-enabled pedagogy, high ethical standard and strong teacher-student bonding create the perfect settings that help students nurture their creative endeavours while striving for technical excellence. There has been significant improvement every year in curricular, co-curricular, extra-curricular activities, even amidst the pandemic. RCCIIT, already known for its consistent placement record, is now focusing on industry partnership in imparting cutting-edge skill and knowledge to the students even before they step into the final year. The institute is proud of a network of its Alumni spread across industry and academia across the country and abroad.

Vision

To develop RCCIIT as one of the most advanced technical institutes of the State by imparting technical knowledge and skill of the highest quality through the use of state-of-the-art

technological tools and thereby producing technical manpower fit for industries, research organizations and academia and by establishing the culture of interdisciplinary research and innovation (to cater to the social needs) in a congenial, inclusive and transparent work environment created by unbiased and visionary leadership and participative management.

Mission

To produce well trained good human beings with ethics and values, good interpersonal skill, team spirit and leadership capability and concern for the society and environment.

To produce technical professionals with fundamental and cutting edge technological knowledge and skill, a flair for innovation and design, ability for analysis and application to meet the demands of real-life projects and challenges of research

To select, groom and retain talented, qualified and committed faculty and staff under a fair and transparent HR policy

To develop state-of-the-art infrastructure and learning resources for pursuing unhindered research and learning practices.

To create congenial and inclusive work environment for all with zero tolerance on gender bias and ragging or harassment of any kind

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

- Inherits the rich tradition of imparting quality education in ICT and allied areas from its mother body Regional Computer Centre or RCC, Calcutta (now NIELIT, Kolkata) under MeitY, GoI.
- Is run by an autonomous Society of Higher Education Dept., GoWB. The HED took the overall responsibility of the institute in 2005 through formation of the Society and BOM. The BOG is constituted by the HED with eminent members from academia, industry and Govt. The institute has received support from GoWB in terms of land, building and funding.
- Spread over two campuses measuring **4.63** acres, the institute is located in the heart of Kolkata metropolis and well connected by road, rail and air. It is in close proximity to the IT hub of Kolkata and HED.
- Has got excellent academic infrastructure comprising of **33** Core Engg. Labs, **33** classrooms, **17** Computer Labs, around **600** PCs, advanced Language Labs, rich Central Library and Digital Library, structured network and unlimited internet facility.
- Is known for consistently good placement record of its students which continued even during the pandemic, a total of **365** offers being provided till date for 2021 batch (highest package **8** LPA). 2022 batch placement has already started with 7 students getting offers worth **13** LPA.
- Has strong set-up (like TPC, IIPC) to develop sound and active collaborations with IT and core industry for creating opportunities for collaborative training, project and consultancy for faculty and also internship & training for students.
- Has a rich pool of teaching resources with proven teaching skills, total faculty count being **91** in 2019-20; **6** Professors, **11** Associate Professors and **74** Assistant Professor. All staff and faculty are paid as per State Govt. norms (having implemented 6th Pay Commission in line with GoWB), resulting in high retention ratio.
- The research credential of the faculty members is quite good with 32 of them having PhD and 13 patents, 7 copyrights, 20 PhD scholars, 150+ journal papers, 250+ conference papers, 125+ book chapters and 50+ books to their credit.
- Two B.Tech programs are already NBA accredited.

Institutional Weakness

- Yet to get NAAC accreditation and NBA accreditation of 3 UG engg. (B.Tech) and 4 PG programs (3 M.Tech and MCA). Out of these, B.Tech CSE got NBA accreditation for the period 2016-2019 but could not get the accreditation renewed owing to marginally less FSR.
- Has a rich Alumni base but Alumni contribution towards institute development is not significant.
- Being a non-Govt. self-financing institute, research projects submitted by the faculty are hardly sanctioned by Govt. funding agencies like DST. Hence IIPC is trying for industrial projects.
- Institute doesn't receive any recurring grant from Govt., hence according to AICTE definition it falls under the category of "private un-aided institute" though it has received TEQIP-II project grant in the Govt.-aided category and has received several grant-in-aids, free of cost land and building from Govt. earlier
- e-governance is not fully implemented through a full-scale ERP though discretely implemented in different functions like admission and accounting.
- There is no owned Hostel for boys and girls though arrangement is there with privately owned local Hostel
- No exclusive facility or system is available for:
- Gymnasium
- Disabled-friendly washrooms
- Assistive technology/facilities for persons with disability
- Rain water harvesting and Borewell recharge
- Extensive solar energy and biogas energy generation
- Sensor-based energy conservation
- Bicycle/Battery powered vehicle
- Biometric attendance
 - Only IEEE journals are subscribed and no. of e-books is less. Plagiarism software is not available.
 - As there is no academic autonomy (institute has to follow syllabus of affiliating University), the syllabus can't be modified to meet industry requirement or market demand. Although beyond the syllabus topics are taught in special cases.
 - Very less budget in marketing or promotion of the institute. There are several noteworthy activities and achievements but because of lack of marketing (advertisement) policy public awareness is not as much as about the private engineering colleges.
 - Cannot award PhD degree.

Institutional Opportunity

• The institute is an asset of the State with rich tradition, reputation for quality of academics and consistency of placement, Govt. support, prominent position, excellent infrastructure & teaching resources and good practices. It has the potential to establish itself as a technical institute with standard at par with the national institutes like the NITs.

- There is a huge demand in industry for quality engineers and technical manpower in Computer Science, IT and allied emerging areas like AI, ML, IOT, Data Science, Cyber Security, Big Data, Cloud Computing, Web Development etc. RCCIIT being an institute focused in ICT, have good chance of grabbing this opportunity if the faculty strength can be enhanced suitably and the existing and spare resources of the institute can be effectively utilized. Seats can be enhanced in B.Tech (Comp. Sc. & Engg. & IT) and also new UG/PG programs with specializations in the above mentioned areas may be introduced.
- Innovation Centre and Technology Incubation Centre can be developed (using excess space of the institute) in collaboration with University and Industry where innovative projects of the faculty and students can be supported to build prototypes and Proof of Concepts and file patents towards promotion of Entrepreneurship/Start-Ups. This may help improve the ARIIA ranking.
- The wide Alumni base of this 22 yrs old institute can be connected through more regular interaction to harness their potential to contribute more for the institute in terms of developing specialized lab with funding and technical support, facilitating collaboration with industry, arranging internship and placement for students, taking classes on emerging technologies, delivering seminars on industry best practices or higher education opportunities etc.
- The rich background & resources and accreditations of the institute can be used to attract CSR projects, consultancy projects on industrial problems and also research project from Govt. funding agencies to provide better exposure to the students & faculty and also to enhance IRG. This may help improve the NIRF ranking.
- If 50% of the programs can be NBA accredited then the Institute can apply for academic autonomy which will help develop industry-designed curriculum.

Institutional Challenge

- Pay and allowance of the employees are as per Govt. pay structure hence financial liability is quite high. With no recurring grant from Govt. and no significant enhancement in student fees over last 4-5 years it is difficult to sustain financially while maintaining the statutory requirement of FSR.
- High FSR requirement is contradictory to minimum teaching load to be assigned to each faculty difficult to balance the two.
- While the craze for Computer Science & Engineering (CSE) and IT is growing overwhelmingly, the core engineering streams like Electrical Engg. (EE), Applied Electronics & Instrumentation Engineering (AEIE) are losing demand. It is challenging now to place EE and AEIE students in respective core industries.
- Because of diminishing demand full quota admission is getting uncertain in EE and AEIE, though the UG EE program is NBA accredited.
- Proliferation of private Universities in the region is creating stern competition for institutes like RCCIIT as they admit huge no of students in B.Tech CSE & IT with no. binding restriction of seat capacity and FSR. On the contrary, having limited seats in B.Tech CSE & IT, RCCIIT loses those students.
- In an institute like RCCIIT focused in ICT it is challenging to keep pace with the rapidly changing technology in the IT industry. To impart the knowledge and skill of the emerging technologies to the students to make them readily employable, the faculty members are required to continuously update their knowledgebase by undergoing certificate courses of NPTEL/Swayam/Coursera/Udemy etc.
- It is challenging to continue research and publish in quality articles after performing usual assignments (teaching, assessment, project guidance, mentoring, marks upload, result analysis etc.) as a faculty.
- For better management of teaching learning in online, digital or hybrid mode (as the pandemic demands), full-fledged LMS needs to be implemented; the process has started though quite challenging

- to assess a student properly and also to conduct practical based subjects like mechanical workshop in online mode.
- Engineering students are usually aspiring for jobs from campus. Encouraging students for entrepreneurship and start-ups is challenging when the job market is good.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Institute is affiliated under Maulana Abul Kalam Azad University of Technology, West Bengal. Curriculums for all programmes are designed by the university designated Board of Studies (BOS). Institute follows those prescribed syllabuses for all 9 offered degree programmes. Some faculty members of this institute are also part of these BOS of different subjects. They significantly participate in curriculum development. Every curriculum comprises significant number of elective courses spanned across different semesters. Students are mentored to identify right elective papers during their course of study. Programme curriculums also include courses on human values and ethics, environmental science, Indian constitution etc. to nurture student on societal responsibilities. All these technical programmes embrace studies on experimental learning, workshop based courses, project works and internships. Faculty members of this institute are actively engaged in designing question papers for university examinations and evaluating answer scripts apart from their regular internal evaluations during the semester. Academic activities of the institute follow a well defined academic calendar published for the students and faculty members through website and notice boards. Institute regularly offers different add-on courses through physical workshops, student development programmes and massively open online courses (MOOCS) since the core curriculums are designed by the university. Every academic department has a departmental advisory board (DAB) with representation from other higher educational institutes, universities, corporate sectors and alumni. DAB recommends emerging and niche areas aligned with the technical program offered by the department. Students are mentored to enrol in specific online programs following the recommendations of DAB and due approval of the institutional academic committee (IAC). University has adequate provision for credit transfer from these online courses to encourage students to participate in these add-on courses. A good percentage of students have successfully undergone add-on courses over the last five academic years. All final and pre-final year students participate in internships and project works. IAC is also open to consider the feedback of the students before arrangement of add-on programs to augment their skills. There is an online student feedback system to gather student feedback on their learning experiences which is analyzed and appropriate actions are taken.

Teaching-learning and Evaluation

Teaching – learning and evaluation processes are among the prime focus areas of the institute academic council (IAC). Academic activities of the departments are governed by the academic calendar of the institute. Every department assigns faculty members in different courses for upcoming semester during the inter semester break. Faculty members prepare corresponding lesson plans and circulate at the beginning of the session. Course outcomes of every courses and their mapping with program outcomes are shared with the students through lesson plan and institute website. Academic classes are conducted with exclusive use of modern ICT tools. Teaching-learning process ensures active engagement of students through various activities like classroom demonstration, assignment of different modules, quizzes, mini projects, laboratory assignments and internal class test examinations. Student activities are thoroughly reviewed and model answers are shared with them to explain expected performance measures. Every possible transparency is maintained in this evaluation process

and individual student query is addressed meticulously. There are adequate mechanisms to identify students' learning progression and accordingly weak students are identified after certain progress in a course. Remedial classes are arranged for weak students to develop their learning level. Faculty members also serve as student mentors for small group of students to discuss various challenges and potentially help them to recover. Currently the institute retains 27:1 mentee-mentor ratio. Institute maintains a 23:1 faculty student ratio. 80.5% of full-time faculty positions are now filled with experienced faculty members with respect to the number of sanctioned posts out of which 30.8% faculty members are having Ph.D. Average teaching experience of these full-time faculty members is 8.5 years. Admission scenario of the institute is promising and it has recorded 85% average enrolment over the span of last five years. There is equal opportunity for admission under reserved categories like SC, ST, OBC, PWD and TFW. On an average 61.5% admission is recorded under these reserved quotas. Excellence in teaching-learning has recorded an impressive average pass percentage of 97.98% over last five academic years.

Research, Innovations and Extension

Institute embarked in 1999 as an academic organization with a mission to impart focused engineering education in the field of information technology and allied domains. Gradually it has adopted research and innovation as centre of attention. Faculty members of this institute are steadily working to create a mark in the field of research and innovation in their specialized domain. Technical education quality improvement (TEQIP) - II program, a World Bank assisted project was awarded to the institute in 2012 with active support from MHRD, NPIU and Higher Education department, Govt. of West Bengal. Institute received nearly rupees 15 crore grant through this project in two phases. Initial grant of rupees 10 crore was received in 2012 and later additional rupees 5 crore was awarded after phase 1 performance review. TEQIP-II has an instrumental role in overall improvement of the research and development scenario in the institute. Many faculty development programs, research workshops, student workshops, conferences, staff development programs, foreign visits for paper presentation and collaboration were successfully conducted under the aegis of TEQIP-II. Current R&D scenario over last five academic years is much promising than before. Institute has recorded 157 instances of faculty involvement in journal publications and 390 instances of conference, book chapter, edited volume etc. publications during this period. Currently 30.8% (27 out of 91) of full time faculty members are having Ph.D. and 10 of them have registered/enrolled Ph.D. scholars. Presently, 3 M. Tech. programmes and 1 MCA program are being offered as post graduate studies. Institute has 9 active collaborations (/ MoUs) with different international institutes and universities to perform collaborative research work, innovation and student/ faculty exchange program. Institutional innovation cell was constituted in 2019 which is regularly organizing several programs on promoting awareness for IPR including patent, copyright and involving students for entrepreneurship activity. Students of this institute are also actively engaged in various extension activities in neighbourhood communities in association with institutional NSS chapter and RCCIIT Rotaract society club. They have participated in 90 different events over past five years for holistic development of society and backward community.

Infrastructure and Learning Resources

Institute offers state-of-the art infrastructure for engineering education through its two centrally located campuses in Kolkata situated over 4.63 acres of land. Main campus is located on Canal South Road with administrative block with Computer Application, Applied Science and Engineering Science and Management departments. Extended new campus is located behind the main campus on Pagla danga Main Road with five academic departments (Electrical, Electronics and Communication, Information Technology, Computer Science

and Engineering, Applied Electronics and Instrumentation). Institute comprises 45 ICT enabled classrooms, 17 computer laboratories having nearly 850 desktop computers and 33 engineering laboratories. This whole area is connected through a single managed network with Wi-Fi facility and adequate power backup (UPS). 100 mbps LAN is supported by two internet lease line connections (10 mbps and 4 mbps). Almost every academic department has a dedicated seminar room with 50 seating capacity, faculty rooms with dedicated cubicles, classroom, tutorial rooms, laboratories and departmental library. Adequate number of desktop computers ensures 1:1 computing facility for our students. Common facilities includes air conditioned auditorium having 370 seating capacity, two separate common rooms for girls and boys with some basic amenities for recreations like instruments for different indoor games, language lab, workshop, central library. A state-of-the art language laboratory for communication and soft skill development has been setup during TEQIP-II with active support from CACM, STEP, Kharagpur with ISIL software. Well equipped central library of the institute is having rich resource repository. Currently it is managed by libsys MIS system and the same will be migrated to KOHA in recent future. Total library space is 417 sq. mt. having dedicated area for reading and digital archive surfing. There are 34230 different volumes at present under 4700 various titles along with some e-books from IEEE and IEEE/IEL online repository. Apart from central library, each department has a small setup in the form of department library which serves the purpose of reference book in System administration department always ensures availability of computing and network facilities where as in campus electrical and civil engineers maintain electrical and civil infrastructure of both campuses.

Student Support and Progression

Institute believes in students centric processes. Addition to teaching – learning activities institute offers other support services in the forms of soft skill training, life skill practices, computing skill developments and many more. Every year training and placement cell organizes many such skill development activities for the students. In addition to these special classes are organized to train the students for higher studies. On an average 13% students have been benefited from these classes during last five academic years. Extensive placement support is offered to the students every year where 25 to 30 companies offer opportunities to the students to appear for placement. During last five academic years more than 50% students on an average have availed placement facilities. Institute has facilities for full free-ship and half free-ship, around 10% students are benefited under this scheme along with scholarships provided under various government schemes. Students are also engaged in different organizational role for annual technical, sports and cultural events. They also take active interest in arranging different departmental level events; freshers welcome program, Saraswati puja and periodically many other events. Alumni of this institute are also engaged in different roles to support various student centric activities of the institute. Alumni supports in the form of technical sessions, motivational talks, mock interviews for the junior batch often becomes effective for the current students. Institute maintains a systematic approach to manage student discipline related issues through disciplinary committee. Additionally there is Institutional Complain Committee (ICC) to manage grievances. Institute is ragging free and strict to maintain all antiragging policies. Students of the institute are also very active maintain the sanctity of the campus by keeping this ragging free. They work together with the staff member to ensure this policy.

Governance, Leadership and Management

The institute has stable governance implemented through the Board of Management (BOM) of an autonomous Society of the Higher Education Department (HED), Govt. of West Bengal. The operational aspects are taken care of by the Board of Governors (BOG) constituted by the HED. The Principal, who reports to the Chairman, BOG, manages the day-to-day office administration with the help of the System Administration Dept.,

Registrar, Deputy Registrar, Accounts Officer and Finance Officer. The academic administration is done through senior faculty members acting as HODs, Officer-in-Charge (Exam) and Faculty-in-Charge (FIC) of T&P /Academics/Legal Affairs/Alumni/Student Affairs, Librarian, TPO and also through different apex committees like Institutional Academic Committee (IAC), Internal Quality Assurance Cell (IQAC), Institutional Research Committee (IRC), Admission Committee, Grievance Redressal Cell, Disciplinary Committee etc. The administration is guided by the institutional Mission Vision statements pivoted on participative, inclusive, unbiased and transparent style of management. The decision making process of different important academic and administrative functions are decentralized by delegating authority to the faculty members (working in committees) irrespective of gender, religion and caste.

The institute also has a strategic plan for operation, growth and quality assurance which is effectively deployed through IAC, IQAC, IIPC, IRC, NSS Unit and different other committees. The status and progress is reviewed periodically by the IQAC, Advisory Committee and Academic Audit Committee.

The institute has implemented e-governance discretely for limited functions like Accounting and Admission. Other functions will be gradually brought under the purview of ERP. There exist approved rules and procedures including leave rules, promotional rules, recruitment rules, purchase procedure, PF rules, Mediclaim rules, reimbursement rules etc. which are followed for administrative decisions with absolute transparency and uniformity. AICTE and State Govt. rules are followed for performance appraisal and promotion – an internal CAS Committee and Expert committee formed as per norms looks after CAS.

The Finance Committee and BOG ensures optimal utilization of institutional resources in keeping with revenue generated, liability and future challenges and mobilizes fund accordingly protecting the interest of the students and staff. The IQAC contributes significantly in fine tuning the internal processes towards overall quality improvement and better administration.

Institutional Values and Best Practices

RCCIIT is not only known for good academic practice, it is also an Institute with values. It takes care of its staff and students based on the values of humanism and compassion. It provides opportunities beyond academics to help students achieve their full potential as a socially responsible citizen. Being a self-financing Institute of unique origin and nature, it follows all relevant govt. rules including that for pay of its teaching and non-teaching staff with absolute transparency and equity in policy.

The equity is prominently reflected in the equal treatment done with and equal facility extended to the female faculty, staff and student in recruitment, admission, promotion, leave, delegation of responsibility from time to time. There are many examples of female employees occupying leadership roles of the institute at different times. Awareness programs on gender equity and gender sensitization are often conducted by the NSS unit. The Internal Complaints Committee is there to address any issue arising out of sexual or any kind of harassment faced by any female staff or student.

The institute has adopted some good practices as far as protecting the internal ecosystem and surrounding environment is concerned. Such practices include e-waste management, solid and liquid waste management by segregating bio-degradable and non bio-degradable wastes, zero tolerance for thin plastics, restoring and maintaining water bodies and gardens, water conservation and clean water distribution, usage of solar street lights and energy efficient LED lights, recycling of garden wastes, cleanliness drives, plantation programs, community hygiene and cleanliness awareness program. However, full fledged solar energy driven system and

rain water harvesting could not be implemented yet.

The institute provides an inclusive environment to all students and staff with and ensures absolute harmony of diverse populations belonging to different cultural, regional, linguistic, communal and socio-economic backgrounds. No discretion or favoritism towards any particular group is entertained. Rather the weaker and underprivileged group students are given support in need. The student welfare committee, SC/ST Committee, NSS unit ensures tolerance and harmony among all communities.

There are earmarked programs to instill values, ethics to the students through UHV mentoring events and induction programs.

2. PROFILE

2.1 BASIC INFORMATION

| Name and Address of the College | | | |
|---------------------------------|---|--|--|
| Name | RCC INSTITUTE OF INFORMATION TECHNOLOGY | | |
| Address | CANAL SOUTH ROAD, BELIAGHATA, | | |
| City | KOLKATA | | |
| State | West Bengal | | |
| Pin | 700015 | | |
| Website | www.rcciit.org | | |

| Contacts for Communication | | | | | |
|----------------------------|----------------------|-------------------------|------------|-------------|---------------------------------|
| Designation | Name | Telephone with STD Code | Mobile | Fax | Email |
| Principal(in- charge) | Anirban Mukherjee | 033-23231534 | 9836210201 | 033-2323466 | principalofreciit@g mail.com |
| IQAC / CIQA coordinator | Anirban Mukherjee | | 9836210201 | _ | anirbanm.rcciit@g mail.com |

| Status of the Institution | |
|---------------------------|---------------------------------|
| Institution Status | Grant-in-aid and Self Financing |

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

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

| Establishment Details | |
|--------------------------------------|------------|
| Date of establishment of the college | 07-09-1999 |

University to which the college is affiliated/ or which governs the college (if it is a constituent college)

| State | University name | Document |
|-------------|---|---------------|
| West Bengal | Maulana Abul Kalam Azad University of Technology | View Document |

| Details of UGC recognition | | | |
|----------------------------|------------|----------------------|--|
| Under Section | Date | View Document | |
| 2f of UGC | 01-10-2013 | <u>View Document</u> | |
| 12B of UGC | | | |

| Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC) | | | | | |
|---|---------------|------------|----|--|--|
| Statutory Regulatory Authority Recognition/App roval details Inst itution/Departme nt programme Recognition/App pay,Month and year(dd-mm- yyyy) months Remarks | | | | | |
| AICTE | View Document | 15-06-2020 | 12 | | |

| Details of autonomy | | |
|--|-----|--|
| Does the affiliating university Act provide for conferment of autonomy (as recognized by the UGC), on its affiliated colleges? | Yes | |
| If yes, has the College applied for availing the autonomous status? | No | |

| 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 | CANAL SOUTH ROAD, BELIAGHATA, | Urban | 4.63 | 13519.51 |

2.2 ACADEMIC INFORMATION

| Details of Pro | ogrammes Offe | red by the Col | lege (Give Data | a for Current A | Academic year |) |
|--------------------|--|-----------------------|--|---------------------------|------------------------|-------------------------------|
| Programme Level | Name of Pr ogramme/C ourse | Duration in Months | Entry Qualificatio n | Medium of Instruction | Sanctioned Strength | No.of Students Admitted |
| UG | BTech,Comp uter Science And Engineering | 48 | XII pass in Science with Physics. Chemistry and Mathematics along with JEE rank | English,Hind i,Bengali | 113 | 113 |
| UG | BTech,Information Technology | 48 | XII pass in Science with Physics Chemistry and Mathematics along with JEE rank | English,Hind i,Bengali | 113 | 110 |
| UG | BTech,Electr onics And C ommunicatio n Engineering | 48 | XII pass in Science with Physics Chemistry and Mathematics along with JEE rank | English,Hind i,Bengali | 113 | 112 |
| UG | BTech,Electr ical Engineering | 48 | XII pass in Science with Physics Chemistry and Mathematics | English,Hind i,Bengali | 57 | 45 |

| | | | along with JEE rank | | | |
|----|--|----|---|---------------------------|----|----|
| UG | BTech,Appli ed Electronics And Instrum entation Engineering | 48 | XII pass in Science with Physics Chemistry and Mathematics along with JEE rank | English,Hind i,Bengali | 57 | 32 |
| PG | Mtech,Comp uter Science And Engineering | 24 | Engineering graduate or Master of Science in relevant discipline as per MAKAUT WB | English,Hind i,Bengali | 16 | 15 |
| PG | Mtech,Information Technology | 24 | Engineering graduate or Master of Science in relevant discipline as per MAKAUT WB | English,Hind i,Bengali | 16 | 12 |
| PG | Mtech,Electr onics And C ommunicatio n Engineering | 24 | Engineering graduate or Master of Science in relevant discipline as per MAKAUT WB | English,Hind i,Bengali | 16 | 3 |
| PG | MCA,Comp uter Application | 36 | BCA or BSC in relevant discipline | English,Hind i,Bengali | 60 | 44 |

Position Details of Faculty & Staff in the College

| | | | | Te | aching | g Faculty | y | | | | | |
|--|-------|-----------|--------|-------|--------|---------------------|--------|-------|----------------------------|--------|--------|-------|
| | Profe | Professor | | | | Associate Professor | | | Assistant Professor | | | |
| | Male | Female | Others | Total | Male | Female | Others | Total | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 13 | | | | 29 | | | | 67 |
| Recruited | 5 | 1 | 0 | 6 | 8 | 3 | 0 | 11 | 39 | 14 | 0 | 53 |
| Yet to Recruit | | | | 7 | | | | 18 | | | | 14 |
| Sanctioned by the Management/Soci ety or Other Authorized Bodies | | | | 8 | | 2 | | 15 | J | | | 75 |
| Recruited | 5 | 1 | 0 | 6 | 8 | 3 | 0 | 11 | 50 | 24 | 0 | 74 |
| Yet to Recruit | | | | 2 | | | | 4 | | | | 1 |

| | | Non-Teaching | Staff | |
|--|------|--------------|--------|-------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | 7, | | 49 |
| Recruited | 40 | 9 | 0 | 49 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 49 |
| Recruited | 40 | 9 | 0 | 49 |
| Yet to Recruit | | | | 0 |

| | | Technical St | aff | |
|--|------|--------------|--------|-------|
| | Male | Female | Others | Total |
| Sanctioned by the UGC /University State Government | | | | 29 |
| Recruited | 27 | 2 | 0 | 29 |
| Yet to Recruit | | | | 0 |
| Sanctioned by the Management/Society or Other Authorized Bodies | | | | 29 |
| Recruited | 27 | 2 | 0 | 29 |
| Yet to Recruit | | | | 0 |

Qualification Details of the Teaching Staff

| | Permanent Teachers | | | | | | | | | | | |
|------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|--|--|
| Highest Qualificatio n | Qualificatio | | Associate Professor | | | Assistant Professor | | | | | | |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | Total | | |
| D.sc/D.Litt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| Ph.D. | 5 | 1 | 0 | 5 | 2 | 0 | 9 | 5 | 0 | 27 | | |
| M.Phil. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| PG | 0 | 0 | 0 | 3 | 1 | 0 | 41 | 19 | 0 | 64 | | |

| | Temporary Teachers | | | | | | | | | | | |
|------------------------------|--------------------|--------|--------|---------------------|--------|--------|---------------------|--------|--------|-------|--|--|
| Highest Qualificatio n | Professor | | | Associate Professor | | | Assistant Professor | | | | | |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | Total | | |
| 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 Qualificatio n | Professor | | | Associate Professor | | | Assistant Professor | | | | |
| | Male | Female | Others | Male | Female | Others | Male | Female | Others | Total | |
| 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 | Male | Female | Others | Total | | | | |
| engaged with the college? | 7 | 5 | 0 | 12 | | | | |

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 | 1114 | 242 | 0 | 0 | 1356 |
| | Female | 455 | 66 | 0 | 0 | 521 |
| | Others | 0 | 0 | 0 | 0 | 0 |
| PG | Male | 104 | 5 | 0 | 0 | 109 |
| | Female | 94 | 3 | 0 | 0 | 97 |
| | 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 | 38 | 78 | 68 | 75 | | | |
| | Female | 18 | 35 | 21 | 36 | | | |
| | Others | 0 | 0 | 0 | 0 | | | |
| ST | Male | 3 | 1 | 4 | 3 | | | |
| | Female | 0 | 1 | 1 | 2 | | | |
| | Others | 0 | 0 | 0 | 0 | | | |
| OBC | Male | 0 | 0 | 0 | 0 | | | |
| | Female | 0 | 0 | 0 | 0 | | | |
| | Others | 0 | 0 | 0 | 0 | | | |
| General | Male | 291 | 357 | 327 | 290 | | | |
| | Female | 136 | 131 | 144 | 117 | | | |
| | Others | 0 | 0 | 0 | 0 | | | |
| Others | Male | 0 | 0 | 0 | 0 | | | |
| | Female | 0 | 0 | 0 | 0 | | | |
| | Others | 0 | 0 | 0 | 0 | | | |
| Total | · | 486 | 603 | 565 | 523 | | | |

Extended Profile

1 Program

1.1

Number of courses offered by the Institution across all programs during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 531 | 531 | 531 | 531 | 531 |

| File Description | Document |
|--------------------------------------|----------------------|
| Institutional data prescribed format | <u>View Document</u> |

1.2

Number of programs offered year-wise for last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 9 | 9 | 9 | 9 | 9 |

2 Students

2.1

Number of students year-wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 2083 | 2025 | 2009 | 1932 | 1905 |

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

2.2

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 134 | 158 | 158 | 140 | 140 |

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

2.3

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 517 | 472 | 510 | 514 | 539 |

| File Description | Document | |
|---|----------------------|--|
| Institutional data in prescribed format | <u>View Document</u> | |

3 Teachers

3.1

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 91 | 81 | 76 | 84 | 85 |

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

3.2

Number of sanctioned posts year-wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 98 | 100 | 110 | 106 | 106 |

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

4 Institution

4.1

Total number of classrooms and seminar halls

Response: 45

4.2

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 317.59 | 329.33 | 391.88 | 462.83 | 729.62 |

4.3

Number of Computers

Response: 850

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curricular Planning and Implementation

1.1.1 The Institution ensures effective curriculum delivery through a well planned and documented process

Response:

Institute follows a systematic process for curriculum management across all programmes during both odd semester (July to December) and even semester (January to June). Generally, all Departmental HoDs are advised to perform subject allocation at least one month prior to the commencement of semester. HoDs organize a meeting of Departmental Academic Committee (DAC) under their chairmanship for balanced faculty allocation of courses. This allocation task is executed to achieve utmost optimality among departmental faculty members. The DAC identifies all unallocated courses; mostly these are of nondepartmental specialization. A brief report on this allocation is sent to Faculty-in-charge (Academics) for review and necessary arrangements for unassigned courses. FIC (Academics) reviews the allocation details received from every department in presence of all HoDs and Principal during Institutional Academic Committee (IAC) meeting. First, they try to assign unallocated courses to the faculty members of other departments having requisite proficiency. AICTE prescribed teaching loads for different cadres are maintained. Advertisement for engaging visiting faculty members is published in the college website and through a standard process visiting faculty members are recruited for a semester to cater remaining unallocated courses. These assignments are intimated to concerned department. Department then designs the routines through a departmental routine committee. Final routine is reviewed by FIC (Academics) and approved by the Principal. Approved routine is published for faculty members and students through emails and the Institute website. Meanwhile, the faculty members (also known as course coordinators) start preparing their detailed lesson plans in an IAC approved format which contains necessary details like course name, course outcome (CO), and detailed week wise schedule of lecture with micro contents for each session and their mapping with CO along with the reference books and textbooks. Course coordinators simultaneously design a tentative list of experiments to be performed in the laboratory for practical courses. Program assessment committee comprising the program coordinator and module coordinator moderates these lesson plans and finalizes them. Course coordinators then finalize their basic course files containing study notes, lecture slides, assignments based on CO, quiz questions based on CO, and short-term class test questions with model answers. Progress of each course is rigorously monitored through the following;

- 1.Student performance in the assignment, active and participative learnings, classroom demonstration, quiz, and internal written examinations and finally end semester exam (SGPA) conducted by the university.
- 2. Multiple evaluations are done in project-based papers through semester-long activities like internal presentation to guide, internal execution study, end semester examination in presence of external experts. Quality works are motivated and mentored to go for acquiring copyright or publication based on their merits.
- 3. Class attendance
- 4. Student feedbacks
- 5. Attainment of various objective parameters

Institute has its own model for comprehensive internal evaluation (CIE) mechanism. Regular monitoring is a part of this process to identify slow/ weak learners, passive learners, and active learners. Accordingly, special remedial classes are arranged for slow learners. Their progress is monitored periodically. Special classes are arranged for students with backlogs so that they can clear their doubts and reappear with better preparation.

| File Description | Document |
|---------------------------------|---------------|
| Upload Additional information | View Document |
| Link for Additional information | View Document |

1.1.2 The institution adheres to the academic calendar including for the conduct of CIE

Response:

Institute follows the main academic calendar of its affiliating University, Maulana Abul Kalam Azad University of Technology, West Bengal (MAKAUT, WB). Internal academic calendar of the institute is manifested over the outline of University academic calendar. Start date of the session, student enrollment, internal theory examination dates, practical internal evaluations dates, examination form fill-up, end semester examination, training program details, faculty development programs and workshops, technical and cultural fests are mentioned in academic calendar. Regular academic activities for the students involves three types of courses spanning over eight semesters for B. Tech. programmes, four semesters for M. Tech. programmes and six semesters of MCA programme. These three types of programmes comprise three types of courses as theory, practical and sessional. Each theory paper is evaluated through 30 internal marks and 70 marks end semester examination conducted by university. Practical papers are evaluated through 40 internal marks and 60 marks during end semester examination by university at college level. Sessional paper is evaluated through a 100 marks examination during end semester examination.

Before the commencement of the academic year, the Institution prepares and publishes

academic calendar containing the relevant information so that faculty members and students should know all the activities regarding continuous evaluation process. Internal marks for theory papers are evaluated through four 25 marks continuous assessments (CA1, CA2, CA3 and CA4), which are done through different activities like written examination, quiz and classroom demonstration etc. Internal 40 marks for practical courses are evaluated through two separate internal assessments (Practical continuous assessment (PCA)) each of 40 marks. The evaluation is done on the basis of continuous performance of the students in practical class assignments and periodical viva voce examinations taken by concerned course instructor. Sessional papers are internally monitored through several activities based on the nature of course and concerned course coordinator. Internal assessment mechanism helps to segregate the students into two groups, namely passive (slow) and active (fast) learners so that adequate remedial teaching can be arranged for the development of passive learners/ slow learners.

| File Description | Document |
|---------------------------------|----------------------|
| Upload Additional information | <u>View Document</u> |
| Link for Additional information | View Document |

- 1.1.3 Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the last five years
 - 1. Academic council/BoS of Affiliating university
 - 2. Setting of question papers for UG/PG programs
 - 3. Design and Development of Curriculum for Add on/certificate/ Diploma Courses
 - 4. Assessment /evaluation process of the affiliating University

Response: B. Any 3 of the above

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

1.2 Academic Flexibility

1.2.1 Percentage of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

Response: 100

1.2.1.1 Number of Programmes in which CBCS / Elective course system implemented.

Response: 9

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | View Document |
| Any additional information | <u>View Document</u> |
| Link for Additional information | View Document |

1.2.2 Number of Add on /Certificate programs offered during the last five years

Response: 77

1.2.2.1 How many Add on /Certificate programs are offered within the last 5 years.

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 19 | 25 | 25 | 8 | 0 |

| File Description | Document |
|--------------------------------------|----------------------|
| List of Add on /Certificate programs | View Document |
| Any additional information | <u>View Document</u> |

1.2.3 Average percentage of students enrolled in Certificate/ Add-on programs as against the total number of students during the last five years

Response: 12.7

1.2.3.1 Number of students enrolled in subject related Certificate or Add-on programs year wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 174 | 825 | 278 | 11 | 0 |

| File Description | Document |
|---|----------------------|
| Details of the students enrolled in Subjects related to certificate/Add-on programs | View Document |
| Any additional information | <u>View Document</u> |

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:

Institute follows the prescribed curriculum of affiliating University that contains separate courses on Values and Ethics in profession and Environmental Science. Basic theories are exercised among students during these courses.

Number of female students in the institute is 579 whereas no. of male students is 1442. No discrimination is done for these two categories of students as far as educational facilities are concerned. There are separate common rooms for boys and girls. It is ensured by the management that girls also represent in institutional committees like Anti-Ragging Committee, Grievance Redressal Cell, ICC, NSS and also in Student Welfare Committee, Coding Club, Rotaract Club etc. Recently out of two students nominated for the International Youth Exchange Programme 2020-21 & Miss Avantika Sadhukhan of 2nd Yr B.Tech has been selected by the University to represent IYEP from the State. There is a general gender sensitization action plan approved by the ICC and authority. According to that plan awareness programs on gender

sensitivity are organized by NSS team in the campus. The female faculty members, staff and students are informed about various laws and rights available for their empowerment. Recently Women's Day was celebrated by the NSS team where 15 lady faculty members were felicitated.

Institute puts lot of emphasis on developing the students as good human being and responsible citizen of future primarily besides developing their technical and professional skills. Besides creating and maintaining a culture that fosters such development, the institute took initiative to appoint Universal Human Values (UHV) Coordinators to supervise the following activities:

- a. Sending faculty members of all the Departments to different levels of FDPs, conducted by AICTE_UHV Cell.
- b. Sensitizing students to attend e-SIP and the guardians for joining Family Workshops.
- c. Sensitizing senior faculty members to conduct Refresher Workshops on UHV for faculty members and students (to prepare the students on value-based pedagogy and value-embedded living in future).
- d. Training of faculty members in UHV Mentoring Programs of AICTE and MAKAUT.

The institute also has taken a long-term holistic approach to sensitize students and staff about constitutional obligations, values, rights and responsibilities through different activities.

There is no bore-well or open-well in the campus. Underground water tank is filled up with Municipality water supply and then distributed to all supply points through the distribution line via overhead tanks. All tanks are regularly cleaned to avoid any pollution due to stagnation. It is ensured that there is minimum wastage of water owing to overflow from tanks or leakage from distribution lines or supply points. The wastewater generated from canteen upon washing of foods utensils is stored in drums which are used for watering the plants, thereby recycling the wastewater in an indigenous way.

Presently there is no planned system of Rain Water Harvesting. However, the management has kept this provision as part of future plans for environmental care and preservation of natural resources. Currently, the water bodies act as natural catchment areas of rainwater which in turn helps to restore the groundwater level.

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

1.3.2 Average percentage of courses that include experiential learning through project work/field work/internship during last five years

Response: 4.9

1.3.2.1 Number of courses that include experiential learning through project work/field work/internship year-wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 26 | 26 | 26 | 26 | 26 |

| File Description | Document |
|---|---------------|
| Programme / Curriculum/ Syllabus of the courses | View Document |
| MoU's with relevant organizations for these courses, if any Average percentage of courses that include experiential learning through project work/field work/internship | View Document |
| Any additional information | View Document |

1.3.3 Percentage of students undertaking project work/field work/ internships (Data for the latest completed academic year

Response: 49.16

1.3.3.1 Number of students undertaking project work/field work / internships

Response: 1024

| File Description | Document |
|--|---------------|
| List of programmes and number of students undertaking project work/field work//internships | View Document |

1.4 Feedback System

1.4.1 Institution obtains feedback on the syllabus and its transaction at the institution from the following stakeholders 1) Students 2) Teachers 3) Employers 4) Alumni

Response: D. Any 1 of the above

| File Description | Document |
|-------------------------------------|----------------------|
| Any additional information (Upload) | <u>View Document</u> |
| URL for stakeholder feedback report | <u>View Document</u> |

Page 27/93 07-09-2021 08:52:04

1.4.2 Feedback process of the Institution may be classified as follows: Options:

- 1. Feedback collected, analysed and action taken and feedback available on website
- 2. Feedback collected, analysed and action has been taken
- 3. Feedback collected and analysed
- 4. Feedback collected
- 5. Feedback not collected

Response: B. Feedback collected, analysed and action has been taken

| File Description | Document |
|-------------------------|----------------------|
| URL for feedback report | <u>View Document</u> |

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1 Average Enrolment percentage (Average of last five years)

Response: 84.38

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 486 | 603 | 565 | 523 | 542 |

2.1.1.2 Number of sanctioned seats year wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 561 | 672 | 714 | 640 | 640 |

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

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

Response: 61.53

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 63 | 110 | 93 | 101 | 84 |

| File Description | Document |
|---|---------------|
| Average percentage of seats filled against seats reserved | 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:

Institute organizes orientation cum induction program for under graduate, B. Tech. students of all disciplines. This induction program encompasses refreshers course on Physics, Chemistry, Mathematics and English alongside the interaction with various industry personnel, sessions on social and environmental responsibilities and NSS activities. This, sessions are included to inculcate positive attitude and competitive spirit. This process helps as a base for monitoring the future progress of the students.

Institute follows rigorous outcome-based monitoring through multiple modes of evaluation to judge the learning level of the students. Once after completing orientation programs, a student joins in regular curriculum-oriented academics then there the Institute has designed multiple tools for evaluation for each and every course. These evaluation models are well defined in course plan and are shared with the students at the very beginning of the semester classes. These evaluation tools are class test comprising short answer type questions, descriptive questions, problem-oriented questions, quiz based on multiple choice question, classroom demonstration, micro project, assignments etc. After completion of every module as defined in the syllabus, concerned course instructor/ subject teacher conducts a suitable form of evaluation. The performance analysis is shared with the students and accordingly the short comings or learning difficulties are pointed out. Accordingly remedial classes are arranged for students with certain understanding issues or slow learners. Also, there is a provision of tutorial classes and mentoring which are offered on requirement basis. Occasionally guest lectures in the form of seminars/ webinars are arranged to discuss new and open challenges. These sessions are extremely effective for the students who are in advanced learner grade.

Students are encouraged to enroll for various MOOC courses. Most of our students have enrolled for such courses and secured different certifications from various online course providers including NPTEL, SWAYAM, Coursera, Udemy etc.

Students from various departments, are regularly presenting and publishing research papers in their areas of study under the guidance and supervision of faculty. The college has adopted this as a part of its strategy to encourage the advanced learners.

| File Description | Document |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

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

Response: 23:1

2.3 Teaching- Learning Process

2.3.1 Student centric methods, such as experiential learning, participative learning and problem

Page 30/93 07-09-2021 08:52:05

solving methodologies are used for enhancing learning experiences

Response:

Institute follows outcome based education system. All courses are delivered and assessed by student centric academic process under the aegis of outcome based education system.

Demonstration during lecture classes: Theory classes on programming languages are often demonstrated through live execution of program in relevant simulator/ compiler. The students are made to interact through quizzes on the steps. Such direct involvement helps a student to understand the concept or theory better.

Practical sessions: Most of the theory classes are combined with practical classes where students need to work on various assignments which help to develop their practical insight of a theoretical concept. These assignments are further illustrated with a mini project where students work in small groups and acquire relevant hands-on skill and confidence to apply that.

Classroom demonstration: Students are often asked for class room demonstration where they need to deliver a small topic relevant with the course and already covered in some earlier lecture. These class room demonstration sessions help a student to realize the gaps in understanding a concept. Also this flipped delivery/ teaching sessions help others to get a brief revision upon previous discussions.

Major Project: For UG students, at the beginning of 5th semester, students assigned to faculties for Minor Project which later converted to Major Project from 6th Sem. For PG students (including MCA), the project starts from the 1st Sem other than M.Tech Students of VLSI and Microelectronics course where project starts from 2nd semester.

Mini projects: Students are regularly engaged in developing mini projects. These mini projects are offered on the concept of concerned laboratory course and the assignments they worked before or on solving a practical (design/execution) problem. Here students can exercise their power of innovation, skill deployment and analytical abilities.

Group Discussion: Group discussion is frequently organized in language classes, especially in the language laboratory. There students are also called for extempore. Various video materials are shown in these language classes which emphasizes on vocabulary and pronunciation grooming. Also their soft-skill like personality development, attitude towards various situations is mock drilled during the session.

Industry visit and internships: Mainly the fourth or fifth semester students are taken to visit different industries relevant to their disciplines. During this industry visits, within a short span of time, they experience production procedure and corporate etiquettes. Sometimes a special demonstration is also arranged during the visit where an official of that organizes address the students on some technical insights related to the production process which they will visit.

After sixth semester examination, students are sent for internship at various industries for a period of three to five weeks. This tenure of internships sometimes are further extended on the basis of work progress, merit of work and time remaining for conclusion.

The projects, internship and practical are example of experiential learning, Group discussion, Classroom

demonstration, Industry visits are examples of participative learning, Mini project, quizzes are example of problem solving.

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

2.3.2 Teachers use ICT enabled tools for effective teaching-learning process.

Response:

To get effective learning results from students and to make the teaching sessions adaptive to individual learner, faculties use multimedia teaching aid to deliver lectures. Faculty members used to prepare lively presentations with adequate real-life examples, videos of different working models and animations to stage dummy simulation of a process like Xilinx ISE, Microwind etc. This content delivery helps a student to easily remember the concept and understand its impact. Moreover it also helps faculty members to upgrade their skills and keep abreast of the latest developments and best practices.

The common multimedia teaching aids used in classroom and laboratory of Institute are, LCD projectors, internet enabled computer, laptops & Interactive Digital Boards (Smart Boards) connected with audio system for better audibility.

The electronic resource packages like NPTEL, SPOKEN TUTORIAL and Digital Library are available. The faculty members effectively utilize Audio Visual aids to demonstrate the concepts to the students using the resources from National Programme on Technology Enhanced Learning (NPTEL) to enhance the learning experience. Moreover few video courses (offline) from NPTEL are accessible to faculty and students in the digital library section.

NPTEL Intranet server id: 172.20.100.200

| File Description | Document |
|---|---------------|
| Provide link for webpage describing the ICT enabled tools for effective teaching-learning process | View Document |

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

Response: 27:1

2.3.3.1 Number of mentors

Response: 78

| File Description | Document |
|---|---------------|
| Upload year wise, number of students enrolled and full time teachers on roll. | View Document |
| mentor/mentee ratio | View Document |
| Circulars pertaining to assigning mentors to mentees | 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: 80.48

| File Description | Document |
|---|----------------------|
| Year wise full time teachers and sanctioned posts | <u>View Document</u> |
| for 5years(Data Template) | |

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: 30.8

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 26 | 25 | 26 | 26 | 25 |

| File Description | Document |
|--|---------------|
| List of number of full time teachers with Ph. D. / D.M. / M.Ch. / D.N.B Superspeciality / D.Sc. / D.Litt. and number of full time teachers for 5 years (Data Template) | View Document |
| Any 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: 8.45

2.4.3.1 Total experience of full-time teachers

| Response: 769.2 | |
|---|---------------|
| File Description | Document |
| List of Teachers including their PAN, designation, dept and experience details(Data Template) | View Document |

2.5 Evaluation Process and Reforms

2.5.1 Mechanism of internal assessment is transparent and robust in terms of frequency and mode

Response:

Institute follows prevailing guidelines of affiliating university for internal evaluations. Programmes under this university have mainly three types of courses as theory, practical and sessional. Internal evaluations for each of these categories are explained below;

Theory: University has allotted 30 marks from internal evaluation of each theory paper. University has stipulated 4 continuous assessments (CA1, CA2, CA3 and CA4) spanning across the whole semester each of 25 marks. Each course is planned and mapped with different course outcomes across its various modules. Faculty members conduct multiple activities to measure the level of learning, understanding of the core concepts and attainments. Normally two written examinations are conducted respectively for CA1 and CA3. Quiz, assignments, class demonstrations and mini projects in some practical oriented papers are the evaluation tools used case to case basis for CA2 and CA4 respectively. After each evaluation, detail reports, analysis, exam copies are shared with the students, their doubts are clarified and a model answer script is provided for their reference. Each marks of CAs are uploaded in university portal which students can view from their own login. Apart from these stipulated evaluations, special examinations are conducted in remedial classes to measure the progress of slow learners in remedial classes.

Practical: University accepts 40 marks through internal assessments in practical papers. This marks are based on regularity in attending classes, submitting assignments and understanding. Assignments are evaluated after each day of class and evaluated and corrected assignments are shared back with the students. Often their mistakes and opportunities are explained to them for further improvement. University has prescribed two formal practical continuous assessments (PCA) in the form of PCA 1 and PCA 2. Evaluation out of 40 is uploaded against each PCA in university portal which students can view from their own login similar to CAs. Faculty members conducts viva voce, classroom demonstration of experiments either individually or in group and short examination along with regular laboratory assignments to measure the learning progress.

Sessional: Sessional papers like project, industrial training or group discussion have only one examination on 100 marks during end semester examination. However apart from this formal evaluation, institute always conducts group demonstration, presentation for these papers throughout the semester to evaluate student progress. Reports of these sessions are shared with the students for their better understanding.

Each department has program assessment committee for their respective programmes. This committee scrutinizes the progress of students in each course and relevant measures are taken for further betterment.

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

2.5.2 Mechanism to deal with internal/external examination related grievances is transparent, timebound and efficient

Response:

Institute follows guidelines of Maulana Abul Kalam Azad University of Technology, W.B. for internal evaluation. For undergraduate and post graduate programs, the institute conducts four continuous evaluations (CA) and two lab internals as Practical Continuous Assessment (PCA1 & PCA2) as per academic calendar published by the University.

Institute follows the following mechanism to deal with internal examination related grievances -

- If a student is not able to appear for internal examination because of medical emergency or any valid & genuine reason, special examination is conducted for that student as per norms, provided that he/she submits application with proper documents.
- If any student scores very less marks in internal examination and wants to improve in that subject, he/she may appear for the improvement examination provided that he/she submits application through proper channel.
- The grievances of the students with reference to assessment are made clear by showing his/her performance in the answer sheet by course coordinator. The answer sheet of such student is assessed by the course coordinator once again in the presence of the student. Any corrections in the total of marks or assessment of answer books as identified by students are immediately done by the course coordinator.
- Any student who is not satisfied with the assessment and award of marks may approach the concern Head of the Department who can intervene and seek opinion of another course Teacher.
- The Institute follows open evaluation system where the student performance is displayed on the notice board and the same is informed to the parents and uploaded to University portal.

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:

The Institute offers five undergraduate program and four post graduate program and all of them follow Outcome based education. The following mechanism is followed by the institution to communicate the learning outcomes to the stakeholders.

- Graduate attributes are described to the first year students at the commencement of the programme.
- Outcomes of the Programs and Courses are observed and measured periodically.
- Copy of Curriculum and Learning Outcomes of Programmes and Courses are uploaded on the

Institution website for reference.

- The importance of the learning outcomes has been communicated to the teachers and Staff. Moreover displayed throughout the institute.
- The students are also communicated about the Programme outcomes, Programme Specific Outcomes and Course outcomes through meetings and display.

| File Description | Document |
|---|---------------|
| Upload COs for all Programmes (exemplars from Glossary) | View Document |
| Past link for Additional information | View Document |

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

Response:

The Institute is affiliated to Maulana Abul Kalam Azad University of Technology, W.B. We offer Under-Graduate & Post-Graduate courses. For these programs and courses, the institute followed the curriculum designed by affiliated university. The Programme outcomes (PO), Programme Specific outcomes (PSO) and course outcomes (CO) are evaluated by the Departments and Institution and the same are communicated to the students in the formal way of the discussion in the classroom/Meeting and display board.

Institute took utmost care of measuring the level of attainment of POs, PSOs and COs and followed formal as well as informal mechanism for the measurement of attainment of the outcomes. Feedback is also taken from all the stakeholders in this respect and necessary steps are taken accordingly.

Subsequently, the Institute took care of the attainment to measure the outcomes and implemented the mechanism as follows-

- At the end of each semester/course, the assessment of PO attainment is done from the CO attainment (from CO against PO mapping) of all curriculum components.
- In each course, the level of attainment of each CO is compared with the predefined targets, if the target is not achieved the course coordinator takes necessary steps (including change of lesson plan, course delivery methods, assessment rubrics etc.) for the improvement to reach the target in the subsequent cycle.
- The CO, PO attainment of the curricular components and improvements suggested are discussed and analyzed at the levels of DAC, DAB and IAC to endorse or advice further changes in the process.

| File Description | Document |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

2.6.3 Average pass percentage of Students during last five years

Response: 97.98

2.6.3.1 Number of final year students who passed the university examination year-wise during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 517 | 472 | 510 | 514 | 539 |

2.6.3.2 Number of final year students who appeared for the university examination year-wise during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 544 | 483 | 513 | 521 | 544 |

| File Description | Document |
|--|----------------------|
| Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template) | View Document |
| Upload any additional information | <u>View Document</u> |

2.7 Student Satisfaction Survey

2.7.1 Online student satisfaction survey regarding teaching learning process

Response:

| 1 | |
|--|---------------|
| File Description | Document |
| Upload database of all currently enrolled students (Data Template) | View Document |

Criterion 3 - Research, Innovations and Extension

3.1 Resource Mobilization for Research

3.1.1 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: 34.5

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 0 | 25.25 | 3.25 | 6 | 0 |

| File Description | Document |
|--|---------------|
| List of endowments / projects with details of grants | View Document |
| e-copies of the grant award letters for sponsored research projects / endowments | View Document |

3.1.2 Percentage of teachers recognized as research guides (latest completed academic year)

Response: 10.99

3.1.2.1 Number of teachers recognized as research guides

Response: 10

| File Description | Document |
|---|----------------------|
| Institutional data in prescribed format | <u>View Document</u> |

3.1.3 Percentage of departments having Research projects funded by government and non government agencies during the last five years

Response: 13.33

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 0 | 2 | 1 | 1 | 0 |

3.1.3.2 Number of departments offering academic programes

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 6 | 6 | 6 | 6 | 6 |

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

3.2 Innovation Ecosystem

3.2.1 Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

Response:

RCC Institute of Information Technology has created an ecosystem for the students and faculties for exploration of their new ideas and sharing of knowledge with other likeminded in their areas of interest. Students with creative and innovative ideas approach the specialized teachers who are guiding them in their prototype model design and development work and later their work is presented in competitions/seminars conducted by the affiliated colleges of the same university and other university.

The National Innovation and Startup Policy 2019 as per MHRD are implemented in RCCIIT for students and faculty. This encourages students and faculty members to engage actively in innovation and entrepreneurship related activities.

The Institute has established Institution's Innovation Council (IIC) as per the MHRD to systematically foster the culture of Innovation and also to encourage, inspire and nurture young students by supporting them to work with and also new ideas and transform them into prototypes while they are informative years.

The Research Cell of RCCIIT inculcates research culture among the Students and encouraging for novel thinking. This platform provides an opportunity for expression of academic talent and promotes interaction among academia. This committee oversees the smooth and efficient coordination of research and development activities in the institute, thus fostering overall growth.

The roles and responsibilities RCCIIT Research cell:

- Planning and management of R&D projects and research activities, resource mobilization and networking for all the departments and also the preparation of R&D budgets.
- To establish liaison with near and far industry and identify the technological challenges being faced by them.
- Identify opportunities for externally funded R&D projects, encourage faculty to prepare project proposals and apply for funding.
- Identify infrastructure/facilities requirements for research/project/prototype development.
- Stimulate and enhance the research ability of students having the potential/aptitude for innovative research by providing them the required platform and technical support.
- Identify external facilities where part of research activities, prototype development can be carried out and external expertise can be shared.
- Identify prioritized research areas based on the expertise available with the college and plan and organize conference and symposiums to showcase in-house research and network with community doing research.
- To initiate and promote MoU with industries and R&D organizations for consultancy, collaborative research, sponsored projects, industry institute interactions etc.
- To develop and establish consultancy policy for internal & external research projects and also Initiate and co-ordinate signing of MoUs with other institutions & industries for collaborative research..
- To encourage and promote the faculty members and students for the Peer review/SCI indexed journal and conference publication.
- To motivate faculty for doctoral and post doctoral research.
- Organize awareness workshops on IPR for the faculty by inviting experts from concerned Govt. agencies.

Institute has also established an Entrepreneurship Development Cell to promote an Entrepreneurial Mindset and encourage students & faculties for forging a relationship between the industry and the institution. This cell is also to create an environment for self-employment and entrepreneurship development through formal and non-formal programmes .

| File Description | Document |
|---------------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |
| Paste link for additional information | View Document |

3.2.2 Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the last five years

Response: 6

3.2.2.1 Total number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship year-wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 1 | 1 | 2 | 2 | 0 |

| File Description | Document |
|--|---------------|
| List of workshops/seminars during last 5 years | View Document |
| Any additional information | View Document |

3.3 Research Publications and Awards

3.3.1 Number of Ph.Ds registered per eligible teacher during the last five years

Response: 1.9

3.3.1.1 How many Ph.Ds registered per eligible teacher within last five years

Response: 19

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

Response: 10

| File Description | Document |
|---|---------------|
| List of PhD scholars and their details like name of the guide, title of thesis, year of award etc | View Document |
| Any additional information | View Document |

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

Response: 1.88

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 46 | 31 | 33 | 28 | 19 |

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

3.3.3 Number of books and chapters in edited volumes/books published and papers published in national/international conference proceedings per teacher during last five years

Response: 4.68

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 52 | 87 | 88 | 99 | 64 |

| File Description | Document |
|---|---------------|
| List books and chapters edited volumes/ books published | View Document |

3.4 Extension Activities

3.4.1 Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the last five years.

Response:

NSS unit of the institute has undertaken many activities inside and outside the institute campus which has a far reaching outcome on the overall development of the student's social and cultural backbone and helps to nurture ones holistic growth in the modern era. Besides academics, a student has some social responsibility, which starts from his or her family and the moral values as imbibed by our NSS activities help that individual to extend his or her hand for the society which can be termed as an extended family.

NSS Unit started its journey with a handful of staff members and in conjunction with the institute management who always extended their hands for the voluntary activities as performed by the NSS unit. Visit to Orphanage was the first mission where student volunteers were involved. In this mission many orphan children were supported with their day to day requirements including food items, stationary aids and medicines were also procured and distributed. The students' volunteers used to spend their time with the orphans and also provided academic help through computer literacy training to the local underprivileged children living in the slum areas adjacent to the institute.

Students also did a mass campaign going door to door to make the local people aware about the importance of hygiene and sanitization through Dengue Awareness Program. Swacchata Abhiyaan was also organized

by the NSS unit involving students to spread awareness that not only we should clean our own houses but also if we can spread the message of Mahatma Gandhi that each and every house premises including the institute which is the temple of learning to them should be cleaned, only then we can make a better India and cleaner India.

NSS unit has frequently organized tree plantation programs and the local people were involved in this campaign to make them understand the importance of Carbon sequestration, amount of CO2 absorption and how these trees help us to prevent soil erosion and other green values. Rallies with placards and posters were done in the local slum areas by the students against drug abuse, illicit alcohol consumption and the deadly consequences of chewing tobacco or smoking in public places which pose a threat to human health especially on children and pregnant women. These campaigns not only made the local people aware but also enabled the students get a closer look of the conditions of the people belonging to different strata of the society, their daily needs and how they fulfil their demands through hardship.

In a nutshell, NSS activities help a student to understand his or her socio-economic status and also inculcate the path of self-reliance, patriotism, responsibility for the society and fellow-feeling.

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

3.4.2 Number of awards and recognitions received for extension activities from government/government recognised bodies during the last five years

Response: 21

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 9 | 6 | 2 | 4 | 0 |

| File Description | Document |
|---|---------------|
| Number of awards for extension activities in last 5 | View Document |
| year | |

3.4.3 Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., during the last five years (including Government initiated programs such as Swachh Bharat, Aids Awareness, Gender Issue, etc. and those organised in collaboration with industry, community and NGOs)

Response: 90

3.4.3.1 Number of extension and outreached Programmes conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., yearwise during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 46 | 19 | 11 | 5 | 9 |

| File Description | Document |
|--|----------------------|
| Number of extension and outreach Programmes conducted with industry, community etc for the last five years | View Document |
| Any additional information | <u>View Document</u> |

3.4.4 Average percentage of students participating in extension activities at 3.4.3. above during last five years

Response: 42.99

3.4.4.1 Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year-wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 854 | 1945 | 395 | 205 | 907 |

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

3.5 Collaboration

3.5.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship per year

Response: 284

3.5.1.1 Number of Collaborative activities for research, Faculty exchange, Student exchange/internship year-wise during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 108 | 164 | 1 | 6 | 5 |

| File Description | Document |
|--|---------------|
| Details of Collaborative activities with institutions/industries for research, Faculty exchange, Student exchange/internship | View Document |

3.5.2 Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the last five years

Response: 9

3.5.2.1 Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year-wise during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 4 | 2 | 0 | 1 | 2 |

| File Description | Document |
|---|---------------|
| e-Copies of the MoUs with institution/industry/corporate houses | View Document |
| Details of functional MoUs with institutions of national, international importance, other universities 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:

Institute operates through two campuses situated side by side, one measuring 2.45 acres and another 2.18 acres. The one on canal south road comprises a four storied administrative building including Central Library, Accounts Office, Principal and Chairman's Office, Board Room and Exam Cell; basic UG engineering labs (Physics, Chemistry, Mechanical Workshop and Engineering Graphics), Language labs, faculty rooms of Applied Science and ESM Dept., Canteen facility, student Common Room (separate for both boys and girls), a big auditorium measuring 350 sqm. with 370 seating capacity and Computer application department. All the buildings in this campus are renovated old buildings leased to the college by State Govt. The old world ambience of this campus (with old trees, pond and garden) is really attractive and eco-friendly as well. Another campus is situated behind the old campus. It has a five storied building (developed by the college from its own fund) where five engineering departments are situated, one in each floor measuring around 1000 sqm. Each department has requisite number of classrooms and labs as per AICTE norms and University curriculum.

Institute has 45 ICT enabled classrooms, 17 computer laboratories and 33 core engineering labs. All the classrooms are equipped with ceiling mounted projector, public address system, projection screen, black and white board and network access point. Institute has collaborated with CDAC to setup a BOSS lab in CSE department and another lab with National Instruments in Electrical engineering department. 17 computer labs of the institute comprise nearly 850 desktop computers. Both the campuses are connected through a single managed network with 100 mbps LAN bandwidth and Wi-Fi service boosted with two lease line internet connection having 10 mbps and 4 mbps bandwidth respectively. Adequate UPS support and Generators are there to give necessary power back up. Fire fighting system is also installed in the new campus building. The Electrical Engineering Dept. has experimentally started generating usable electricity from wind and solar power system installed on small scale.

Currently there are three separate MIS systems installed in student support. Online admission management system for student admission, Library management system (libsys) for library and Financial management system for accounts department are currently deployed for student service management. Institute is now in the process of acquiring one MIS system which will cater the data management for every activity associated with student covering departmental data management, placement, examination, administrative and the same will be integrated with library and finance system.

| File Description | Document |
|---------------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |
| Paste link for additional information | View Document |

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

Response:

Student extracurricular activity is among the top focus areas of the institute. Students of the institute take immense interest in participating in socio-cultural events and sports activities. Institute has two separate common rooms for girls and boys, each measuring approx 100 sqm. These rooms are separately equipped with table tennis boards, carroms to keep the students engaged in these indoor sports events. It has newly introduced a yoga room measuring approx 65 sqm where sessions will be conducted periodically on life skills and yoga to build better mental and physical health. A covered and fully air-conditioned auditorium of 350 sqm is available in the campus having nearly 350 seating capacity and a large stage. Different in-house cultural events are performed here by the students or staff members or both. Apart from this there is an open-air courtyard measuring approx 200 sqm where students play badminton, volleyball or short cricket. In addition to these a moderate playground measuring approx 947 sqm is available in the campus which is mainly used for playing football or cricket. While the annual cultural festival Regalia is performed here through an open air stage, the annual sports festival Krirathon is also organized here primarily. All sports/games kits are provided by the institute.

The central computing labs or other lab facilities are used by the students for conducting computer-based gaming and coding competitions during annual technical festival Techtrix or events like Game of Thrones. Some of the other events like Quiz, Paper Presentations are conducted in Language Labs or Seminar Rooms. A permanent platform within the premises is used for Robotic competitions. Institute has its annual budget for sponsoring sports/games/cultural fest/technical fest and other extra-curricular activities including NSS activities.

| File Description | Document |
|---------------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |
| 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: 45

| File Description | Document |
|---|----------------------|
| Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template) | <u>View Document</u> |
| Paste link for additional information | View Document |

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

Response: 33.65

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 45.90 | 48.36 | 106.00 | 222.17 | 467.36 |

| File Description | Document |
|--|---------------|
| Upload Details of budget allocation, excluding salary during the last five years (Data Template) | 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:

Central library of RCCIIT has two parts; one part consists of rich **collection** of hardbound text and reference books, periodicals and magazines, whereas the digital section deals with journals (**IEEE ASP**), **e-books** (**Wiley and Oxford**), thesis/dissertations, short reports on projects, university question papers(available in **DSpace**). Moreover, audio/video mode of learning is also available using a good collection of CD/DVD. The digital section has **computer facility** (as per AICTE norms) which helps the students to learn MOOC courses using both **internet and intranet**. The library manages a **reprographic centre** to cater to the needs of the authorized users. **Close circuit TV/Camera** has been installed in the reading Room for maintaining security. The **fully air-conditioned facility** in the reading room as well as in digital section adds comfort while learning.

The vast pool of **hardcopy books** can as well as **CD/DVDs** are bar-coded, and both **online and separate offline catalogues** are maintained for every learning resource. All the materials can be **browsed for checking availability using OPAC** (Online Public Access Catalogue) either using name of the books, or by authors, even by using keywords. All the versions available so far for any particular search are

displayed with a facility to mention the available contents at that moment for issue/reference. The present collection of 4700 titles and 34230 volumes is enhanced every year in phase-wise manner based on the **requisitions made by teachers** as well as **suggestions/demand of students** within the allocated budget. The **acquisition** process therefore makes a complete list of the items, gets approval from appropriate authority, and thereafter financial sanction, and ultimately placed to different vendors following the standard rules for higher discount. Purchased books after bar-coded, becomes available for **circulation**.

Normally **students can borrow** 3 books at a time for 14 days. Additionally there is **Book Bank facility** that allows a student to avail 2 to 4 books for the entire semester depending on year of study. Besides this, final year students may issue **books for their semester projects** also. Faculties can issue upto 12 books per semester. **Reading room facility** and **overnight issuing provision** adds further benefit apart from the existing regulation.

So far, issue/return facility is controlled though LIBSYS (v7) software, which is capable to generate the bar-code in systematic manner whenever the new entries are made. For repository interoperability, structured metadata via Open Archives Initiative Protocol for Metadata Harvesting (OAI-PMH) is available via request. This gives immense facility to users while browsing a particular item, either by using year, or by search keywords for digital/digitized materials. Online recourses from BCL (British Council Library) can be accessed, and also in hardbound form using Institutional membership. Institute is the member of NDL (National Digital Library) and DELNET facility is also available.

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

4.2.2 The institution has subscription for the following e-resources

- 1.e-journals
- 2.e-ShodhSindhu
- 3. Shodhganga Membership
- 4.e-books
- 5. Databases
- 6. Remote access to e-resources

Response: A. Any 4 or more of the above

| File Description | Document |
|---|---------------|
| Details of subscriptions like e-journals, e- ShodhSindhu, Shodhganga Membership, Remote access to library resources, Web interface etc (Data Template) | 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: 17.93

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)

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 10.41 | 10.99 | 5.19 | 33.64 | 29.44 |

| File Description | Document |
|---|---------------|
| Details of annual expenditure for purchase of books/e-books and journals/e- journals during the last five years (Data Template) | View Document |
| Audited statements of accounts | View Document |

4.2.4 Percentage per day usage of library by teachers and students (foot falls and login data for online access) during the last completed academic year

Response: 9.06

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

Response: 197

| File Description | Document |
|---|----------------------|
| Details of library usage by teachers and students | <u>View Document</u> |

4.3 IT Infrastructure

4.3.1 Institution frequently updates its IT facilities including Wi-Fi

Response:

with optical fiber backbone with Juniper EX3300 (stackable) switch as an edge with LACP configured for uplink to core switch in 2013. The core to the edge is on OM3 fiber so the network is 10G ready; the implementation of Campus Wide Network was completed in 2014. In 2020-2021 two more labs structured network was done and are now connected to Campus-wide Network. Cisco controller-based Wi-Fi access was installed in 2015 and subsequently extended the Wi-Fi coverage in the year 2017 with authentication with the LDAP server. All classrooms were also connected to a network for providing internet connectivity in the classroom. Now all network nodes in both the campuses are connected to high-speed internet. Continuous up-gradation has been done as below;

- 1. Internet facility with two ISDN 128 Kbps lines,
- 2.2011 The ISDN was changed and a Broadband of 2 Mbps was introduced
- 3.2013- 2 Mbps Internet Leased Line 1:1 from VSNL (Now TATA Communications) was installed replacing the Broadband
- 4.2014 2 Mbps Internet Leased Line 1:1 was upgraded to 10 Mbps to cater to the growing demand of the institute.
- 5.2015 4 Mbps Internet Leased Line 1:1 From Reliance communication was added in addition to the existing 10 Mbps So the Institute Upgraded the internet bandwidth to 14 Mbps with two link
- 6.2016 16 Mbps Internet Leased Line 1:1 from BSNL was installed with OFC replacing the 4 Mbps ILL link from Reliance. So the institute upgrade the internet bandwidth to 26 Mbps
- 7.2018 20 Mbps Internet Lease Line from Sify with dual Link was installed replacing the 10 Mbps link from Tata Communications. So the institute internet bandwidth was upgraded to 36 Mbps
- 8.2019- Both the link was upgraded to 50 Mbps so the total internet bandwidth was upgraded to 100 Mbps
- 9. The institute currently has 100 Mbps 1:1 ILL with a wireless backup link secured with Fortinet UTM Fortigate 100D.
- 10. The Institute Central Computing Lab is now equipped with around 90 Desktop all connected with Network and Internet

Some high-end servers;

1. Dell Power Edge R720, Intel(R) Xeon(R) CPU E5-2630 0 @ 2.30GHz 16 GB 300x2 SAS HS

2. Dell Power Edge R720, Intel(R) Xeon(R) CPU E5-2630 0 @ 2.30GHz 16 GB 300x2 SAS HS

3.HP Proliant ML 350 G9, Intel(R) Xeon(R) CPU E52620 @ 2.10GHz 16GB 320x2 SCSI

4. Sun Oracle Sparc T4-1, Sparc P4 8 Core 2.8GHz, 32 GB 300 x 4 SAS2 HS

5. Lenovo X3500M5, Intel(R) Xeon(R) CPU, E52020 @ 2.40GHz 16 GB 1TB SAS

6. Lenovo TS140 16 GB 1TB x 4 SATA

10.Workstation Intel® Xeon® CPU E5-2630 @ 2.20GHz 128 GB 2TB SATA + 500 GB SSD

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

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

Response: 2:1

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

4.3.3 Bandwidth of internet connection in the Institution

Response: A. ?50 MBPS

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

4.4 Maintenance of Campus Infrastructure

4.4.1 Average percentage of expenditure incurred on maintenance of infrastructure (physical and academic support facilities) excluding salary component during the last five years(INR in Lakhs)

Response: 55.8

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 218.66 | 241.01 | 229.35 | 209.39 | 242.3 |

| File Description | Document |
|---|---------------|
| Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates) | 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:

The Institute monitor, control and direct maintenance and utilization of facilities time to time. Funds are allocated for regular maintenance of existing facilities. The institute reviews the budgetary requirements for building, furniture, laboratory equipment and computer systems etc. prior to the commencement of academic session and allocation is accordingly made in the budget.

Maintenance of Classrooms, Labs and other support systems:

The institute has appointed campus engineer for maintenance and upkeep of infrastructure and supervision. The institute has appointed housekeeping staff for regular cleanliness of corridors, washrooms, classrooms, laboratories, and the premises. The maintenance of ACs and water coolers is carried out through annual

maintenance contracts.

The institute has appointed electrician for repair and maintenance of electrical works.

Equipments and electrical fixtures/facilities in laboratories are monitored by the respective laboratory technical staff. Track of consumption/stock of spares and consumables are maintained through stock/issue register. New equipments purchased are systematically numbered and updated in the asset register with copies of invoice.

Facilities like first aid kits and fire-system are periodically checked.

The auditorium and seminar halls with large seating capacity, central AC, projectors and sound systems, are maintained on regular basis.

Maintenance of library facilities:

The books and journals are maintained against disfiguring. Book binding is carried out for damaged books against further damage. Stock verification is done as a part of regular monitoring and control. The Institute has constituted Library Committee for effective acquisition, safekeep and distribution of learning resources to students and faculty. The library collection is updated and upgraded periodically as per revisions in curriculum.

Maintenance of computing facilities:

The maintenance of computing, and network infrastructure is carried out by the systems division headed by system administrator and the technical assistants of the respective departments. The health-check of computers and ICT tools are done on regular basis by respective technical assistants; faults/status are noted in a register and primary trouble-shooting is done on spot. Those which are not-repairable by the systems division are sent to enlisted vendors for repairing. The software updates and internet related problems are resolved through respective service providers.

Maintenance of extracurricular facilities:

Common amenities such as indoor and outdoor game facilities, common room facilities are maintained through a standard monitoring procedure.

Maintenance of drinking water facilities, toilets:

Clean and hygienic drinking water is available in campus. Overhead water tanks are cleaned periodically. All the toilets are wet cleaned every day.

Generator facility:

The campus has power backup facilities and generator which are monitored on regular basis.

Canteen:

The canteen maintenance committee takes care of quality of food, overall cleanliness and hygiene

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: 4.32

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 158 | 101 | 91 | 52 | 34 |

| File Description | Document |
|--|---------------|
| upload self attested letter with the list of students sanctioned scholarship | View Document |
| Upload any additional information Average percentage of students benefited by scholarships and freeships provided by the Government during the last five years (Data Template) | View Document |

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

Response: 4.84

responser no :

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 54 | 79 | 90 | 98 | 155 |

| File Description | Document |
|---|---------------|
| Number of students benefited by scholarships and freeships institution / non- government agencies in last 5 years (Date Template) | View Document |

5.1.3 Capacity building and skills enhancement initiatives taken by the institution include the

following

- 1. Soft skills
- 2. Language and communication skills
- 3. Life skills (Yoga, physical fitness, health and hygiene)
- 4.ICT/computing skills

Response: A. All of the above

| File Description | Document | |
|---|---------------|--|
| Details of capability building and skills enhancement initiatives (Data Template) | View Document | |

5.1.4 Average percentage of students benefitted by guidance for competitive examinations and career counselling offered by the Institution during the last five years

Response: 14.25

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 289 | 313 | 225 | 273 | 316 |

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

5.1.5 The Institution has a transparent mechanism for timely 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

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: 51.72

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 287 | 223 | 225 | 273 | 316 |

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

5.2.2 Average percentage of students progressing to higher education during the last five years

Response: 13.54

5.2.2.1 Number of outgoing student progression to higher education during last five years

Response: 70

| File Description | Document |
|--|---------------|
| Details of student progression to higher education (Data Template) | View Document |

5.2.3 Average percentage of students qualifying in state/national/international level examinations during the last five years (eg: IIT-JAM/CLAT/ NET/SLET/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations, etc.)

Response: 76

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 12 | 5 | 2 | 0 | 1 |

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 15 | 5 | 2 | 0 | 1 |

| File Description | Document |
|---|---------------|
| Number of students qualifying in state/ national/ international level examinations during the last five years (Data Template) | View Document |

5.3 Student Participation and Activities

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

Response: 26

5.3.1.1 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) yearwise during the last five years.

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 8 | 8 | 2 | 5 | 3 |

| File Description | Document |
|---|---------------|
| Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national/international level during the last five year | View Document |

5.3.2 Institution facilitates students' representation and engagement in various administrative, cocurricular and extracurricular activities following duly established processes and norms (student council, students representation on various bodies)

Response:

Students of this Institute are actively engaged in various administrative, co-curricular and extracurricular activities through different duly constituted committees and chapters. Student Welfare Committee is the main student representative body which actively conducts different activities throughout the year. Technical, Cultural and Sports events of this Institute are conducted under the active management of student welfare committee. This committee has three different sub wings to manage technical, cultural and sports activities respectively. Students from different departments are the members of core committee. They self-select their general secretary, president, treasurer and other secretarial roles like technical secretary, cultural secretary and sport secretary. Generally representation from prefinal year students are considered in these committees. Institute deputes three faculty mentors who monitors the overall discipline in the operation of these committees. Also there are certain representations from junior batches and these students appear in the leading role in upcoming years. RCCIIT student welfare committee organizes their annual cultural event 'REGALIA', annual technical event 'TECHTRIX' and annual sports events 'KRIRATHON'.

Institute has NSS Student Chapter which is a blend of second and first years students along with few faculty and staff members in the mentoring role of this chapter. NSS Student Chapter is one of the active units of this units. They perform yearlong activities on environment awareness, tree plantation, events on gender sensitization, food and garment distribution as a part of relief activities, working with orphan age homes, literacy drives, celebration of engineers' day, independence day, republic day and many more. Students of second year takes lead role in organizing freshers welcome ceremony 'BIHAN' and first year arranges festival of Devi Saraswati 'SARADE'. All these events are absolutely planned and executed by the students.

Students have inducted in Institutional Quality Assurance Cell 'IQAC' as per the constitutional guidelines and they will be representing their views in the development of the Institute and will join hands in adopting best practices in relevant activities. Institutional Innovation Council 'IIC' actively works on the development of innovative mind set among the students, inspire them to showcase their development in different state and national level competitions, hackathons and techathons. IIC arranges several technical workshops and seminars on patent and copyrights to motivate students. This IIC has student representation and students actively participate in the arrangements of the events, give their inputs on the training requirements and plan future activities. Student members are also present in different committees related to Anti-ragging and Institutional Complaint Committee (ICC) constituted in accordance with 'AICTE's VISHAKHA' regulation.

In addition to the above, different students' clubs operate in the Institute with active participation of the students. Institutional coding club 'RccTechz' takes active initiative to increase coding culture among the students across all discipline. Another active student club exists under Rotary International District 3291 & sponsored by Rotary Club of Calcutta Renaissance, Kolkata. Apart from these there are several dept and institutional level committees to look after many activities like dept level technical events, intra departmental technical competitions, publication of wall magazines and technical magazines.

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

5.3.3 Average number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions)

Response: 5.4

5.3.3.1 Number of sports and cultural events/competitions in which students of the Institution participated year-wise during last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 3 | 7 | 7 | 5 | 5 |

| File Description | Document |
|---|---------------|
| Number of sports and cultural events/competitions in which students of the Institution participated during last five years (organised by the institution/other institutions (Data Template) | View Document |

5.4 Alumni Engagement

5.4.1 There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Response:

Alumni associations are groups of former students that have the goal of fostering a lasting connection with one's alma mater as well as promote the welfare of the college's alumni. These associations offer a number of opportunities for graduates to stay in touch with their college and fellow alumni while also expanding their networks to enhance their professional opportunities. RCCIIT has a registered alumni association that contributes significantly to the development of the institution through financial and / or other support services.

1. Professional Network

RCCIIT alumni association is a rich network of professional contacts. Graduates have the opportunity to network with recent grads as well as graduates several years their senior.

2. Placement Support

In alliance with the college placement cell, alumni association offers career counselling, seminars, webinars, and networking events, providing helpful information about the job market and technology trends.

3. Grooming Services

Alumni actively join hands with training and placement cell to conduct mock interview sessions for pre final year students to groom them before their placement drive starts.

4. Pointers towards Careers

Alumni association often provide a wealth of career services to help students to find job opportunities and improve their chances of landing a job offer. Their input often helps us to bridge the gap between university curriculum and industry best practices.

5. Pointers towards Academics

RCCIIT alumni are part of Departmental Advisory Board, which time to time promotes best practices in academic and non-academic operations of the department by suggesting suitable electives, trend of new technologies, offering webinars / seminars, special training programs / tutorials.

6. Specialist's Roles

Our alumni act as a member in IQAC (Institutional Quality Assurance Committee). They play major role in university examinations as external examiners, or as keynote speakers in international events of the institute.

7. Regular Touch

There has always been a frequent contact with our alumni in individual, departmental or institutional level, regarding the where abouts and well wishing in both the ends. RCCIIT has named it C2A (Connect to Alumni).

Along with the support services mentioned above, following are few more planning that we are going to materialize in near future.

8. Exclusive Job Listings

RCCIIT alumni association hosted job boards on the website and/or post job listings in the college placement cell and/or through messaging services. Job newsletters and magazines to do the same.

9. Finishing Schools

Resume and cover letter assistance to help graduates put their best foot forward. Close connections leading to internships, job openings, clients, partnerships and other valuable career opportunities.

10. Fundraising Support

Accounted financial support for needy students, infrastructural help, award ceremony, hackathons and research collaborations and many more.

These may also include events and fundraisers as well as career opportunities, such as certification programs, new degree programs, or continuing education opportunities, all of which may offer graduates a competitive edge in the job market.

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

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

Response: E. <1 Lakhs

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1 The governance of the institution is reflective of and in tune with the vision and mission of the institution

Response:

Governance:

The institution is governed by the Board of Management of an autonomous Society of Department of Higher Education, Govt. of WB. Though self-financing in nature the service rules are aligned to that of the State Govt. All policy matters are approved by the Board of Management (BOM) (of the Society) constituted by the State Govt. while the operational and financial decisions are approved by the Board of Governors (BOG) formed by the Society. The Principal is the DDO of the college and runs the day-to-day academic and administrative affairs with the help of different committees comprising faculty members, HODs, Faculty-in-Charge (FIC) of different important functions, Registrar's office and Accounts & Finance office.

The Governance of the institution is strictly in accordance with the Vision and Mission. The Mission/Vision statements that reflect the nature of governance are:

Vision:

To develop RCCIIT as one of the most advanced technical institutes of the State.....in a congenial, inclusive and transparent work environment created by unbiased and visionary leadership and participative management.

Mission:

- To select, groom and retain talented, qualified and committed faculty and staff under a fair and transparent HR policy.
- To create congenial and inclusive work environment for all with zero tolerance on gender bias and ragging or harassment of any kind.

The words that indicate the attributes of governance are *participative*, *inclusive*, *unbiased* and *transparent*. The decision making system is effectively decentralized for better governance and performance.

The Principal, Registrar, FICs (of training & placement, academic affairs, legal affairs, student affairs, alumni) and all the academic HoDs (of 6 degree offering departments 2 supporting departments) and functional HoDs (like Librarian, Finance Officer, TPO) ensure the proper implementation of the decisions and directions given by the BOG and the BOM following the basic institutional Mission, Vision and perspective plans.

The Institute has a perspective plan for development, quality assurance and adherence to Mission-Vision. It is developed by the Principal with the help of HOD's and FIC's thru Institutional Academic Committee

(IAC) under the guidance of the BOG. The perspective plan helps to streamline and monitor various processes and systems like teaching-learning, research, infrastructure, facilities etc. As the Institute consistently promotes a culture of participative management, responsibility is delegated at different levels. The HODs look after the fulfilment of Program Specific Objectives (PSO) and targets given by the management through further delegation of responsibilities to the Program Coordinators and individual faculty members. The FICs coordinate with the HODs on fulfilment of plans on different thrust area like training, placement, academic outcome, alumni connect, student activities etc. The Institute has different committees for implementation of different statutory norms and institutional functions. The committees comprise FICs, HoDs/ functional heads, faculty members and student representatives (wherever needed). Conscious effort is given so that responsibility of acting as members or conveners (of committees) is distributed among all faculty members The BOG also has representation from faculty as per guidelines of AICTE.

| File Description | Document | |
|---------------------------------------|----------------------|--|
| Upload any additional information | <u>View Document</u> | |
| Paste link for additional information | View Document | |

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

Response:

The institute has decentralized the decision making process of different important areas of operation like regular academics, student affairs, alumni affairs, legal affairs, training & placement, research etc. and delegated considerable authority to selected individuals with knowledge, acumen, interest, ability and leadership quality in respective area. Accordingly the FIC or Faculty In-charge position is created in each functional area and most eligible faculty members are given the responsibility to act as FIC. There are 5 FIC positions as mentioned below.

- 1. FIC, Academics (A)
- 2. FIC, Students Affairs and Student Welfare (SA & SW)
- 3. FIC, Training & Placement (T&P)
- 4. FIC, Legal Affairs (LA)
- 5. FIC, Alumni

The power and functions of each FIC is clearly defined and hierarchy-wise FIC reports to Principal and can direct the HODs or for that matter any faculty member or employee of the institute in matters related to its designated functional area. The major function of **FIC**, **A** is to monitor, advice and support the academic departments in maintaining quality of academics. It is his responsibility to take appropriate decision to fulfil statutory rules and requirements of AICTE, University etc. and apprise the Principal. Activities like

feedback analysis, verification of API score of faculty members, publication of academic calendar and class routine, organize academic audit and all other academic activities falls under the purview of FIC, A. FIC, SA & SW handles all student related matters ranging from disciplinary issues to student fests. He is responsible for advocating for student's rights and concerns and overseeing the activities and demands of Student Welfare Committee. All decisions regarding student's extracurricular and co-curricular activities and related facilities, financial and infrastructural requirement are given by FIC, SA & SW in the form of recommendation. **FIC**, **T&P** is responsible for planning and execution of training and placement activities for students and also communicate (with authority) with recruiting companies. FIC, LA advises for making institutional decisions having legal implications and essentially in all legal matters, statutory issues etc. FIC, Alumni is responsible to develop and strengthen the institutional alumni network, plan and execute alumni activity and ensure alumni contribution towards welfare of the institute. It requires communication (with authority) with the alumni working in different organizations and coordination with the departments and students of the institute. As far as research is concerned a senior faculty is given the authority as Convener, Research Committee to coordinate and monitor research activities of the faculty members and motivate young faculty members in submitting research projects, patents, copyrights etc. Similarly the authority of Principal is delegated to Convener, Entrepreneurship Development Cell and Convener, Institutional Innovation Cell to look after those activities following statutory guidelines.

| File Description | Document | |
|-----------------------------------|----------------------|--|
| Upload any additional information | <u>View Document</u> | |

6.2 Strategy Development and Deployment

6.2.1 The institutional Strategic / Perspective plan is effectively deployed

Response:

The strategic plan includes "Expanding opportunities for social service" as one of the thrust area or activity point. Activity under this head is meant to contribute towards the development and well-being of the underprivileged community in and around the institute free of cost, involving willing students, faculty and staff members. Towards this end the NSS team of RCCIIT has rendered community service in orphanages including Sukanya Home at Sector V, Salt Lake City, Kolkata, Gobinda Kr. Home, Panihati, Kolkata, Ramakrishna Vivekananda Mission, Barrackpore, N-24 Parganas, Child Care Home, Sector IV, Salt Lake City, Kolkata and at Howrah station, Howrah. Since 2015 till date seven such programs were organized by the team. Day-long community service were rendered in these orphanages where foods (cakes & biscuits) donated by 1st year engineering students were distributed among the orphan children of all age group – from standard III to X. The students and staff visited the orphanages, mixed with the children, interacted freely with them and entertained them by playing games and giving small gifts like pens, colour pencils, chocolates etc. Sometimes soap and shampoo were also distributed to the children. In some orphanage blankets were given to the needy people who rendered service to the orphan children. Overwhelming response were received from the orphan children during such interactions and it seemed that these small gifts given to them as token of love & friendship meant a lot for them and brought a fresh air of joy in their monotonous life as they miss the compassion of their near and dear ones.

The NSS team also carried out environment awareness and cleanliness drive in the local community as an extended opportunity of social work under strategic plan. Last such event organized was in 2018 at Mathurapur village of Barrackpore I Block, Kowgachi-II Gram Panchayat, N-24 Parganas. Activities like door to door cleanliness awareness campaign, conducting village/school level meetings and rallies, distribution of pamphlets, waste collection drives, demonstration of development of compost pit, segregation of solid waste into bio-degradable and non bio-degradable parts, process of making manure and much more were carried out over couple of consecutive days. This also fulfilled the Swach Bharat Summer Internship of engineering students. In the process bleaching powder, Chlorine tablets, dustbins, 55 micron recyclable plastic packets and waste collection garbage bags and pamphlets instructing Dos and Don'ts were distributed in the village free of cost.

In addition to these activities, a free computer literacy program is also run by the institute to give first hand computer education to the 1st generation learners (class VIII students) of the local community.

Every year the NSS team is encouraged by the institute to involve more and more students, faculty and staff members to add more orphanage or schools of underprivileged children and conduct community service at a greater scale in villages or slum areas around the institute in an effort to expand the opportunity of social service in line with the strategic plan of the institute

| File Description | Document |
|--|---------------|
| Upload any additional information | View Document |
| strategic Plan and deployment documents on the website | View Document |
| Paste link for additional information | 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 Board of Management (BOM) headed by the Chairman is the apex body having all the power in framing the strategic plans, regulations, guidelines and policies for the Institution in consultation with the Governing Body of the Institution. The BoG headed by Chairman is responsible for the operation of all aspects of the institution including its finance, human resource, educational and research functions and infrastructure arrangements. It develops strategic plan and deliberates on the academic, financial and administrative functions which guides the institution to serve its stakeholders as per the vision, mission and quality policy statements of the institution.

Both, Chairman, BOM and Chairman, BOG are non-remunerative honorary posts. Chairman, BOG is the final approving authority of operational decisions. Principal is the DDO or executive authority of the institute. In the administrative set-up Finance Officer, Registrar, Librarian, TPO, FICs, HODs, 1st Yr Coordinator and PA to Principal directly report to the Principal. The HODs are reported by respective Program Coordinators, Faculty members and Technical Assistants/Lab Technicians/Lab Assistants. Deputy Registrar, Office Superintendent, Asst. System Administrator, Campus Engineer and one Senior Assistant

work under Registrar. One Senior Assistant, Stores Assistant, Asst. TPO, Asst. Librarian, Accountant report respectively to Deputy Registrar, Office Superintendent, TPO, Librarian and Finance Officer. In each academic and functional department there are Junior Assistants (for office work) and in Library there are Library Assistants who report to the respective heads.

Besides the above administrative hierarchy of regular posts there is a functional hierarchy of different committees formed to carry out different functions. Some committees like Institutional Academic Committee (IAC), Anti-Ragging Committee, IQAC, Grievance Redressal Cell, Disciplinary Committee, NBA& NAAC Compliance Committees are directly headed by the Principal. Again the IAC, Training & Placement Cell, Student Welfare Committee, Advisory Committee-IIPC, and Alumni Network are coordinated by FIC, Academic Affairs, FIC, T&P, FIC, SA & SW, FIC, Legal Affairs and FIC, Alumni respectively. The FICs in turn report to Principal. Committees like Research Committee, Entrepreneurship Development Cell (EDC), Institutions Innovation Cell (IIC) and ICC are coordinated by one faculty member each as Convener or President or Presiding Officer who in turn report to Principal. The Examination Cell, Admission Cell and the NSS team report to the Registrar. Every academic year one faculty member is nominated as Officer-in-Charge (OIC) of Semester Exam.

Apart from the major committees shown in the organogram, there are other committees like MOOCs Committee, SC/ST Committee, Library Committee, Finance Committee, Purchase Committee, Garden Committee, Canteen Committee, Scrap Committee, Coding Skill Development & Monitoring Committee, Social Media Cell which also performs important functions following standard/institutional policies and procedures and report to Principal for approval of decisions through respective conveners.

| File Description | Document | |
|---|----------------------|--|
| Upload any additional information | View Document | |
| Paste link for additional information | View Document | |
| Link to Organogram of the Institution webpage | <u>View Document</u> | |

6.2.3 Implementation of e-governance in areas of operation

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

Response: C. 2 of the above

| File Description | Document |
|---|----------------------|
| Screen shots of user interfaces | <u>View Document</u> |
| Details of implementation of e-governance in areas of operation, Administration etc | View Document |
| Any additional information | View Document |

6.3 Faculty Empowerment Strategies

6.3.1 The institution has effective welfare measures for teaching and non-teaching staff

Response:

The management of the institute maintains fair and transparent HR policy and in its effort to create a congenial work environment and also to attract and retain its staff has taken effective staff welfare measures. Some of these measures are listed below:

For Teaching Staff:

- Incentive for higher qualification is given as per AICTE norms
- Retirement benefit includes Gratuity and Leave Encashment (covered under LIC scheme) as per the State Govt. rules
- Two half day and one half day leave is granted respectively to registered and non-registered faculty members pursuing PhD to meet and consult their PhD guide
- 50% of the fee for registration in a conference (where paper is accepted for presentation/publication) is provided to faculty member
- On-duty leave is granted for PhD coursework in different University/Institute where a faculty member is enrolled
- On-duty leave is granted to a faculty member invited as a resource person in a Conference/Seminar/Workshop
- Each faculty member is provided with a cubicle with furniture and desktop PC and zero interruption high speed internet access, common printing facility in respective faculty room

For Teaching and Non-Teaching Staff:

- Each regular lady staff is entitled for full pay Child Care Leave for a maximum period of 2 years and Maternity Leave for a maximum period of 180 days
- Study leave of maximum 2 years granted to regular staff for pursuing higher studies/training/research in India or abroad (with full pay for first 6 months and half pay for next 18 months)
- Quarantine leave is granted for a period not exceeding 21 days for infectious diseases
- Flat reimbursement of Rs. 3000/- is made to each staff against premium paid by him/her towards personal mediclaim policy
- Facility of Group Mediclaim policy through National Insurance Co. enjoyed by willing staff whereby entire family (including senior citizen members) of the staff is covered under the policy
- Contractual faculty and staff are brought under EPF subject to a maximum of employer

contribution of Rs. 15000/- per month

- Festival Bonus is given to regular and contractual employees (eligible for bonus as per State Govt. rules) once in a year
- Financial help is provided in the form of interest free loan/advance for child's education/marriage etc. on case to case basis against prayer of employee
- All staff can lend unlimited no. of books from central library
- Institute sponsors Viswakarma Puja and annual Picnic with food and recreation for all staff and their family members

Everyday tea (twice) and tiffin during exam invigilation/admission work/audit is sponsored by the Institute

| File Description | Document | |
|-----------------------------------|---------------|--|
| Upload any 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: 27.04

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 10 | 12 | 4 | 43 | 45 |

| File Description | Document |
|--|---------------|
| Details of teachers provided with financial support to attend conference, workshops etc during the last five years | View Document |

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

Response: 10.6

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 9 | 8 | 5 | 18 | 13 |

| File Description | Document |
|--|---------------|
| Upload any additional information | View Document |
| Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff | 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: 54.03

6.3.4.1 Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course year-wise during the last five years

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 48 | 40 | 35 | 56 | 47 |

| File Description | Document |
|--|---------------|
| Details of teachers attending professional development programmes during the last five years | View Document |

6.3.5 Institutions Performance Appraisal System for teaching and non-teaching staff

Response:

Institutional follows a well-defined performance appraisal system for teaching and non-teaching staffs. Teaching staff are generally recruited and promoted following AICTE guidelines. Non-teaching staff are recruited and promoted following Revision of Pay and Allowances (ROPA) rules of the West Bengal government. Respective promotional processes are elaborated below;

Faculty: Faculty members apply to Registrar for availing promotion under Career Advancement Scheme (CAS) after completing their requisite service tenure as per relevant AICTE norms. Registrar office forwards a form for Performance based Appraisal System (PBAS) after verifying primary eligibility of the incumbent. An incumbent needs to fill up year wise PBAS as self-appraisal for all the service years under review for CAS and submit the same to the Registrar office along with all supportive enclosures and duly signed by concerned Head of the Department. Registrar office forwards the application to an Institutional CAS committee for data verification and validation with the enclosures. The committee prepares a summary report based on the claim of the incumbent and places the same to the Principal for

further process. Principal constitutes a Screening committee following AICTE guideline and obtains approval of the Chairman, BOG. Screening committee thoroughly screens all records and submits their recommendation to the Principal. Then an interview panel is constituted with the approval of Chairman, BOG and interviews are conducted for some categories of promotion. Finally promotion is offered to the incumbent based on the recommendation of the Screening committee and interviewers on a case to case basis.

Non teaching: Promotion of non teaching staff are awarded as per ROPA rules. Generally after completing 8 years of service in a particular grade pay, they apply to the Registrar for availing promotion under CAS. A self appraisal form is forwarded to them which they need to submit. Additionally a feedback from the concerned Head of the Department or Cell is collected. This feedback and self appraisal form are then placed to an internal committee formed by the Principal. promotion is awarded to the concerned incumbent with due approval of the competent authority based on the satisfactory recommendation of the committee.

| File Description | Document |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

6.4 Financial Management and Resource Mobilization

6.4.1 Institution conducts internal and external financial audits regularly

Response:

The Institution has established a mechanism for conducting statutory audits on the financial transactions every year to ensure financial compliance. As per decision by the management we are in the process of appointment of Internal Auditor. The process of appointment has been delayed due to pandemic situation. Statutory audit is carried out on an elaborate way on yearly basis.

The role of the Statutory Auditors included crucial impact factors like the Institute's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible; changes, if any, in accounting policies and practices and reasons for the same. Moreover significant adjustments made in the financial statements / books of accounts arising out of audit findings; compliance with statutory requirements relating to financial statements; disclosure of any related party transactions; internal control systems; to look into the reasons for delays in the payments / recoveries from / to creditors / debtors and carrying out any other function/s as deemed necessary in the capacity of Statutory Auditor.

The accounts of the college are audited by the Statutory Auditor regularly as per the government rules. Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. The institution did not come across with any audit objection during the preceding years. Minor errors of omissions and commissions when pointed out by the audit team are

immediately corrected / rectified and precautionary steps are taken to avoid recurrence of such errors in future. All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid defalcation of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and Statutory Auditor.

Relevant details (for five years) of the external audits conducted are listed in the table below. All the Audit reports have been displayed in our website.

| Year of Statutory Audit | Period of Statutory Audit | Date of Statutory Audit |
|-------------------------|---------------------------|-------------------------|
| 2015-2016 | 01.04.2015-31.03.2016 | 23.09.2016 |
| 2016-2017 | 01.04.2016-31.03.2017 | 22.09.2017 |
| 2017-2018 | 01.04.2017-31.03.2018 | 24.09.2018 |
| 2018-2019 | 01.04.2018-31.03.2019 | 24.09.2019 |
| 2019-2020 | 01.04.2019-31.03.2020 | 28.12.2020 |

Grant Audits have been conducted separately as per guideline.

6.4.2 Funds / Grants received from non-government bodies, individuals, philanthropers during the last five years (not covered in Criterion III)

Response: 0

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

| 2019-20 | 2018-19 | 2017-18 | 2016-17 | 2015-16 |
|---------|---------|---------|---------|---------|
| 0 | 0 | 0 | 0 | 0 |

| File Description | Document |
|--|---------------|
| Details of Funds / Grants received from of the non-government bodies, individuals, Philanthropers during the last five years | View Document |

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

Response:

Higher education institutions is required to have a policy that enhances academic activities and mobilising resources for the better utilisation of possible streams of support towards the fulfilment of desired outcome of the education institution. As far as education institution is concerned, identifying those activities that require special financial assistance in short period and longer period of time is important. Being an education institution, all efforts to mobilize funds shall be subjected to the primacy of the academic logic of the said institution. Acceptance of funds shall be encouraged without compromising the academic

interests of the institution. While extending such support towards this end, the following policy guidelines shall be considered.

- 1. The activities that need recurring fund and those that require instant funding shall be identified and grouped separately.
- 2. Academic activities that directly generate revenue shall be prioritized among the academic activities of the institute.
- 3. Activities which would generate revenue could be encouraged. For example, encouraging faculty members to apply for funded researches, taking up projects, consultancies.
- 4. Activities which would require huge investments, for example improvements in infrastructural facilities, shall be sought the possibilities of incorporating external funding agencies governmental, non-governmental or private agencies under strict scrutiny.
- 5. Strategies for the mobilisation of financial resources shall be with the interests of substantial improvements in the academics of the institution.
- 6. Special encouragements shall be made to all forms of asset building programmes.
- 7. Institution shall identify the areas which require more thrust for improvements, and all possible ventures of resource mobilization.
- 8. Resource mobilization shall be encouraged in the forms of voluntary contributions such as donation for equipments, devices, books to library and other resources.
- 9. Funds shall be mobilised in association with neighbourhood networks, associating with industry and enterprises through the exchange of resources and expertise in the effective ways of implementing corporate social responsibility.
- 10. Collection of overhead charges available as part of various projects, assignments shall be systematised. The policy on fund mobilisation is framed with the objective of encouraging the academic community in addressing rapid change happening in the higher education at national and international level. More the support from the part of institution, more shall be expected from the academic fraternity.
- 11. The Alumni, who also provide financial and non-financial support for various activities in the Institution.
- 12. Fee collected by conduct of FDP, conferences, workshops etc.
- 13. Hiring out the infrastructure facilities to various commercial utility facilities.
- 14. Funds are also generated as a result of interest on corpus fund.

Budget is prepared keeping in mind developmental criteria of the Institute; accordingly provisions are made in the budget, which is prepared by the Finance department of the Institute and then approved by the Finance Committee and management before the fund is sanctioned. It is then deployed on different Heads of Expenditures in accordance with approval. College budget includes recurring expenses, non recurring expenses, development expenses, student freeship, social service, etc. The expenses will be monitored by the accounts department as per the budget allocated by the management.

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

Response:

Structural progress towards academic improvement and academic excellence has been the prime importance of the institute since its inception in 1999. Primary focus of the management was to recruit bright and young faculty members and nurture, develop and retain them for better academic interest. This has helped to foster good culture of teaching and learning. Technical education manifesto of the country has evolved with time and institute has attempted to upgrade them continuously to cope up with this change dynamics. Institutional Academic Council (IAC) has been incepted from academic year 2015 – 2016 where Principal is the chairman and all HoDs along with Examination in charge are the members. IAC has been taking care of regular academic activities with intense focus on outcome based education (OBE), identification of weak students and arranging remedial classes for them. Multiple modes of evaluation involve written internal class tests, regular class assignments on different modules, classroom demonstration, quizzes and mini projects. Similarly during laboratory classes students are encouraged to work on individual assignments and group assignments. Group assignments involve mini project for proto type development and presentation of the prototypes. Students are frequently being regularly encouraged to take part in different state or national level project competitions, technical paper presentation in seminars and conferences. Student feedback system is a part of recurrent review process where the institute has its own in-house software. This is used for acquiring two times feedback during a semester. System generated analytical feedback reports are shared with Principal and HoDs which are subsequently reviewed in IAC. Summarized feedback is also shared with concerned faculty members to maintain a transparency and offer a scope for further improvement. IQAC of the institute was formally formed in 2018 – 2019. Initial focus of the IQAC was to augment regular academic activities with special focus on skill development to meet up industry needs. This includes special classes on coding competency development through additional coding classes for all students from first year to pre final year, engaging alumni more intensely to deliver special lectures on innovative technologies which are now part of industry's best practices, arranging mock interaction or interview sessions for final and pre final year students to orient them for placement drives and offering leads for placement and internship. Alumni activities of the institute are covered under "Connect to Alumni" events. IQAC has also introduced some best practices as a part of student outreach activities for societal development through "Connect to School" events. Students are joining hands with our faculty members to arrange multiple knowledge transfer sessions for senior school students to encourage for choose technical discipline as their future endeavor. IQAC has also emphasized on regularly organizing "Connect to Parents" events where faculty members directly interacts with parents and guardians, listen to them, gather their collective feedback and attempts to implement those suitably. Ultimate goal of IQAC is to provide better campus life and make the students good and responsible human being.

| File Description | Document |
|---------------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |
| Paste 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:

Institutional academic policies and operation monitoring are mainly managed by Institutional Academic Committee (IAC). IQAC has entrusted IAC to maintain the quality of education and thrive for continuous up gradation. IAC has adopted various measures to meet the quality criteria for education. There remain ample scopes to periodically augment or delete various check parameters as per review and recommendation of IQAC. Regular academic activities of the institute are broadly governed by affiliating University. All academic departments identify suitable faculty members for upcoming semester classes during the semester break. Accordingly class routines are prepared and faculty members are asked to prepare their lesson plans. Initially these lessons plans are submitted to the Program Coordinator (PC) and reviewed in a program assessment committee (PAC) of the concerned department if needed by concerned program coordinator. Finally these lesson plans are verified and circulated among the students on the first day of the session. Academic classes of a semester commence as per academic calendar. Regularity of the classes, student attendance monitoring, active learning methodologies, frequent work out exercises through assignments, review discussions, internal class tests, quizzes, classroom demonstration are parts of common academic practice. Progress in the classes and overall discipline at different departments are jointly monitored by PCs and HoDs. Interim reviews on the same are carried out at IAC. Departmental advisory board periodically reviews academic progress in the department, suggests technological inclusions, identifies thrust areas for learning through workshop, online programs and elective papers. Some of the activities performed jointly by IAC and IQAC towards sustainable development of the academic quality of the institute involve;

- i. **Identification of faculty members for courses and preparation of lesson plan:** This is done before the start of every academic session. It ensures allocation of right faculty member for a particular course, planning of course delivery following academic calendar of the upcoming academic semester and dissemination of the whole lesson plan among the students. Lesson plan comprises prerequisites of the course, intended course outcome, relational mapping of the expected course outcomes with the programme in which the course will be offered, module details, additional reading, tentative stages of evaluation and suggested readings.
- ii. **Multiple evaluations to ensure progress of the students and learning outcomes:** There are different modes of evaluation like assignment, short quiz, written class test or internal examinations, classroom demonstration on selected topics and mini project works. Each of these evaluations is thoroughly analyzed by concerned course coordinator and they identify the students showing weak progress. Remedial action plan for the students having weak progress are clustered apart and special classes are often arranged for them. Final written examination is conducted by University for theory papers on 70 marks and practical papers for 60 marks. Sessional courses like project, seminar, Group discussion are internally evaluated throughout the semester through multiple activities like demonstration, team work, seminars and presentations. One final examination is taken during practical and sessional examination slot of affiliating University and final evaluation is done on 100 marks based on performances in internal activities and final end semester examination.
- iii. **Faculty feedback by students:** Students feedback is taken twice in a semester through internal online feedback system. First feedback is taken during middle of the semester preferably after first written internal test and the second feedback is acquired just before the University examination. Feedback given byu the students are analyzed based on multiple criteria set in the feedback software and the same is shared with the Principal and HoDs. All these feedbacks are carefully discussed in IAC and Departmental

Academic Committee (DAC) meeting. The same is shared with faculty members and necessary scopes for improvements are openly discussed.

- iv. **Analysis of end semester result:** End semester results are thoroughly analysed by the department and the same is presented in the IAC. IAC reviews course wise student performance and identifies short comings if any. Necessary remedial action plan is adopted to overcome any identified shortfall.
- v. **Zero backlog policy:** IQAC has instrumented a separate action plan to reduce the number backlogs. This involves identification of some courses for special importance where probability of high backlog percentage has been recorded in previous academic years. Experienced faculty members have been identified to assign these courses. Sometimes such expertise has been identified in one or two departments where as the course is also offered in other programmes, IQAC has made adequate provision to adjust the teaching load of such faculty members in other courses so that they can be specially engaged for that particular course. Simultaneously focused activity oriented special classes have been arranged for the students carrying backlogs from past academic years.
- vi. **Parent meet:** Institute management or the department often arranges meeting with the guardians. Different academic activities, institutional planning for academic development of the students is discussed in the meeting and views of the guardians upon these are carefully noted. Any collective feedback received towards the development of a particular batch/ group is taken care of by arranging necessary trainings or special classes. Any personal issues are sorted out through separate discussion in presence of concerned HoD and student mentor.
- vii. **Alumni interaction:** Departments or academic units often arrange special sessions for the current students with their alumni. Alumni share their experiences on various matters with the students and attempt is made to keep these sessions more interactive so that students get motivated and they try to adopt best practices to attain success.
- viii. **Focus on Research and Innovation:** Institute comprises a good pool of academicians. Investing their effort more on research and development works has now become the prime importance of the institute. Faculty members are collaborating with different organizations to extend the span of the research network and involve UG/ PG students in those activities. This has resulted in more student research publications. Students are also taking keen interest in engaging themselves for product development and innovative findings. They are also participating in various external events and making their mark by winning accolades.

| File Description | Document |
|-----------------------------------|----------------------|
| Upload any additional information | <u>View Document</u> |

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 intitiatives with other institution(s)

- 3. Participation in NIRF
- 4.any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

Response: A. All of the above

| File Description | Document |
|--|---------------|
| Upload e-copies of the accreditations and certifications | View Document |
| Upload details of Quality assurance initiatives of the institution | View Document |
| Upload any additional information | 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:

- **1. Recruitment**: RCCIIT has given equal opportunity for men and women candidates regarding recruitment of faculty and staff which is purely based on performance in the interviews by a panel of experts following AICTE/State Govt. guidelines. Currently, there are 28 nos. (32%) female faculty members and 10 nos. (14%) female staff members in the institute.
- **2. CAS**: Male and female faculty/staff members are given equal opportunity for career advancement or promotion as applicable as per institute service rules and statutory guidelines.
- **3. Special Leaves**: Quite a number of regular female faculty/staff members of the institute have been granted additional benefits of Child Care Leave (of maximum 2 years) and Maternity Leave (180 days) on application.
- **4. Class Load and Additional Responsibility**: Male and female faculty members are treated equally by HOD/Principal in terms of allotting class load or additional responsibility at departmental or institutional level. Many female faculty/staff holds important roles/positions at institutional level currently
- **5. Facility/Recognition**: Equal facility for PhD work (weekly half day leave), study leave, training (FDP, Workshop) has been given to female faculty/staff. Certificate of appreciation is given for outstanding achievement by the male/female faculty members based on student feedback appreciation mails are given to outstanding/excellent performers irrespective of gender.
- **6. Gender Equity in Students**: Number of female students in the institute is 579 whereas no. of male students is 1442. No discrimination is done for these two categories of students as far as educational facilities are concerned. There are separate common rooms for boys and girls. It is ensured by the management that girls also represent in institutional committees like Anti-Ragging Committee, Grievance Redressal Cell, ICC, NSS and also in Student Welfare Committee, Coding Club, Rotaract Club etc. Recently out of two students nominated for the International Youth Exchange Programme 2020-21 one girl (Miss Avantika Sadhukhan of 2nd Yr B.Tech) has been selected by the University to represent IYEP from the State.
- **7. Awareness Programs**: There is a general gender sensitization action plan approved by the ICC and authority. According to that plan awareness programs on gender sensitivity are organized by the NSS team in the campus. The female faculty members, staff and students are informed about various laws and rights available for their empowerment. Recently Women's Day was celebrated by the NSS team where 15 lady faculty members were felicitated.
- **8. Safety, Security and Counselling:** The ICC comprising lady faculty and staff member is vigilant to ensure prevention and prohibition of sexual harassment of women employees and students in the institute. Any complain of any kind of female harassment is taken up by the ICC maintaining confidentiality of the

complainant. Problem is attempted to be resolved through close counselling so that there is no psychological setback. Helpline nos. of Anti-Ragging Committee and ICC are displayed at multiple locations in the campus.

| File Description | Document |
|--|---------------|
| Link for annual gender sensitization action plan | View Document |

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

Response: C. 2 of the above

| File Description | 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:

Solid Waste Management:

A standard system of disposal of general waste is followed whereby biodegradable and non-biodegradable wastes are kept in separate bins placed in optimum no. of locations throughout the campus. Every day these two categories of wastes are disposed off to the waste collecting van of the municipality. There are instructions not to throw plastics or other materials in the water bodies and care for the gardens in the campus.

There is a separate Scrap Committee for selling out the scrap furniture and materials other than e-waste to enlisted vendors as and when required.

Liquid Waste Management:

It is ensured that liquid waste that is generated in canteens, chemical lab and other sources within the campus are passed away smoothly through the drainage systems to the internal sewer lines connected to the underground municipality sewer lines. It is also taken care of that the liquid waste does not mix with the water bodies and make any harm to the ecosystem therein. No public bathing or washing of clothes or utensils are allowed in the water bodies.

Hazardous chemicals and radioactive waste management:

There are no labs in the institute that produce toxic/hazardous chemicals or radioactive wastes in the campus.

Waste Recycling:

Garden wastes (dry leaves/branches /flowers/fruits) and waste vegetables or peels are collected and used for making compost through natural decomposition. Compost is used as effective fertilizer for the garden plants. There are instructions displayed in the canteen and other places to not to throw away peels or uncooked vegetable wastes in waste bins, rather drop it in designated buckets.

E-waste Management:

RCCIIT being an IT institute lot of e-waste in the form of discarded electronic/electrical components of PC/UPS/Printer, AC/electrical installations/lab equipments& consumables is generated which have harmful metals like mercury, cadmium, lead etc. and elements like polybrominated flame retardants that are detrimental to the environment if not managed in a planned manner. In-line with statutory e-waste management guidelines proper protocol and procedures are followed in terms of collection, segregation (from general waste), handling and disposal. Instruction is given to the departments so that e-wastes are kept in separate designated boxes in the labs/workshop/stores/faculty rooms. At regular intervals those wastes are collected from labs/rooms and securely stored at a designated place till those are sold to the retailer as recyclable scrap. Conscious effort is given so that e-waste doesn't mix up with general waste and even if so happens those are segregated as far as possible before general waste is disposed off.

| File Description | 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

07-09-2021 08:52:21

| Response: B. 3 of the above | |
|------------------------------------|---------------|
| File Description | Document |
| Any other relevant 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

Response: Any 4 or All of the above

| File Description | Document |
|--|---------------|
| Various policy documents / decisions circulated for implementation | View Document |
| Any other relevant documents | View Document |
| Link for any other relevant information | View Document |

7.1.6 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

Response: D.1 of the above

| File Description | Document |
|--------------------------------------|----------------------|
| Certification by the auditing agency | <u>View Document</u> |

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

| Response: C. 2 of the above | |
|------------------------------------|---------------|
| File Description | 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:

In line with its mission statement: *To create congenial and inclusive work environment for all....* RCCIIT maintains inclusiveness in its policies and programs. It is against any kind of discrimination and prejudice across cultural, regional, linguistic, communal, socio-economic and other diversities.

The **cultural**, **regional** and **linguistic** diversity is primarily caused by admission of students hailing from regions outside West Bengal through the 10% JEE Main quota. Students from neighbouring states like Bihar, Orissa and North East India are usually admitted in addition to students of West Bengal. Few Kashmiri students are admitted through PMSSS scheme. Again there are many non-Bengali students who are residents of West Bengal but are accustomed in non-Bengali culture and language. The faculty and staff, though mostly Bengali, have no bias towards the Bengali students. The language of instruction is strictly English for all and all are treated equally, irrespective of their linguistic and regional background, so that no student feels any difficulty or favouritism.

Fresher's Welcome and Orientation/Induction programs are organized every year after completion of the admission process to welcome the new batch and help students of diverse background to be familiar with the institutional practices and culture and know each other. Similarly, annual Technical Fest (Techtrix), Cultural Fest (Regalia), Sports Fest (Krirathon) & GOT (Game of Throne) programs plus Coding Club, Cultural Club and Rotaract Club provide students effective platforms to mix with each other freely and work together with team spirit and fellow filling. The students and staff enjoy holidays for not only the local festivals but also for festivals of other regions. Staff members are paid bonus during Durga Puja and Eid festivals. Few festivals like Saraswati & Viswakarma puja and Holi & Doljatra along with important national or international days are celebrated in the campus which brings all on a common inclusive platform to reinforce the internal harmony.

As far as **communal** and **socio-economic** diversity is concerned, the institute maintains the balance by protecting the weaker and underprivileged groups. For admission in each course 22%, 6% and 3% seats are reserved for SC, ST and Physically Challenged (PC) candidates. There is a institutional SC/ST committee to look after the interest of the minority students. Any discourse on the basis of caste animosity is not tolerated in the campus. Also, half freeship is provided to 5% students of each batch in each discipline every year on the basis of merit and financial status. Deserving students are actively supported and recommended to avail the different scholarship schemes of the State & Central Govt.

Gender equity is ensured by giving equal opportunity to female staff members and promoting them into important committees. Similarly the female students are given equal opportunity to participate in different extra-curricular and co-curricular activities. There is an air of dignity and mutual respect among the male and female members within the campus.

The Student Welfare Committee, NSS Unit, Anti-Ragging Committee and ICC are there to ensure protection of basic rights & respect, tolerance & harmony among all community.

| File Description | Document |
|---|---------------|
| Link for supporting documents on the information provided (as reflected in the administrative and academic activities of the Institution) | View Document |
| Link for any other relevant information | 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:

One of the Mission statements of the institute is: To produce well trained good human beings with ethics and values, good interpersonal skill, team spirit and leadership capability and concern for the society and environment.

To fulfill it's above Mission, the institute puts lot of emphasis on developing the students as good human being and responsible citizen of future primarily besides developing their technical and professional skills. Besides creating and maintaining a culture that fosters such development, the institute took initiative to appoint Universal Human Values (UHV) Coordinators to supervise the following activities:

- 1. Sending faculty members of all the Departments to different levels of FDPs, conducted by AICTE_UHV Cell
- 2. Sensitizing students to attend e-SIP and the guardians for joining Family Workshops
- 3. Sensitizing senior faculty members to conduct Refresher Workshops on UHV for faculty members and students (to prepare the students on value-based pedagogy and value-embedded living in future)
- 4. Training of faculty members in UHV Mentoring Programs of AICTE and MAKAUT.

The institute has taken a long-term holistic approach to sensitize students and staff about constitutional obligations, values, rights and responsibilities through following activities.

- 1. Sensitize and involve students and staff for celebrations of all important National and International days and events that are pertinent to unity and integrity of India and the world at large.
- 2. Sensitize the students and staff with the grand values that have been expressed in clear terms in the Preamble of Indian Constitution; the salient points are:
- Social, Economic and Political Justice
- Liberty of thought, expression, belief, faith and worship;
- Equality of status and of opportunity;

• Fraternity assuring the dignity of the individual and the unity and integrity of the Nation;

In line with the UHV-1 of AICTE the Students' Induction Programme (SIP) has been formulated with specific goals to help students to:

- 1. Become familiar with the ethos and culture of the institution
- 2. Set a healthy daily routine;
- 3. Create bonding and value-based relation in a batch as well as between staff members and seniors
- 4. Get an exposure to a holistic vision of life;
- 5. Develop consciousness, sensitivity and sense of responsibility for:
- o the Self
- the Family
- the Society
- the Nation
- International cause
- Entire Nature/Existence
- 1. Overcome weaknesses in some essential professional and behavioral skills;
- 2. Reduction of proneness to competition through the application of the rule of "Natural Acceptance";
- 3. Develop personality, team spirit, fellow feeling and caring attitude

While AICTE has made UHV 1 course mandatory for the first year students, the UHV II course has been made Credit-based for the second year students. University has made Indian Constitution - an Audit-based course for the third year students and Ethics & Values course was included in the syllabus for long. Thus RCCIIT students are getting enough exposure to constitutional obligations, values, rights and responsibilities right from first year. The UHV Coordinators monitor the activities through UHV course and workshops conducted that inculcate values.

| File Description | Document |
|---|---------------|
| Link for any other relevant information | 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

Response: B. 3 of the above

| File Description | Document |
|--------------------------------|----------------------|
| Code of ethics policy document | <u>View Document</u> |

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

Response:

National/International commemorative days are regularly celebrated in RCCIIT, coordinated by the NSS unit to maintain a healthy work environment, as well as to make learners conscious of international issues and aware of national pride and rich cultural legacy. The college has a pluralist approach to all religious functions/festivals and encourages students and staff to demonstrate this.

• Independence Day & Republic Day:

Independence Day & Republic Day are celebrated every year – the national flag is hoisted in the campus in presence of students and staff in the morning hours. The 74th Independence Day and 72nd Republic Day were celebrated respectively on 15th August 2020 and 26th January 2021 virtually, coordinated by the NSS team, where upto 70 students participated online through the singing of patriotic songs, recitation, dances, and other performances. In 2019, Independence Day was celebrated with plantation program as part of 'One Student One Tree' theme of AICTE.

• International Day for Preservation of the Ozone Layer:

16th September is celebrated for awareness of global response against ozone layer depletion. In 2020 this day was celebrated virtually by the NSS unit, where 84 students (27 Female & 57 Male) participated by presenting self-made posters & slogans and planting trees. A webinar was organized with speeches on: "Let us protect our radiation shield - for a better tomorrow" and "Protection of Ozone Layer - The Wonder Umbrella".

• Swachhata Divas:

Swachhata Divas is celebrated by the NSS unit on 2nd October. In 2020 it was celebrated through an awareness program virtually. 51 students (22 Female and 29 Male) participated in the program through presentation of poster & slogan and various cleanliness activities done their homes and surroundings. In previous years a cleanliness drive (with special attention on plastic waste and e-waste) in the campus premises was taken up involving students and staff.

• World Environment Day and Jal Divas:

5th June is regularly celebrated as World Environment Day by the NSS unit by organizing plantation drive, student's sit & draw competition on pollution and wild life and also by arranging seminars by environmentalists. Jal Divas was last celebrated on 22nd July 2019 to create awareness of wastage and conservation of water resource.

• Wild Life Week:

A national-level webinar to celebrate Wild Life Week was conducted by the institute virtually for 2 days - 15th & 16th October 2020. The participants included the faculty members from the college, the affiliating University, and 42 students (13 female and 29 male). The topics of the webinars were: "Delving to white continent", "Snakes around us" "Hands of Change - A Success Story of Conservation" and "Tigerland the wonderland". The webinar was informative regarding wildlife and raised awareness for the urgent need for conservation.

• In addition to the above, Teacher's Day (5th September, 2020), Engineers Day (15th September, 2020), International Women's Day (8th March, 2021), International Yoga Day (21st June, 2021), Saraswati Puja (16th February, 2021), Viswakarma Puja (17th September, 2020) were celebrated in the institute.

| File Description | Document |
|---|---------------|
| Link for 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: Measures initiated by the institute for the promotion of gender equity

Gender equity in education means that males and females students and staff should have - equal opportunities in: teaching-learning process, educational outcomes and credit/award earned, career development, training and promotion, co-curricular, extra-curricular and outreach activities, representation in departmental and institutional committees, access to resources and common facilities; also both should have: unbiased treatment as student and teacher/staff, equal social and cultural respect and importance. Here equal implies equivalent in terms of rights, benefits, obligations and opportunities. RCCIIT regulation & policy guidelines for admission, recruitment, administrative functioning & academic activities safeguard the interests of the students, faculty & staff without any differentiation to their gender.

RCCIIT maintains an open and transparent system of recruitment of faculty and staff which is purely based on performance in interviews by a panel of experts following AICTE guidelines. We currently have 28 nos. (32%) of regular female faculty members and 10 nos. (14%) of regular female staff members in our institution. Male and female faculty/staff members get equal opportunity for career advancement or promotion as applicable as per institute service rules and statutory guidelines. The regular female faculty/staff members of the institute are entitled to additional benefits of Child Care Leave (of maximum 3 years) and Maternity Leave (180 days) over male faculty/staff members. Many female faculty/staff members have availed or currently enjoying this opportunity.

Male and female faculty members are treated equally by HOD/Principal in terms of allotting class load or additional responsibility (as Program/Module Coordinator and/or Convener/Member of Committee) at departmental or institutional level. Many female faculty holds/held important roles/positions at institutional level e.g. Chairman-Research Committee, Presiding Officer-ICC, Exam OIC/Supervisor, Coordinator-Cultural Sub-Committee (SA & SW), 1st Year Coordinator, HOD, Librarian, TPO, OIC, Principal etc. Many other female members act/acted as members of different committees e.g. IIC, Disciplinary Committee, Anti-Ragging Committee, Grievance Redressal Cell, SC/ST Committee, IQAC, IAC, Social Media Cell, NSS etc. Besides this, equal facility for PhD work (Weekly half day leave) and training (FDP, Workshop) is given to male and female faculty/staff. Certificate of appreciation is given by the management for outstanding achievement by the faculty members and recently 2 faculty members one each in male and female category have been certified.

As regards students, no. of female students in the institute is 579 whereas no. of male students is 1442. No discrimination is done in these two categories of students as far as teaching-learning and educational facilities are concerned. There are separate common rooms for boys and girls, though no hostel facility is available. Both male and female students are allowed to represent the student community in some institutional committees like Anti-Ragging Committee, Grievance Redressal Cell, ICC, NSS etc. Recently one female and one male student were nominated by the institute for the International Youth Exchange Programme 2020-21 and the female student namely Miss AvantikaSadhukhan (2nd YrB.Tech IT) has been selected by the University to represent the state.

Awareness programs and workshops on gender sensitivity are organized by the NSS in the campus and surroundings to generate awareness towards women issues in order to enhance women empowerment. The female faculty members, staff and students are informed about various laws and rights available for their empowerment. The Internal Complaints Committee (ICC), headed by DrShilpi Bhattacharya, Associate Professor, EE, ensures gender sensitization, prevention and prohibition of sexual harassment of women employees and students in the institute.

Recently Women's Day was celebrated by the NSS team where 15 lady faculty members were felicitated.

BEST PRACTICE—2: Measures initiated by the institute in maintaining natural ecosystem, fostering environmental care and standard waste management practices

Environmental protection is one of the most important challenges being faced by mankind today. Every individual, institution, and nation needs to make a contribution towards betterment of our environment and preservation of natural resources. An educational institution like RCCIIT, where thousands of young students from across the State of West Bengal and outside interact and study can play a very important role in creating awareness towards environmental care in the society.

RCCIIT has initiated several measures towards environmental protection and to foster a sense of environmental care. A few initiatives implemented in the campus include electronic waste or e-waste management, maintaining water bodies and developing greenery across the campus, using solar and wind energy.

RCCIIT being an IT institute lot of e-waste in the form of discarded electronic/electrical components of PC/UPS/Printer, AC/electrical installations/lab equipments& consumables is generated which have harmful metals like mercury, cadmium, lead etc. and elements like polybrominated flame retardants that are detrimental to the environment if not managed in a planned manner. In-line with statutory e-waste management guidelines proper protocol and procedures are followed in terms of collection, segregation (from general waste), handling and disposal. Instruction is given to the departments so that e-wastes are kept in separate designated boxes in the labs/workshop/stores/faculty rooms. At regular intervals those wastes are collected from labs/rooms and securely stored at a designated place till those are sold to the retailer as recyclable scrap. Conscious effort is given so that e-waste doesn't mix up with general waste and even if so happens those are segregated as far as possible before general waste is disposed of. A standard system of disposal of general waste is also followed whereby biodegradable and nonbiodegradable wastes are kept in separate bins placed in optimum no. of locations throughout the campus. Every day these two categories of wastes are disposed of to the waste collecting van of the municipality. Garden wastes (dry leaves/branches/flowers/fruits) and waste vegetables or peels are collected and used for making compost through natural decomposition. There are instructions displayed in the canteen and other places to not to throw away peels or uncooked vegetable wastes in waste bins, rather drop it in designated buckets. There are also instructions not to throw plastics or other materials in the water bodies and care for the gardens in the campus.

The ecosystem of the water body in the campus was restored by cleaning the water and relaying the bed with sand, developing embankment with bamboo piles and releasing fish larvae and fry. The water body is regularly maintained and deep cleaning done once a year. The garden with wide varieties of plants and trees is well maintained with plantation of seasonal saplings and use of fresh soil, fertilizers and plant medicine at regular intervals. The institute regularly takes the drive to add to the existing biodiversity by planting more all-season trees.

Many events are organized by the NSS team to foster care for the environment amongst the students. Some of these events include tree plantation program, celebration of International Day for Preservation of Ozone Layer, Wildlife Week, World Environment Day, JalDiwas (to create awareness about water conservation and rainwater harvesting) etc. Sit & Draw competitions, poster presentation, plantation by students within the campus and seminar/webinar by experts are organized on these days and students and faculty/staff members participate quite enthusiastically. In some of these programs, anti-plastic campaign and promotion of a green and clean campus is undertaken by the NSS student members.

RCCIIT has taken a lead in deploying Solar as well as Wind powered systems for electricity generation for not only reducing dependence on conventional power supply, but also to build up an awareness among budding engineers about the Green Energy. The Electrical Engineering Department of the Institute had also set up an advanced Power Electronics Research Lab, where R&D work is carried out on efficient Power conversion from the PV –Wind Hybrid System. At the same time a data logger is also installed in order to record daily generation from either system and peak generation too. Those data are used and may also be used in future for analysis and prediction.

Wind turbine has been installed along with Solar PV Systems not only to compensate the generation at night time but to study co-generation and Smart Grid. Moreover capacity building efforts for harnessing solar power and developing prototype equipment like solar powered Inverter, MPPT have also been initiated.

The institute plans to augment the capacity of existing solar power generation by creating necessary

infrastructure with a vision to meet the entire power requirement from clean source of energy towards realizing the vision of the Govt. like the National Solar Mission. Apart from the above, the institute has also installed a number of Stand Alone Solar Street Lighting Systems in the Year 2014 to promote Green Energy applications. Attempts are on to create awareness and interest among the stakeholders in reducing carbon footprint and emission of Greenhouse gases and preserving natural resources and ecosystems.

The institute has plans to go for a third-party Green Audit to quantify the overall visible impact of these environmental conservation practices followed in the campus.

Environmental care is not a one-time activity. RCCIIT has adopted this as a sustained and continuous endeavour with a prolonged strategy but funding has always been an issue for expanding current capacities like – increasing solar power generation capacity by installing solar panels on all the rooftops, implementing rain water harvesting, waste recycling system etc.

| File Description | Document |
|---|---------------|
| Link for 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:

Measures taken by the institute in scaling up research activities:

Since establishment in 1999, RCCIIT has remained committed to research by treating it as a priority next to quality teaching-learning process which is the primary goal for an affiliated institute like RCCIIT. Our Vision statement says: "To develop RCCIIT as one of the most advanced technical institute by establishing the culture of interdisciplinary research and innovation (to cater to the social needs)" The following Mission statement also echoes that: To develop state-of-the-art infrastructure and learning resources for pursuing unhindered research and learning practices. Accordingly we have prioritized research activity in our strategic plan as:

Enhancing student and faculty interest in PRIDE PROJECTS: P [Patents, Products, Publications], R [Research], I [Innovation (Ideation, Incubation)], D[Design] and E[Entrepreneurship]

Enhancing research capacities and outcomes

So research is one of our thrust areas though we are not a research institute or University. Admittedly, unlike the developed countries, a culture of research is largely missing in our institutions of higher education, which are the major centres for enriching the manpower at all levels. The management of

RCCIIT believes that the institute can't reach the next level of excellence if it is confined only in imparting syllabus-based teaching-learning and does not involve its faculty and students in research and projects in the prevalent and upcoming technology. Research is a culture which needs to be inculcated among the young faculty as well as students at UG/PG level; it supplements the learning process and inspires the thinking mind in generating innovative ideas and ways of utilizing the technology – the research attitude and approach to solve new problems is particularly essential for engineers who are supposed to apply technology to solve different real-life problems, be it in industry or in academia.

Keeping this in view, RCCIIT has been making sincere attempts to infuse the research culture right from the UG (B.Tech) level. Obviously, these necessitated active involvement of faculty members in the form of mentoring good student projects or papers with research elements and invoke research interests at UG and PG (M.Tech/MCA) levels. At RCCIIT there has always been a Institutional Research Committee (IRC) comprising senior faculty members (Professors and those with PhD) from all departments and sometimes leading researchers from Universities or research organizations to frame and implement in-house research/project policies and promote research, innovation and publication by the students and faculty. As per a resolution of the Research Committee at least one published/accepted conference paper or book chapter in edited volume has been made mandatory for the M.Tech students. The M.Tech as well as the B.Tech students are encouraged to participate and contribute in the research work of a faculty member in domains or topics matching their interest or strength. Mostly the students carry out such work as part of their final year B.Tech or M.Tech projects guided by a faculty member. This has resulted in many [30] (from my side in last 5 years)] research publications of the students with faculty as co-authors. The students are given necessary support (funding) to present those papers in conference. This gives a good exposure to the students in real-life research problems and at the same time helps expedite the research/PhD work of the faculty members.

As innovative projects lead to publication and also job opportunities, the IRC has mandated student projects from pre-final year; as per University curriculum project is only in the final year. Further, to translate the research ideas of UG students, research labs and central computing labs are provided where the students from their pre-final year are allowed to design models/software and experiment with trial runs. This has fostered creative thinking among the students (especially at UG levels) and helped them getting awards/laurels in national/international competitions like Smart India Hackathon, Bengalathon, IBM Master the Mainframe Contest, IIT-Techfest, ACM Project Contest etc. and in Conferences.

The institute has created the following **research labs** for the benefit of both student and faculty community:

- QualNet 6.1 Research Lab
- IOT Lab
- Computer Architecture and Embedded System Lab
- Renewable Energy Lab On/Off Grid Wind Solar Hybrid Power Generation
- Wireless Sensor Network Research Lab
- APJ Abdul Kalam Research Lab
- Microwave Anechoic Chamber
- Deep Learning Machine Lab

The faculty members of RCCIIT have significantly improved the quality and quantity of their research publication and filing of patents. IRC regularly keeps track of faculty publications and encourages young faculty members to submit research project (for funding by DST/AICTE/SERB) under the guidance of

senior faculty and if possible, in collaboration with faculty of other Universities or research organizations like VECC.

| Particular | Numbers |
|---|---------|
| Faculty with PhD | 31 |
| Faculty pursuing PhD | 25 |
| Publication in UGC listed Journals (in last 5 yrs) | 74 |
| Publication in Conference & Book Chapters (in last 5 yrs) | 393 |
| Publication of Books (in last 5 yrs) | 50+ |
| Patents filed + granted | 9 |
| Funded Research Projects | 4 |

Besides IRC, the Institution's Innovation Cell or IIC works towards spreading the awareness of Intellectual Property Right (IPR), Patent, Copyright etc. and organizes workshops by experts in the field to disseminate the technicalities involved in filing patents or applying for copyright. Interested students are also allowed to attend those workshops to enlighten them about the recognition/rewards of innovative designs and concepts.

To promote the research culture in the institute, different departments organize Conferences or Symposiums on niche areas. In-house faculty and students submit and present their research papers in these conferences. Since 2014, around 10 international conferences/symposiums have been organized. The Conference series ICRCICN was organized in 5 consecutive years, each time the proceedings with high-quality peer reviewed presented articles was published in IEEE Xplore. The symposium ISSIP was organized in 3 consecutive years and the proceedings were published by Springer Nature in AISC Book Series. International Conference on Research and Applications in Artificial Intelligence was organized online in 2020, proceedings published in Springer AISC. The International Conference on Industrial Instrumentation & Control (ici2c-2021) will be organized by the Applied Electronics Dept. in Aug. 2021.

| File Description | Document |
|---|---------------|
| Link for appropriate web in the Institutional website | View Document |

5. CONCLUSION

Additional Information:

RCCIIT was selected under Govt.-aided category of Institutes under sub-Component 1.1 of the World Bank-MHRD, Govt. of India funded Project TEQIP-II or Technical Education Quality Improvement Programme, Phase II amongst around 200 competitively selected HEIs across India. The objective of the project was to improve learning outcomes and employability of graduates. The institute was granted additional **Rs. 5 crores** over and above the initial funding of **Rs. 10 crores** because of the overall impressive performance recorded by the institute on pan India basis. The utilization of project funding was as follows:

SOURCES OF FUND

CENTRAL GOVT. SHARE Rs. 97,250,000

STATE GOVT. SHARE Rs. 47,250,000

PROJECT RESOURCES (A) Rs. 144,500,000

NON-PROJECT RESOURCES (B) Rs. 4,228,804

TOTAL RESOURCES (C = A+B) Rs. 148,728,804

USES OF FUND

PROCUREMENT Rs. 85,199,527

PG STUDENT ASSISTANTSHIP Rs. 13,156,000

RESEARCH & DEVELOPMENT Rs. 4,465,187

FACULTY & STAFF DEVELOPMENT Rs. 23,304,146

INDUSTRY ACTIVITY Rs. 1,802,721

CAPACITY DEVELOPMENT Rs. 1,950,513

INSTITUTIONAL REFORMS Rs. 3,831,704

WEAK STUDENT GROOMING Rs. 3,926,421

OPERATIONAL COST Rs. 11,059,771

TOTAL USES OF FUND (D) Rs. 148,695,990

The above figure shows that there has been procurement worth Rs. 8.5 crores under TEQIP-II funding that helped develop some of the best-in-class infrastructure including core engineering labs equipped with state-of-

the-art instruments, modernized classrooms and Teaching-learning facilities at RCCIIT.

Concluding Remarks:

Conclusion

RCCIIT started its journey in 1999 with a mission to provide a homely atmosphere to the students and nurture them to develop as good human being who will perform their societal responsibilities and will also contribute in social and application oriented problem solving through engineering solutions. RCCIIT ecosystem is managed by a dedicated pool of young and talented faculty members where average experience of service is nearly 8.5 years. All programs of RCCIIT are affiliated by Maulana Abul Kalam Azad University of Technology, W. B. and accredited by AICTE, New Delhi. Currently B. Tech. (IT) and B. Tech. (EE) programmes are accredited by NBA, New Delhi. RCCIIT follows university prescribed curriculum which is time to time augmented by some add-on programs through student workshops, MOOCs and seminars. Students take ample advantage of rich infrastructure of the institute spanning across two campuses comprising 45 ICT enabled classrooms, 33 engineering labs, 17 computer labs with 850 desktops. Campus is fully connected with 100 mbps LAN and Wi-Fi services boosted with two lease lines for internet facility. Apart from regular activities, student performs extension activities in neighbourhood communities through NSS unit and RCCIIT Rotaract club. Student extracurricular activity involves annual technical fest, sports fest, cultural fest, freshers' welcome, saraswati puja etc. RCCIIT students are generally well behaved and disciplined. Campus is ragging free and there prevails a friendly atmosphere among the students. Institute has anti-ragging committee, institutional complaint committee, grievance redressal cell etc to maintain and monitor overall discipline. Strong alumni base of the institute helps in the development of current students through different technical and motivational activities. Institute focuses on the importance to make the alumni base and their activities stronger. Research and development activities are slowly developing and average participation in research and development are slowly improving. In spite of certain weaknesses and challenges, institute strives to offer productive opportunities and provide the best infrastructure and amenities in its quest of brilliance. The staff and student community persist to work always towards realising its mission.