

### FOR

# **1<sup>st</sup> CYCLE OF ACCREDITATION**

# TECHNOCRATS INSTITUTE OF TECHNOLOGY(EXCELLENCE) BHOPAL

IN FRONT OF HATHAIKHEDA DAM, ANAND NAGAR, POST PIPLANI PB NO-24 BHEL 462021 www.titexcellence.net

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Submitted To

### NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

### BANGALORE

## July 2024

# **1. EXECUTIVE SUMMARY**

### **1.1 INTRODUCTION**

Technocrats Institute of Technology (Excellence) was established in the year 2007 under the aegis of Chandravadhani Siksha Samiti,Bhopal and is one of the engineering institutions run under Technocrats Group of Institution. Since its inception, it has been striving incessantly to scale new heights and to mold students to be at par with the technological advancements. Technocrats Institute of Technology (Excellence) is approved by All India Council for Technical Education, New Delhi and affiliated to Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal, Madhya Pradesh. Technocrats Institute of Technology (Excellence) has under graduate B.Tech. Program with eight specializations namely Computer Science & Engineering,Computer Science & Engineering (AI&ML).Computer Science & Engineering (AI). Computer Science & Engineering (Cyber Security),Civil Engineering and post graduate MTech. Program with three specializations namely Computer Science & Engineering, Artificial Intelligence & Machine Learning, Construction Technology & Management along with MBA and MCA PG programs.

The infrastructure, facilities, faculties and teaching learning process are as per the standards set by regulatory body AICTE. The Land area and the built up area are far in excess of mandatory limits as per the guidelines of specific academic administrative and regulatory bodies at State and Central levels. The teaching and learning process of TITE ensures not only excellent end semester results culminating into students getting Chancellor's award but also progression of students registering excellent placement track record. E-Cell, I-Cell, Research Cell and Incubation Cell have provided a wide platform to the students to enrich their skills and unveil their hidden talents. Ourfour UG B.Tech. Programmes namely, Computer Science & Engineering, Civil Engineering, Electronics & Communication Engineering, and Mechanical Engineering are NBA accredited. TITE has also created conducive environment for excellent placements, as a result of this, our institution is known for unbeatable placements in central India.

#### Vision

To become a "Centre of Excellence" for quality education in the field of engineering, research and management so as to produce globally competent and socially responsible professionals, who can contribute in technological and socio-economic development of the nation as a whole and region in particular.

#### Mission

M.1: To educate students with deep professional knowledge through innovative teaching-learning process and to make them aware of cutting edge technology so as to become capable of understanding and addressing the issues of society, state and the country.

M.2: To create in- house facilities for research and innovation to provide solution to the industrial problems.

M.3: To inculcate right human values and professional ethics, leadership qualities, communication and entrepreneurship skills in students to meet the need of society.

### 1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

#### **Institutional Strength**

#### **Institutional Strength**

- 1. Pre eminent position in technical education in Central India.
- 2. World class infrastructural facilities and learning ambience.
- 3. Supported by visionary, dynamic and resourceful group.
- 4. Experienced and qualified faculty members.
- 5. Four Undergraduate B.Tech Programs are NBA accredited.

6. Cells like Innovation Cell, E-Cell and I-Cell to inculcate innovation and entrepreneurship skills amongstudents.

- 7. Plethora of ISR activities for the holistic development of the students.
- 8. Excellent mentor-mentee system with dedicated Tutor Guardians for students.
- 9. Enrichment of curriculum to include contemporary trends.
- 10. Comprehensive feedback system from all stakeholders.
- 11. Special emphasis on imparting training to students to make them industry ready.
- 12. Lush green ambience with dedicated efforts towards environmental protection through

Sewage Treatment Plant and Green Energy and Environment Audits.

- 13. Entire campus is under the surveillance of CCTV ensuring safety and security.
- 14. NCC and NSS wings for both male and female students.

### Institutional Weakness

- 1. Minimum scope of flexibility in curriculum being an affiliated institute.
- 2. Inadequate research environment and patent filing.

3. Inability to cope up with unscrupulous marketing strategies employed by contemporary and

competitiveinstitutions in the region with specific reference to admission.

4. Less emphasis on games and sports being technical institute.

5. Less control on the quality of intake of the students because of online counseling.

6. Less financial contribution from Alumni.

#### **Institutional Opportunity**

1. All time excellent scope in technical education that motivates students.

2. Students enjoy the opportunity to avail diverse nature of specialties related to conventional engineering disciplines.

3. The environment of healthy competition among students which make them to perform better.

4. The Institute enjoys status of having lesser fee structure as compared to institutions in the other states.

5. Providing required facilities to students for choosing a better career.

6. The Institute attracts students from all districts of Madhya Pradesh being situated in the capital of the states.

7. The Institute has guidance of visionary management to enhance its status as autonomous institute/university.

#### **Institutional Challenge**

1. Constraint in getting government agencies research funds being self finance institute.

2. Coping with changes in technical scenario and its inconsistency with the syllabi prescribed by the affiliating university.

3. Unethical and unscrupulous approaches in admission and faculty hunting followed by

competitor institutions.

4. To deal with the students from diversified background and make them competent

professionals.

5. To explore greater possibilities for the placements of students of core disciplines of

engineering.

### **1.3 CRITERIA WISE SUMMARY**

#### **Curricular Aspects**

The Institute offers curriculum as prescribed by affiliating university Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal MP. The Institute follows academic calendar propagated by university. Institute isworking line with the university academic calendar for scheduling academic and co-curricular activities.Date wise/month wise and department wise activities are planned for academic and co-curricular domains. Academic flexibility is provided in the prescribed curriculum given by affiliating university. Elective courses are offered to students in 3rd year and 4th year of the UG program and in 2nd year of PG program. To address the identified gaps in PO's, PSO's and CO's in curriculumadditional value-added courses are planned. The contents of the course beyond the prescribed syllabi making it industry oriented is also planned in courses. In the last five years 65 add on/certificate programs were offered for the benefit of students. Academic flexibility is also provided in the form of branch transfer. Students who wish to change their branch after first year can do so. This process is initiated and controlled by Department of Technical Education, Government of M. P. The curriculum prescribed by the affiliating university has courses which include various crosscutting issues, prominent courses in Curriculum related to Environment and Sustainability, Professional Ethics, Human Values, Energy, Environment and Ecology, Rural Outreach, English for Communication, Chemistry, Language Labs and Seminars, Construction Planning and Management, Sustainable Design andConstruction, Waste Disposal and Management and Intellectual Property Right. Apart from these, average 12.37% of courses provide experiential learning through project work/field work/internship during last five years. IQAC of the institute initiates and monitors updating of syllabi in line with the industry requirements. To identify the missing areas and the inconsistency of syllabi with latest technological advancements, IQAC monitors the data of students undertaking project work/field work/internship.

The Institute has a well-planned feedback system encompassing feedback from all the stakeholders namely students, parents, faculties, employers and alumni. The institute has a well-defined practice of following all the necessary steps i.e. feedback collection, feedback analysis, feedback action taken report and feedback to ensure.

#### **Teaching-learning and Evaluation**

Admissions in the institute are done through centralized counseling conducted by government of M. P.

Admission of students from different states leads to diverse categories of students. Average enrolment percentage of last five years is 95.1%. Reservation for reserved category is given as per the norms of state government. Orientation programme helps new students to assimilate with the institute culture. To cater to the demands of varied qualities of students, the teaching-learning process provides knowledge to students and helps to identify advanced and slow learners. Faculty members are the backbone of the Teaching Learning Process. In the latest academic year, the student teacher ratio was 12.84 which are better than the ratio as per the norms of AICTE. Teaching learning process is strictly followed as per the university guidelines. Teaching Learning process is delivered through traditional techniques as well as by employing interactive and learner centric approaches. The traditional techniques employ classroom, interactions, tutorials, assignments, projects, selfstudy etc. for the overall development of students ICT enabled teachings including NPTEL videos, virtual labs, MOOCs, e-notes etc. are used. In addition, participating learning through flip classes, group discussion, quizzes, role play, casestudies, minor/major projects, industrial visits, internship etc.are ensured. Additionally, the institute impartsEmployability Enhancement Training Module (EETM)to students for campus placement wherein concepts of aptitude, reasoning, communication skills and programming skills are provided to the students. The institute employs well qualified and highly experienced faculty members for effective and quality teaching. A continuous internal evaluation system monitors progress of students. Dates of internal examinations are displayed in academic calendar. The result of internal evaluation is displayed on notice board and is shared with parents. Remedial sessions are conducted to improve the performance of slow learners. A mechanism is in place for addressing the grievances if any raised by the students regarding CIE. The average pass percentage of final year students in the last five years is 83.97%, which speaks of the well devised teaching learning process. The institute evaluates attainment of program outcomes and course outcomes and takes student satisfaction survey regularly for further improvement.

### **Research, Innovations and Extension**

The IQAC of the Institute takes initiative and monitors the activities regarding research, innovations and extension. The Institute has created an ecosystem for research and innovations with the help of different types of cells i.e. I-Cell, E-Cell, Research Cell and Institution Innovation Council (IIC) for transfer of knowledge and information. The students and faculty members are encouraged to take up research activities utilizing the existing facilities. These cells initiate various activities for the career enhancement of students at different medium like self-employment, startup initiatives, collaboration with research institutions and otherindustrial manufacturing related careers. In the last five years a total of 78 workshops/seminars have been attended on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship. Extension activities are an integral part of institute and are organized on a regular basis and play a vital role in not only sensitizing the students to social issues in and around the neighborhood but also form a base for their holistic development to become a good citizen of the country. All the important days are celebrated each year like World Environment Day, International Yoga Day, International Women's Day, Save Girl Child Day, etc. to spread awareness about the various social, national and international issues. Proactive cells of NCC and NSS motivate students to take active participations in extension activities. The students also learn how to contribute their services through these activities to the neighborhood community. A total of 52 extension and outreached programmes have been conducted in the last five years in collaboration with industry, community and non-government organizations. An average 59% of students have participated in extension activities during the last five years. The Institute has been involved in collaborative activities for research faculty exchange, student exchange/internship during the five years. A total of 19MOUs with institutions of national, international importance, industries, corporate houses etc. have been signed during the last five years leading to the benefit of students.

#### **Infrastructure and Learning Resources**

Technocrats Institute of Technology (Excellence) is spread over a sprawling 5.8 acres lush green campus with sylvan surroundings. It has adequate spacious classrooms with advanced teaching aids and a workshop enriching the facilities of teaching learning. The Institute has 04 seminar halls and 5 conference halls. The Institute has well equipped Language Lab with adequate number of computers and headphones. Medical Center with a doctorand nurse provides medical facilities. TITE is proud to announce that the overall ambience and infrastructure of the institute is so distinguished that the renowned film Producer and Director Mr. Prakash Jha requested the Governing Body of the Technocrats Group to allow him for his film shooting. Similarly, the premises of the institute have been used for shootings of various other films and TV serials. Institute has sports facilities for outdoor games and indoor games like Cricket, Volleyball Kabbadi, Badminton, Table- Tennis, Carom, Chess etc. Secure and separate hostel facilities for boys and girls are provided in the campus. A total of 55 % of classrooms and seminar halls are enabled with ICT facilities. TITE has a rich library with 40285volumes and 5047 titles of books. Digital Library provides access to documents in electronic form. 100 Mbps leased line provides 24\*7 high speed internet connectivity. The institute has 560 latest computers for students. Sophos firewall protects the computers from unauthorized access. The infrastructure and other facilities are properly maintained as well as updated regularly. Adequate in-house staff is available to maintain cleanliness. Rest rooms and wash rooms are available at each floor. Dustbins are placed in every lab, corridor and wash room. The garden of the campus is well maintained.

#### **Student Support and Progression**

The Institute continuously aspires for providing excellent mechanism for support and progression of students in holistic manner. The degree of support may be perceived from the past records of students' academic performance, percentage of placement, negligible dropout rate, students' success in competitive examinations and enrollment in higher studies and recognition of the institute as a center of academic excellence. The financial needs of the students are addressed through Government Scholarships and institutional free ships. An average of 29.71 % of students were benefited by the guidance for competitive examinations and career counselling during the last five years. Initiatives for capacity building and life skills like-Training on soft skills and communication skills, life skills and ICT / Computing skills are conducted regularly. The Institute also has Grievance Redressal Cell, Sexual Harassment Cell, Anti-ragging Cell etc.

An active training and placement cell ensures training of students for on-campus and off campus drives. The T & P Cell coordinates with the prospective employers and arranges for the on-campus placement drives, pool campus drives and off campus drives. As a result good number of our students have been placed through campus drives. Placement cell also takes care of Industry Interaction to maintain cohesive relationship with industries and promote placement prospects and reduce the gap between academia and industry. A total of 388 students were placed in 2022-23. A total of 12% of students participated in examinations like GATE, CAT, GRE, TOEFL etc. The Institute has a well-established Student Activity Council (SAC) comprising of various members from the student body of all the semesters at various levels. SAC representatives register their active involvement in various activities conducted by the institute. For development of healthy body and mind and a holistic personality, indoor and outdoor sports activities, yoga classes, co-curricular activities, techno-cultural festivals etc are organized at regular intervals. Many of our students have won prizes in sports and cultural activities. Institute has aregistered and active alumni association for providing support to students and the institute.

### **Governance, Leadership and Management**

Technocrats Institute of Technology (Excellence) was established in the year 2007 by Chandravadhani Shiksha Samiti, with a visionary commitment and passion to provide the quality professional education to the young aspirants. The vision statement drives the Institute to continuously strive for producing skilled and compatible engineers. The Institute follows a participatory mode of governance with all stakeholders participating in all its activities The Board of Governors delegates' authority to the IQAC to initiate and monitor various qualityparameters in the institute. The Institute believes in a culture of participative management. The levels of participation are at Department Level, at the Inter-Departmental Level and at the Institutional level. Management has authorized Director to formulate various cells/committees either for continuous long terms activities or short-term activities to take timely decisions.

The Institute has a definite perspective/strategic plan for development. In line with its mission statement; the institute has developed a perspective plan for five years. The major activities included in the perspective plan are Industry Institute Interaction, Excellence in Teaching and Learning, Human Resource, Campus Training and Placements etc.

The Institute has e-governance in its area of operations including administration, finance, student admission, etc. Many welfare measures have been developed for both the teaching and non-teaching staff. Faculty members are encouraged to participate in workshops, seminars, FDPs etc. An effective performance appraisal system for teaching and non-teaching staff is in place in the institute for optimizing the contribution of individual staff to institutional performance.

Technocrats Institute ofTechnology (Excellence), Bhopal is a self-finance institute. It regularly undergoes internal and external audit. The main resource is the fee collected from the students. Financial resources are effectively allocated among various departments to fulfill their needs based on budget allocation and to ensure optimal utilization of resources. The Institute has formed the Internal Quality Assurance Cell (IQAC) and has been contributing significantly for quality assurance. IQAC monitors all the activities of the institute including the teaching-learning process to up keep the status of center of excellence. The Institute is ISO 9001:2015 certified.

### **Institutional Values and Best Practices**

Technocrats Institute of Technology (Excellence) conducts various activities to address different forms of gender discrimination. Keeping this in mind, various curricular and co-curricular activities are organized where women are encouraged to get equal opportunity as far as participation in events and conducting of events are concerned. Several events have been organized on women empowerment, gender discrimination, gender equity and gender sensitization. Rakhi celebration of NCC girls with Jawans of CRPF, Smriti Diwas celebration honoring distinguished women etc. are some of the activities to prove this point. The Institute is eco conscious and takes a number of initiatives to maintain an Eco –friendly campus by maintaining green campus by planting shady trees all over the campus, proper use of water resources and energy conservation. Efforts for energy conservation like using solar energy, using LEDs and wheeling to the grid are in place in the institute. Disposal of bio-degradable and non-degradable waste is done to ensure minimal adverse environmental effects. Rain water harvesting systems prevail in the campus. Green and Energy audits are undertaken regularly to compute carbon neutrality. Sewage Treatment Plant makes sure the treatment and recycling of liquid waste in the campus. TITE has a well-defined mechanism of e-waste management through the authorized vendor.

The Institute has disabled friendly barrier free environment. For disabled students, there is a provision of ramp and lift in the building for the movement of the wheel chair within the institute premises. The Institute, being center of excellence, puts emphasis on inculcation of moral values, ethics, rights, duties and responsibilities of good citizen. The Institute celebrates various national /international days and festivals for inculcating cultural integrity amongst the students and for making the students aware of the Indian historical past and their contribution in the national development. Constitution Day, Nadi Abhiyan, Digital India Campaign, Kargil Vijay Diwas, Gaon Chale Hum, Padhe Bhopal, etc. are some of the regular activities conducted in the institute. Apart from this, Institute also exercises many best practices. Two of them are Institutional Social Responsibility (ISR) and Employability Enhancement Training Module. (EETM).

# **2. PROFILE**

### **2.1 BASIC INFORMATION**

| Name and Address of the College |   |
|---------------------------------|---|
| Name                            | TECHNOCRATS INSTITUTE OF<br>TECHNOLOGY(EXCELLENCE) BHOPAL               |
| Address                         | In Front of Hathaikheda Dam, Anand Nagar, Post<br>Piplani PB No-24 BHEL |
| City                            | Bhopal  |
| State                           | Madhya Pradesh  |
| Pin                             | 462021  |
| Website                         | www.titexcellence.net   |

| Contacts for Communication |                        |                            |            |                  |  |
|----------------------------|------------------------|----------------------------|------------|------------------|--|
| Designation                | Name                   | Telephone with<br>STD Code | Mobile     | Fax              | Email  |
| Director                   | Sanjay Kumar<br>Sharma | 0755-2751679               | 7771010386 | 0755-275167<br>9 | directortite@techno<br>cratsgroup.edu.in       |
| IQAC / CIQA<br>coordinator | Ravindra<br>Gautam     | 0755-2751671               | 9827176200 | 0755-275167<br>9 | ravindragautam@te<br>chnocratsgroup.edu<br>.in |

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

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

| <b>Recognized Minority institution</b>     |    |
|--|----|
| If it is a recognized minroity institution | No |

| Establishment Details |  |  |
|-----------------------|--|--|
|                       |  |  |

| State          | University name                             | Document      |
|----------------|---|---------------|
| Madhya Pradesh | Barkatullah University                      | View Document |
| Madhya Pradesh | Rajiv Gandhi Proudyogiki<br>Vishwavidyalaya | View Document |

### **Details of UGC recognition**

| Under Section | Date | View Document |
|---------------|------|---------------|
| 2f of UGC     |      |               |
| 12B of UGC    |      |               |

### Details of recognition/approval by stationary/regulatory bodies like AICTE,NCTE,MCI,DCI,PCI,RCI etc(other than UGC)

| Statutory<br>Regulatory<br>Authority | Recognition/Appr<br>oval details Instit<br>ution/Department<br>programme | Day,Month and<br>year(dd-mm-<br>yyyy) | Validity in<br>months | Remarks                  |
|--------------------------------------|--|---------------------------------------|-----------------------|--------------------------|
| AICTE                                | View Document  | 01-07-2023                            | 12                    | For one Academic<br>Year |

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

| Location and Area of Campus |  |           |                         |                          |
|-----------------------------|--|-----------|-------------------------|--------------------------|
| Campus Type                 | Address  | Location* | Campus Area in<br>Acres | Built up Area in sq.mts. |
| Main campus<br>area         | In Front of Hathaikheda Dam,<br>Anand Nagar, Post Piplani PB<br>No-24 BHEL | Urban     | 5.14                    | 24419                    |

### **2.2 ACADEMIC INFORMATION**

| Programme<br>Level | Name of Pro<br>gramme/Co<br>urse  | Duration in<br>Months | Entry<br>Qualificatio<br>n | Medium of<br>Instruction | Sanctioned<br>Strength | No.of<br>Students<br>Admitted |
|--------------------|---|-----------------------|----------------------------|--------------------------|------------------------|-------------------------------|
| UG                 | BTech,Comp<br>uter Science<br>And Enginee<br>ring,Comput<br>er Science<br>and<br>Engineering  | 48                    | HIGHER SE<br>CONDARY       | English                  | 240                    | 240                           |
| UG                 | BTech,Comp<br>uter Science<br>And<br>Engineering<br>Artificial<br>Intelligence<br>And Machine<br>Learning,Co<br>mputer<br>Science and<br>Engineering<br>Artificial<br>Intelligence<br>and Machine<br>Learning | 48                    | HIGHER SE<br>CONDARY       | English                  | 180                    | 180                           |
| UG                 | BTech,Electr<br>onics And Co<br>mmunication<br>Engineering,<br>Electronics<br>and Commun<br>ication<br>Engineering  | 48                    | HIGHER SE<br>CONDARY       | English                  | 30                     | 30                            |
| UG                 | BTech,Electr<br>ical And<br>Electronics E<br>ngineering,El<br>ectrical and<br>Electronics<br>Engineering  | 48                    | HIGHER SE<br>CONDARY       | English                  | 30                     | 24                            |
| UG                 | BTech,Civil<br>Engineering,<br>Civil  | 48                    | HIGHER SE<br>CONDARY       | English                  | 30                     | 26                            |

|    | Engineering  |    |                      |         |    |    |
|----|--|----|----------------------|---------|----|----|
| UG | BTech,Mech<br>anical Engine<br>ering,Mecha<br>nical<br>Engineering   | 48 | HIGHER SE<br>CONDARY | English | 30 | 30 |
| UG | BTech,Comp<br>uter Science<br>And<br>Engineering<br>Artificial Inte<br>Iligence,Com<br>puter Science<br>and<br>Engineering<br>Artificial<br>Intelligence | 48 | HIGHER SE<br>CONDARY | English | 60 | 35 |
| UG | BTech,Comp<br>uter Science<br>And<br>Engineering<br>Cyber Securi<br>ty,Computer<br>Science and<br>Engineering<br>Cyber<br>Security                       | 48 | HIGHER SE<br>CONDARY | English | 60 | 31 |
| PG | Mtech,Comp<br>uter Science<br>And Enginee<br>ring,Artificia<br>l Intelligence<br>and Machine<br>Learning   | 24 | B.E. OR<br>B.TECH.   | English | 30 | 30 |
| PG | Mtech,Comp<br>uter Science<br>And Enginee<br>ring,Comput<br>er Science<br>and<br>Engineering   | 24 | B.E. OR<br>B.TECH.   | English | 30 | 30 |
| PG | Mtech,Civil<br>Engineering,<br>Construction  | 24 | B.E. OR<br>B.TECH.   | English | 30 | 30 |

|    | Technology<br>and<br>Management  |    |                |         |     |     |
|----|--|----|----------------|---------|-----|-----|
| PG | MCA,Master<br>s In<br>Computer Ap<br>plications,Ma<br>sters in<br>Computer<br>Applications | 24 | GRADUATI<br>ON | English | 180 | 125 |
| PG | MBA,Manag<br>ement,  | 24 | GRADUATI<br>ON | English | 180 | 180 |

### Position Details of Faculty & Staff in the College

|  |      |        |        | Te    | eaching | g Faculty | y       |       |       |          |         |       |
|--|------|--------|--------|-------|---------|-----------|---------|-------|-------|----------|---------|-------|
|  | Prof | essor  |        |       | Asso    | ciate Pr  | ofessor |       | Assis | stant Pr | ofessor |       |
|  | Male | Female | Others | Total | Male    | Female    | Others  | Total | Male  | Female   | Others  | Total |
| Sanctioned by the<br>UGC /University<br>State Government                     | 0    | 1      |        |       | 0       | 1         |         |       | 0     | 1        |         |       |
| Recruited  | 0    | 0      | 0      | 0     | 0       | 0         | 0       | 0     | 0     | 0        | 0       | 0     |
| Yet to Recruit   | 0    |        |        |       | 0       |           |         | 0     |       |          |         |       |
| Sanctioned by the<br>Management/Soci<br>ety or Other<br>Authorized<br>Bodies | 17   |        |        |       | 9       |           |         |       | 152   |          |         |       |
| Recruited  | 11   | 6      | 0      | 17    | 7       | 2         | 0       | 9     | 102   | 50       | 0       | 152   |
| Yet to Recruit   | 0    | 1      |        |       | 0       |           |         | 1     | 0     |          |         |       |

| Non-Teaching Staff   |      |        |        |       |  |  |  |  |  |
|--|------|--------|--------|-------|--|--|--|--|--|
|  | Male | Female | Others | Total |  |  |  |  |  |
| Sanctioned by the UGC<br>/University State<br>Government                 |      |        |        | 0     |  |  |  |  |  |
| Recruited  | 0    | 0      | 0      | 0     |  |  |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |  |  |
| Sanctioned by the<br>Management/Society or<br>Other Authorized<br>Bodies |      |        |        | 35    |  |  |  |  |  |
| Recruited  | 22   | 13     | 0      | 35    |  |  |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |  |  |

| Technical Staff  |      |        |        |       |  |  |  |  |
|--|------|--------|--------|-------|--|--|--|--|
|  | Male | Female | Others | Total |  |  |  |  |
| Sanctioned by the UGC<br>/University State<br>Government                 |      |        |        | 0     |  |  |  |  |
| Recruited  | 0    | 0      | 0      | 0     |  |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |  |
| Sanctioned by the<br>Management/Society or<br>Other Authorized<br>Bodies |      |        |        | 57    |  |  |  |  |
| Recruited  | 49   | 8      | 0      | 57    |  |  |  |  |
| Yet to Recruit   |      |        |        | 0     |  |  |  |  |

### **Qualification Details of the Teaching Staff**

|                                | Permanent Teachers |        |                     |      |        |                     |      |        |        |       |  |  |
|--------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|--|--|
| Highest<br>Qualificatio<br>n   | Professor          |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |  |  |
|                                | Male               | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |  |  |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |  |  |
| Ph.D.                          | 11                 | 6      | 0                   | 5    | 2      | 0                   | 1    | 1      | 0      | 26    |  |  |
| M.Phil.                        | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 1      | 0      | 1     |  |  |
| PG                             | 0                  | 0      | 0                   | 2    | 0      | 0                   | 101  | 48     | 0      | 151   |  |  |
| UG                             | 0                  | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |  |  |

|                                | <b>Temporary Teachers</b> |        |                     |      |        |                     |      |        |        |       |  |  |
|--------------------------------|---------------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|--|--|
| Highest<br>Qualificatio<br>n   | Professor                 |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |  |  |
|                                | Male                      | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |  |  |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 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     |  |  |
| UG                             | 0                         | 0      | 0                   | 0    | 0      | 0                   | 0    | 0      | 0      | 0     |  |  |

|                                | Part Time Teachers |        |                     |      |        |                     |      |        |        |       |  |  |
|--------------------------------|--------------------|--------|---------------------|------|--------|---------------------|------|--------|--------|-------|--|--|
| Highest<br>Qualificatio<br>n   | Professor          |        | Associate Professor |      |        | Assistant Professor |      |        |        |       |  |  |
|                                | Male               | Female | Others              | Male | Female | Others              | Male | Female | Others | Total |  |  |
| D.sc/D.Litt/<br>LLD/DM/M<br>CH | 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     |  |  |
| UG                             | 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?          | 0    | 0      | 0      | 0     |  |  |

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

| Programme |        | From the State<br>Where College<br>is Located | From Other<br>States of India | NRI Students | Foreign<br>Students | Total |
|-----------|--------|---|-------------------------------|--------------|---------------------|-------|
| UG        | Male   | 308   | 260                           | 0            | 0                   | 568   |
|           | Female | 83  | 21                            | 0            | 0                   | 104   |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |
| PG        | Male   | 155   | 83                            | 0            | 0                   | 238   |
|           | Female | 71  | 20                            | 0            | 0                   | 91    |
|           | Others | 0   | 0                             | 0            | 0                   | 0     |

| Years    |        |        |        |        |        |  |  |  |
|----------|--------|--------|--------|--------|--------|--|--|--|
| Category |        | Year 1 | Year 2 | Year 3 | Year 4 |  |  |  |
| SC       | Male   | 74     | 66     | 66     | 39     |  |  |  |
|          | Female | 25     | 28     | 15     | 5      |  |  |  |
|          | Others | 0      | 0      | 0      | 0      |  |  |  |
| ST       | Male   | 16     | 19     | 18     | 14     |  |  |  |
|          | Female | 6      | 6      | 7      | 1      |  |  |  |
|          | Others | 0      | 0      | 0      | 0      |  |  |  |
| OBC      | Male   | 283    | 296    | 176    | 163    |  |  |  |
|          | Female | 85     | 71     | 56     | 20     |  |  |  |
|          | Others | 0      | 0      | 0      | 0      |  |  |  |
| General  | Male   | 492    | 387    | 463    | 325    |  |  |  |
|          | Female | 104    | 70     | 64     | 83     |  |  |  |
|          | Others | 0      | 0      | 0      | 0      |  |  |  |
| Others   | Male   | 0      | 0      | 0      | 0      |  |  |  |
|          | Female | 0      | 0      | 0      | 0      |  |  |  |
|          | Others | 0      | 0      | 0      | 0      |  |  |  |
| Total    | ,      | 1085   | 943    | 865    | 650    |  |  |  |

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

### Institutional preparedness for NEP

| 1. Multidisciplinary/interdisciplinary: | Technocrats Institute of Technology Excellence,<br>Bhopal is prepared to make changes to augment the<br>overall capabilities of the learners as per the National<br>Educational Policy 2020 and related ordinance [4(D)<br>2020, Implemented in 2023-24] of affiliating<br>university, RGPV Bhopal. Institute is promoting IT-<br>based tools in all disciplines to enhance experiential<br>learning and encouraging the students to choose<br>interdisciplinary project. The university already<br>includes some Interdisciplinary subjects in each UG<br>course. We also allow interdisciplinary research in<br>PG courses. Some of our faculty members from core |
|---|---|
|   | course. We also allow interdisciplinary research in PG courses. Some of our faculty members from core   |
|   | branches has already registered in AICTE QIP for getting certification as faculty members in CSE  |

|                                    | AIML branch of engineering. Faculty members are<br>encouraged to upgrade themselves by completing<br>Interdisciplinary NPTEL courses. Some collaborative<br>efforts for interdisciplinary publication are also done.<br>Information about all disciplines and can follow<br>his/her interest irrespective of his/her core branch.<br>Cross-curricular integration is promoted through<br>projects, seminars, and experiential learning<br>opportunities that allow students to apply knowledge<br>and skills from different subject areas. Adequate<br>resource allocation ensures equitable access to<br>instructional materials, technology infrastructure and<br>interdisciplinary research facilities. Assessment<br>practices are rethough to include performance-based<br>assessments and project evaluations that assess<br>students' ability to integrate knowledge across<br>disciplines. Collaborative partnerships of our<br>Institution with industry partners, and community<br>stakeholders enrich students' learning experiences.<br>Co-created research projects, internships, and<br>community engagement initiatives will prepare<br>students for addressing the challenges of the society. |
|------------------------------------|---|
| 2. Academic bank of credits (ABC): | The Academic Bank of Credits (ABC) is an<br>important part of NEP 2020 and is designed to give<br>students greater flexibility in pursuing their academic<br>goals. Institute is already registered at the National<br>Academic Depository. The affiliating university is<br>already offering Credit based courses. At the<br>institute, we instruct each student to sign up for the<br>ABC portal. Encourage students to enroll in and<br>complete courses under the Ministry of Human<br>Resource Development (MHRD) like SWAYAM,<br>NPTEL, etc. for added credits. Faculty members and<br>students are earning these credits for self-<br>development.   |
| 3. Skill development:              | In line with the skill India Initiative the institute has<br>introduced various value-added courses for Skill<br>Development. Besides that, the institution offers<br>Certification and Training courses. The institution<br>has MoUs with industry partners for providing<br>Training to students. Furthermore, online and offline<br>Capacity Building Training Programs and workshops<br>are organized for the students. Dedicated trainers for<br>skill development are recruited for skill development.<br>The training and placement department has a<br>structured skill development program from the first<br>year to the final year, where they focus on language,   |

|  | aptitude, group discussions & technical skills, etc.<br>Training and placement department also conduct<br>proficiency tests as per requirement. Faculty<br>members are encouraged to join the faculty<br>development program announced by AICTE,<br>NPTEL, Udemy etc. Workshops and Industrial visits<br>are also organized on regular basis by the<br>departments to give industrial exposure to students.   |
|--|---|
| 4. Appropriate integration of Indian Knowledge<br>system (teaching in Indian Language, culture, using<br>online course): | In line with the AICTE Model Curriculum released in recent past the affiliating university has already introduced the audit courses on integration of Indian Knowledge system in various programs so thatl professionals must be enrooted with rich Indian knowledge system of our heritage and demonstrate the Indian way of doing things to the world. At our Institute we accommodate this thought through different workshops cultural and social activities. All faculty of the institute prepare videos on their subject and share their knowledge to students by using English and Hindi. To promote cultural activities our institute has student clubs under student activity centre. Under these clubs various activities are conducted on regular basis to enrich extra skill in the students. We also allow students to opt internship in any of the discipline of Indian knowledge system a value added course. The Hindi is commonly used language in MP, therefore faculty and staff members are motivated to deliver lectures in classrooms in bilingual mode. The faculty members of our Institute are able to help students in both the languages. Various activities for students are conducted based on ancient traditional knowledge through the clubs and NSS activities. Activities related Indian music and dance are organized under the banner of student activity centers and many students are participating in it. Various festivals are also celebrated at the institution like Holi, Ganesh Utsav and Navratri etc |
| 5. Focus on Outcome based education (OBE):   | Technocrats Institute of Technology Excellence,<br>Bhopal has implemented the Outcome based<br>Education system to improve the learning levels of<br>the stakeholders as per need of the society. As a part<br>of continuous improvement the workshops on OBE<br>are conducted to train faculty members. In all<br>departments of the Institute, course outcomes (COs)<br>of the all subjects including theory, labs, projects and  |

|   | internship following Bloom's levels are prepared. All<br>internal questions papers are mapped with the course<br>outcomes along with the Bloom's levels. All course<br>outcomes are mapped with the department Program<br>specific outcomes (PSOs) and Programs Outcome<br>(POs). For assessment of each subject, CO attainment<br>and PO attainment through direct and indirect<br>attainment by following our assessment tools is<br>carried out at the end of semester. The COs, PSOs<br>and POs are published on the website of the institute<br>and also shared with stakeholders. The institute<br>follows a student-centric teaching-learning model.<br>The faculty has been trained to write COs using<br>Bloom's taxonomy, prepare question papers mapping<br>with Bloom's levels, and ensuring CO coverage<br>through various assessment methods. The lecture<br>plans are prepared to cover each subject's syllabus as<br>per the institute's academic calendar. As per the<br>university curriculum two mid term examinations are<br>conducted using traditional pen-paper mode and<br>assignments are taken in writing mode and the<br>assessment is carried out to check learning outcomes<br>of students.   |
|---|--|
| 6. Distance education/online education: | Online education platform was utilized at our<br>institution during COVID i.e. after March 2020. At<br>that time Teachers started using various online tools<br>like Google class room for assignment submission<br>and mid-semester exams. We used Google Forms for<br>conduction of Quiz conduction. ZOOM, Google<br>Meet, etc were used for conducting classes. This<br>trend is continuing even after COVID, Still, we are<br>using the above facilities in organizing the value<br>addition course, Summer schools and winter school<br>etc. Faculty development programs regarding ODL is<br>a regular feature at our institution to enable ICT<br>teaching learning facilities. Teachers are trained to<br>develop PowerPoint presentations using LCD's and<br>projectors. Seminar and Conference rooms are also<br>digitally equipped where guest lectures, expert talks,<br>and various competitions are regularly organized for<br>students. Faculties prepare online quizzes for students<br>after the completion of each unit with the help of<br>GOOGLE FORMS. Still using Free Online tools for<br>simulations of technical concepts to increase<br>experiential learning environment. YouTube channels<br>are developed by each department where we upload<br>lectures so that students can refer to them at any time |

| also do | fter college hours. Online notes distribution is<br>one by individual faculty members in case of<br>d of students. |
|---------|--|
|         |  |

|  | 1  |
|--|--|
| 1. Whether Electoral Literacy Club (ELC) has been set up in the College?   | Technocrats Institute of Technology Excellence,<br>Bhopal has taken steps to promote civic engagement<br>and electoral literacy. Promoting the significance of<br>voting as a fundamental democratic right and<br>responsibility, the institute is conducting all related<br>activities under the banner of NSS club from<br>December 2022 with a dynamic team of students and<br>faculty coordinators.  |
| 2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?  | The Electoral Literacy Club (ELC) is working under<br>the banner of NSS unit of Institute. It has 8 student<br>coordinators and 1 Faculty coordinator appointed by<br>Institute. (Faculty Coordinator : Dr Dhreendra<br>Shukla) Following are the objectives of the ELC: 1.<br>Empowering the students about the importance of<br>voting in a democracy, their rights and<br>responsibilities as voters. 2. Aware academic<br>community with the knowledge and motivation<br>needed to participate in the electoral process<br>meaningfully. 3. Motivate citizens to vote ethically,<br>this include voting without being influenced by<br>money, gifts, or any other undue influence. 4.<br>Empowering young people to become active<br>participants in elections and civic activities. |
| 3. What innovative programmes and initiatives<br>undertaken by the ELCs? These may include<br>voluntary contribution by the students in electoral<br>processes-participation in voter registration of<br>students and communities where they come from,<br>assisting district election administration in conduct of<br>poll, voter awareness campaigns, promotion of<br>ethical voting, enhancing participation of the under<br>privileged sections of society especially transgender,<br>commercial sex workers, disabled persons, senior<br>citizens, etc. | The activities related to Electoral Literacy Club at<br>Institute are dedicated towards fostering civic<br>engagement and democratic participation among the<br>student body through a range of innovative programs<br>and initiatives. Awareness Programs: These programs<br>demystify the electoral process, covering voter<br>registration and the electoral system to equip students<br>with the knowledge they need to be active citizens.<br>The programs like 1. Expert talk & Guest Lectures 2.<br>Voter Registration Awareness Drive 3. Panel<br>Discussions 4. Ethical Voting Promotion 5. Inclusive<br>Participation 6. Increased Voter Registration and<br>Turnout are being organizes by the Institute on<br>regular basis.   |

### Institutional Initiatives for Electoral Literacy

| 4. Any socially relevant projects/initiatives taken by<br>College in electoral related issues especially research<br>projects, surveys, awareness drives, creating content,<br>publications highlighting their contribution to<br>advancing democratic values and participation in<br>electoral processes, etc. | The Voter Registration Campaign spearheaded by the<br>activities towards Electoral Literacy are testament to<br>their commitment to raising awareness about the<br>significance of voting. This campaign has illuminated<br>the crucial role of civic duty and highlighted the<br>profound impact of individual participation in the<br>democratic process. The campaign's innovative and<br>informative strategies have engaged students and<br>faculty members towards active citizenship. The<br>pledge-taking ceremony was conducted<br>simultaneously across all faculty members and<br>students of the Institute emphasizing the universality<br>of democratic values and the collective responsibility<br>of the entire community. |
|---|---|
| 5. Extent of students above 18 years who are yet to be<br>enrolled as voters in the electoral roll and efforts by<br>ELCs as well as efforts by the College to<br>institutionalize mechanisms to register eligible<br>students as voters.   | Nearly 85% of the eligible students above 18 years of<br>age have already been registered as Voters in the<br>Electoral Roll. The Institute has initiated a process to<br>increase registration in electoral roll at the time of<br>admission itself. In addition to the above, the voter<br>registration drive through is conducted in association<br>with office of election commission located near the<br>Institute.  |

## **Extended Profile**

### 1 Students

### 1.1

#### Number of students year wise during the last five years

| 2022-23                                 | 2021-22 | 2020-21  |         | 2019-20 | 2018-19 |
|---|---------|----------|---------|---------|---------|
| 2735                                    | 2644    | 2493     |         | 2587    | 2771    |
| File Description                        |         | Document |         |         |         |
| Institutional data in prescribed format |         | View D   | ocument |         |         |

### **2** Teachers

### 2.1

### Number of teaching staff / full time teachers during the last five years (Without repeat count):

| Response: 359 | File Description                        | Document      |
|---------------|---|---------------|
|               | Institutional data in prescribed format | View Document |

### 2.2

#### Number of teaching staff / full time teachers year wise during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 213     | 212     | 204     | 198     | 218     |

### **3** Institution

### 3.1

#### Expenditure excluding salary component year wise during the last five years (INR in lakhs)

| 2022-23                    | 2021-22 | 2020-21  |         | 2019-20 | 2018-19 |
|----------------------------|---------|----------|---------|---------|---------|
| 1339.02                    | 1463.55 | 483.57   |         | 1081.88 | 686.05  |
| File Description           |         | Document |         |         |         |
| Upload Supporting Document |         | View D   | ocument |         |         |

## 4. Quality Indicator Framework(QIF)

### **Criterion 1 - Curricular Aspects**

### **1.1 Curricular Planning and Implementation**

### 1.1.1

The Institution ensures effective curriculum planning and delivery through a well-planned and documented process including Academic calendar and conduct of continuous internal Assessment

### **Response:**

Effective curriculum planning and delivery are essential components of ensuring high-quality education and student success. Our institute prioritizes these aspects through a well-planned and documented process, which encompasses various elements such as orientation programme, academic calendar, lesson plans and the conduct of continuous internal assessment.

Technocrats Institute of Technology (Excellence), Bhopal is an affiliated institute so once the curriculum is adopted (finalized by the concern university i.e. for B.Tech, M.Tech. and MCA by Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal (M.P.) and for MBA by Barkatullah University, Bhopal (M.P.)), in a comprehensive manner, detailing the learning outcomes, course structure, assessment methods, and recommended resources. This documentation serves as a guide for both faculty members and students, providing clarity and direction throughout the learning process.

The curriculum planning process begins with a thorough analysis of academic standards and learning objectives. Faculty members collaborate to review and update course content, ensuring alignment with the latest advancements in their respective fields and the evolving needs.

Institute academic calendar (On the basis of academic calendars provided by the concern university) plays a crucial role in facilitating effective curriculum delivery. It outlines key dates, such as the start and end of semester, examination, holidays, providing a framework for planning and scheduling instructional activities. Our teachers conduct the classes through a well-planned lesson plan, time table etc. which are prepared on the basis of academic calendars and they also teach with the materials related with the content beyond the syllabus. These all activities executed after making a planning which includes lesson plans, content beyond the syllabus, subject allotment, planning for delivering methods of lectures.

Continuous internal assessment is another integral component of our curriculum planning and delivery process. Rather than relying solely on end-of-semester examinations, we emphasize ongoing assessment methods that provide timely feedback and promote active engagement in the learning process. These assessment methods include quizzes, assignments, tutorials, projects, presentations, and group discussions, among others. By incorporating these assessment techniques, we cater to diverse learning styles and encourage critical thinking, creativity, and problem-solving skills.

The results of continuous internal assessment are used to monitor student progress, identify slow and fast learners. Faculty members regularly review assessment data to gauge the effectiveness of their teaching strategies and make adjustments as needed to enhance student learning outcomes. Additionally, students receive constructive feedback on their performance, enabling them to track their progress and take

proactive steps to improve their academic performance.

Our institute also emphasizes the importance of feedback mechanisms to solicit input from stakeholders and facilitate continuous improvement. Faculty members actively seek feedback from students through course evaluations, and one-on-one discussions. Faculty members identify areas for improvement & bridge the gap in prescribed curriculum by providing content beyond the syllabus. Similarly, administrators and other stakeholders provide input through regular reviews and consultations, ensuring that the curriculum remains responsive to the evolving needs of the institution and its stakeholders.

We also conduct academic audit which help to improvise improvement in the planning and execution process over the upcoming academic years.

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

### **1.2 Academic Flexibility**

### 1.2.1

Number of Certificate/Value added courses offered and online courses of MOOCs, SWAYAM, NPTEL etc. (where the students of the institution have enrolled and successfully completed during the last five years)

Response: 100

| File Description  | Document      |
|---|---------------|
| List of students and the attendance sheet for the above mentioned programs  | View Document |
| Institutional programme brochure/notice for<br>Certificate/Value added programs with course<br>modules and outcomes | View Document |
| Institutional data in the prescribed format   | View Document |
| Evidence of course completion, like course completion certificate etc. Apart from the above:                        | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |

### 1.2.2

Percentage of students enrolled in Certificate/ Value added courses and also completed online courses

### of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

### Response: 79.4

1.2.2.1 Number of students enrolled in Certificate/ Value added courses and also completed online courses of MOOCs, SWAYAM, NPTEL etc. as against the total number of students during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 2530    | 1990    | 1891    | 2008    | 2086    |

| File Description                            | Document      |
|---|---------------|
| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | View Document |

### **1.3 Curriculum Enrichment**

### 1.3.1

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

### **Response:**

Gender, Environmental sustainability, human values and professional ethics are given wider space in the implementation of curriculum. Institute has vision to maintain healthy environment for all students. The curriculum includes cross cutting issues, inclusion of issues relevant to gender, environment and sustainability and professional ethics as part of curriculum of all the programs offered by the institute. Faculties create general awareness among students about many cross cutting issues during the academic delivery.

The affiliating university the RGPV has various courses in the technical programs where professional ethics, environment sustainability and human values are the integral part. The curriculum of B.Tech. Program incorporates **nine courses** which inculcate values and ethics so that students can fulfil their role towards as an individual and committed citizen of the country. To make students aware of gender equity, a plethora of activities are conducted throughout the academic sessions such as self defence classes for girl students, celebration International Women's Day, guest lecture by eminent women speaker Awareness of "Beti Bachao Beti Padhao" scheme of the state government, "Nirbhaya" Women Empowerment Program, roads safety program, etc. The Institute is proud to have a dedicated cadet as NCC women.

Prominent emphasis of environment and sustainability can be seen in majority of courses of B.Tech. The government of India sponsored Swach Bharat Abhiyan is implemented with lots of enthusiasm.

Cleanliness campaigns, camps, training programs, plantation and rallies are the regular activities undertaken by the students. Professional ethics, Human values, Energy, Environment, Ecology, Rural outreach, English for communication, Chemistry, Language lab and seminar, construction planning and management, Integrated Waste Management, Intellectual property right. These courses inculcate value based learning among the students. Technology with values and ethics can generate a healthy nation. These above mention courses are also supplemented by expert lectures and workshops. There is no course design by the university which directly address the gender issue. Considering the importance of general awareness about gender issue, the institute has conducted many programs workshops, and seminar related to gender issues like women safety and women security.

The table includes all such subjects related to gender, Environment and Sustainability, Human values and Professional Ethics:

| S. No. | Description of CriticalTitle of the course<br>Issues |   | Chapter or Unit No.                          |  |
|--------|--|---|--|--|
| 1.     | Environmental Issues                                 | ES401: Energy,                                    | Unit 1 to Unit 5                             |  |
|        |  | Environment Engineering                           |  |  |
| 2.     | Environmental Issues                                 |   | Swach Bharat Unna<br>Bharat                  |  |
| 3.     | Professional Ethics                                  | U   | Unit-5: Business<br>communication            |  |
| 4.     | Environmental Issues                                 | 0 0   | Unit-1: Water and its industrial application |  |
| 5.     | Professional Ethics                                  | BT206: Language Labs<br>and Seminars              | Partial                                      |  |
| 6.     | Professional Ethics                                  | CE503: Construction<br>Planning and<br>Management | Unit 1 to Unit 5                             |  |
| 7.     | Environmental<br>Sustainability                      |   | Unit 1 to Unit 5                             |  |
| 8.     | Environmental<br>Sustainability                      | CE-703(C): Integrated<br>Waste Management         | Unit 1 to Unit 5                             |  |
| 9.     | Professional Ethics                                  | IT604: Intellectual<br>Property Right             | Unit 1 to Unit 5                             |  |

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

### 1.3.2

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

#### Response: 51.19

### 1.3.2.1 Number of students undertaking project work/field work / internships

Response: 1400

| 1   |               |
|---|---------------|
| File Description                            | Document      |
| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | View Document |

### **1.4 Feedback System**

#### 1.4.1

Institution obtains feedback on the academic performance and ambience of the institution from various stakeholders, such as Students, Teachers, Employers, Alumni etc. and action taken report on the feedback is made available on institutional website

**Response:** A. Feedback collected, analysed, action taken& communicated to the relevant bodies and feedback hosted on the institutional website

| File Description  | Document      |
|---|---------------|
| Feedback analysis report submitted to appropriate bodies  | View Document |
| At least 4 filled-in feedback form from different<br>stake holders like Students, Teachers, Employers,<br>Alumni etc. | View Document |
| Action taken report on the feedback analysis  | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |
| Link of institution's website where<br>comprehensive feedback, its analytics and action<br>taken report are hosted    | View Document |

### **Criterion 2 - Teaching-learning and Evaluation**

### 2.1 Student Enrollment and Profile

### 2.1.1

### **Enrolment percentage**

Response: 95.1

# 2.1.1.1 Number of seats filled year wise during last five years (Only first year admissions to be considered)

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 1085    | 943     | 865     | 650     | 725     |

### 2.1.1.2 Number of sanctioned seats year wise during last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 1050    | 930     | 864     | 762     | 882     |

| File Description  | Document      |
|---|---------------|
| Institutional data in the prescribed format   | View Document |
| Final admission list as published by the HEI and<br>endorsed by the competent authority   | View Document |
| Document related to sanction of intake from<br>affiliating University/ Government/statutory body<br>for first year's students only. | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |

### 2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

**Response:** 83.16

2.1.2.1 Number of actual students admitted from the reserved categories year wise during last five years (Exclusive of supernumerary seats)

|  |  |  |                                       | I                          |
|--|--|--|---------------------------------------|----------------------------|
| 2022-23  | 2021-22  | 2020-21                                    | 2019-20                               | 2018-19                    |
| 489  | 486  | 338  | 242                                   | 311                        |
| 2 1 2 2 <b>Numb</b> a                                | r of soots opermorize  | d for recorded                             | potogomy og por COI/S                 | State Govt rule year wise  |
| luring the last                                      |  | u ioi reserveu (                           | allegory as per GOI/ S                | state Govt fulle year wise |
| 2022-23  | 2021-22  | 2020-21                                    | 2019-20                               | 2018-19                    |
| 525  | 465  | 432  | 381                                   | 441                        |
| File Descriptio                                      | <b>n</b><br>a in the prescribed fo   | ormat                                      | Document       View Document          |                            |
| Final admission                                      | a in the prescribed for<br>list indicating the ca<br>HEI and endorsed  | ategory as                                 | View Document           View Document |                            |
| competent authors                                    | ority.   | ·  |                                       |                            |
| Central Govern<br>categories(SC,S<br>considered as p | unication issued by s<br>ment indicating the r<br>ST,OBC,Divyangjan,<br>er the state rule ( Tra<br>rovided as applicable | eserved<br>etc.) to be<br>inslated copy in | View Document                         |                            |
| Provide Links f                                      |  |  | View Document                         |                            |

### **2.2 Student Teacher Ratio**

### 2.2.1

Student – Full time Teacher Ratio (Data for the latest completed academic year)

Response: 12.84

### 2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experiences and teachers use ICT- enabled tools including online resources for effective teaching and learning process

### **Response:**

Institute's inclusive policy on equity & learner-centric approach enables students with diverse background to get admitted and hence there are variations in the levels of learning, especially for the students from rural areas. The student centric pedagogic methods of TIT- E provide additionally an inventory of learning methods to its students and scholars with ICT enriched learning/blended learning/ virtual learning/ augmented learning etc. The life-long learning by participation is addressed by organizing workshop, seminars, guest lectures, interactive sessions, industry visits time to time in each semester, The use of audio/video aids in classrooms, library etc, is a common teaching feature at Institute.

For the experiential methods to ensure the learning enhancement, the Institute has the active learning labs and works with and for diversified group of students, preparing them to be adaptable and agile in rapidly changing environment, developing ethical leaders, using experiential learning inside and outside the classroom.

Participative learning methods address the art of thinking independently working together, and by adopting different pedagogies and teaching methodologies to support excellence in teaching / learning.

Institute believes in all round development of students through following innovative teaching learning methodologies:

| S.No. | Session | Type of activity                 | No. of Activity | Average<br>participants | of |
|-------|---------|----------------------------------|-----------------|-------------------------|----|
| 1.    | 2022-23 | Experiential learning            | g20             | 80                      |    |
|       |         | Participative<br>learning        | 43              | 75                      |    |
|       |         | Problem solving<br>methodologies | g30             | 85                      |    |
| 2.    | 2021-22 | Experiential learning            | g10             | 55                      |    |
|       |         | Participative<br>learning        | 35              | 75                      |    |
|       |         | Problem solving<br>methodologies | g25             | 87                      |    |

The summary of all above activities is appeared in below mentioned table:-

| 2020-21 | Experiential learning            | 10  | 75   |  |
|---------|----------------------------------|---|--|--|
|         | Participative<br>learning        | 34  | 80   |  |
|         | Problem solving<br>methodologies | 15  | 85   |  |
| 2019-20 | Experiential learning            | 18  | 82   |  |
|         | Participative<br>learning        | 54  | 77   |  |
|         | Problem solving<br>methodologies | 30  | 90   |  |
| 2018-19 | Experiential learning            | 12  | 67   |  |
|         | Participative<br>learning        | 45  | 79   |  |
|         | Problem solving<br>methodologies | 25  | 84   |  |
|         | 2019-20                          | Image: Second | Participative<br>learning       34         Participative<br>learning       34         Problem solving 15<br>methodologies       15         2019-20       Experiential learning 18         Participative<br>learning       54         Problem solving 30<br>methodologies       54         Problem solving 30<br>methodologies       12         Participative<br>learning       45         Participative<br>learning       45         Problem solving 25       10 | Image: solution of the solutio |

It has been noted after feedback of participants on above methods being adopted at Institute that they were able to perform in a better way after completing all activity. The impact of such activities was analysed on the PO attainment of all department. The attainment of POs were noted with gradual increment in amount as shown in below mentioned table:-

### PO Attainment table:-

| Session          | PO1  | PO2  | PO3  | PO4  | PO5  | PO6  | PO7  | PO8  | PO9  | PO10 | PO11 | PO12 |
|------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| 2022-2<br>3      | 2.11 | 1.91 | 1.85 | 1.81 | 1.82 | 1.77 | 1.71 | 1.82 | 1.85 | 1.83 | 1.74 | 1.69 |
| 2021-2<br>2      | 1.93 | 1.88 | 1.72 | 1.72 | 1.59 | 1.64 | 1.78 | 1.67 | 1.76 | 1.67 | 1.65 | 1.51 |
| 2020-2<br>1      | 1.72 | 1.46 | 1.22 | 1.19 | 0.90 | 1.11 | 1.10 | 1.18 | 1.54 | 1.30 | 0.77 | 1.13 |
| -<br>2019-2<br>0 | 1.56 | 1.17 | 1.12 | 0.97 | 0.86 | 0.96 | 0.77 | 1.30 | 1.35 | 1.44 | 0.76 | 1.01 |

### Summary of student centric methods

| S. No. | Type of method                | Total no. of activities of students |  |
|--------|-------------------------------|-------------------------------------|--|
|        |                               | in last 5 years                     |  |
| 1      | Experiential learning         | 55                                  |  |
| 2      | Participative learning        | 150                                 |  |
| 3      | Problem solving methodologies | 100                                 |  |

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

### 2.4 Teacher Profile and Quality

### 2.4.1

Percentage of full-time teachers against sanctioned posts during the last five years

### Response: 100

### 2.4.1.1 Number of sanctioned posts year wise during the last five years

| 2018-19 | 2019-20 | 2020-21 | 2021-22 | 2022-23 |
|---------|---------|---------|---------|---------|
| 218     | 198     | 204     | 212     | 213     |
| <br>218 | 198     | 204     | 212     | 213     |

| File Description  | Document      |
|---|---------------|
| Sanction letters indicating number of posts<br>sanctioned by the competent authority (including<br>Management sanctioned posts) | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |

### 2.4.2

# Percentage of full time teachers with NET/SET/SLET/ Ph. D./D.Sc. / D.Litt./L.L.D. during the last five years (consider only highest degree for count)

### Response: 11.29

# 2.4.2.1 Number of full time teachers with NET/SET/SLET/Ph. D./ D.Sc. / D.Litt./L.L.D year wise during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 41      | 25      | 19      | 18      | 15      |

| File Description   | Document             |
|--|----------------------|
| List of faculties having Ph. D. / D.Sc. / D.Litt./<br>L.L.D along with particulars of degree awarding<br>university, subject and the year of award per<br>academic year. | <u>View Document</u> |
| Institution data in the prescribed format  | View Document        |
| Copies of Ph.D./D.Sc / D.Litt./ L.L.D awareded by<br>UGC recognized universities   | View Document        |
| Provide Links for any other relevant document to support the claim (if any)  | View Document        |

### **2.5 Evaluation Process and Reforms**

### 2.5.1

Mechanism of internal/ external assessment is transparent and the grievance redressal system is time- bound and efficient

**Response:** 

#### Academic Assessment:

Institute believes that evaluation is for further improvement as teaching-learning and evaluation are supplementary and complimentary to each other.

Institute practices a well framed course evaluation plan for continuous evaluation of students as given in following table

#### 1. Components of course evaluation plan and their contribution

|      |               | ,             | Theory Course      |              |           |               |
|------|---------------|---------------|--------------------|--------------|-----------|---------------|
| S No | Evaluation    | Frequency     | <b>CO</b> Coverage | Scaling of   | Max Marks | Marks         |
|      | Parameter     |               |                    | Marks        | Assigned  | obtained      |
| 1    | Mid Sem Test  | MST-I(20      | CO1, CO2           | 4 Marks per  | 20        | As per actual |
|      |               | Marks)        | (Each CO of        | CO           |           |               |
|      |               |               | 10 Marks)          |              |           |               |
|      |               | MST-II(30     | CO3, CO4,          | 4 Marks per  |           |               |
|      |               | Marks)        | CO5(Each CO        | CO           |           |               |
|      |               |               | of 10 Marks)       |              |           |               |
| 2    | Assignment/T  | 5 Assignments | One Assignme       | 2 Marks per  | 10        | As per actual |
|      | heory Quiz    | /Quiz of 10   | nt/Quiz from       | CO           |           |               |
|      |               | marks Each    | each CO            |              |           |               |
| 3    | University    | At the End of | CO1, CO2,          | 14 Marks per | 70        | As per actual |
|      | Examination   | Semester      | CO3, CO4,          | CO           |           |               |
|      |               |               | CO5                |              |           |               |
|      |               |               | Lab Course         |              |           |               |
| S No | Evaluation    | Frequency     | <b>CO</b> Coverage | Scaling of   | Max Marks | Marks         |
|      | Parameter     |               |                    | Marks        | Assigned  | obtained      |
| 1    | Lab work      | Every week    | CO1, CO2,          | 4 Marks per  | 20        | As per actual |
|      |               | during        | CO3, CO4,          | CO           |           |               |
|      |               | semester      | CO5                |              |           |               |
| 2    | External Viva | At the End of | CO1, CO2,          | 6 Marks per  | 30        | As per actua  |
|      |               | Semester      | CO3, CO4,          | CO           |           |               |
|      |               |               | CO5                |              |           |               |

#### **1. Assessment tools and related attributes**

| <b>Course Type</b> | Assessment Tool          | Assessment Criteria     | Data Collection       |
|--------------------|--------------------------|-------------------------|-----------------------|
| Theory             | Mid Semester Test I & II | Based on student        | Twice in a semester   |
|                    |                          | performance in internal |                       |
|                    |                          | Exams                   |                       |
|                    | Assignments/Quiz         | Based on student        | Minimum one assignmen |
|                    |                          | performance in          | from each CO          |
|                    |                          | performance m           | nom each CO           |

|         |                               | Assignment/Quiz            |                          |
|---------|-------------------------------|----------------------------|--------------------------|
|         | University Exams for          | Based on student           | Once in a semester       |
|         | Theory                        | performance in University  |                          |
|         |                               | Exam                       |                          |
| Lab     | Lab Work Sessional            | Based on Student           | Every turn of laboratory |
|         |                               | performance in labs        | performance              |
|         | Lab Assignment/Quiz           | Based on student           | Once in a semester       |
|         |                               | performance in Lab         |                          |
|         |                               | Assignment/Quiz            |                          |
|         | University Exam for Lab       | Based on student           | Once in a semester       |
|         |                               | performance in University  |                          |
|         |                               | Exam                       |                          |
| Project | University Examination        | Based on student           | Once in a semester       |
|         |                               | performance in University  |                          |
|         |                               | Exam                       |                          |
|         | <b>Internal Presentations</b> | Based on student           | Twice in a semester      |
|         |                               | performance in internal    |                          |
|         |                               | presentations for projects |                          |

As an important stakeholder, the student is given all opportunity to raise their concerns and grievances with regard to evaluation as per the following.

#### 1. Redressal of student grievances

#### **Internal Grievances**

- 1. Redressal of Academic Grievances pertaining to internal evaluation : HOD/Dean(A)/Director
- 2. Redressal of Academic Grievances pertaining to teaching learning process : Tutor Guardian (TG)/Course Faculty
- 3. Redressal of Non Academic Grievances (Internal/External) : Dean Student Welfare

#### **External Grievances**

**Redressal of grievances pertaining to examination**: All grievances pertaining to examination like filling of examination form, exam seat allotment, results, revaluations etc. are coordinated / addressed by examination section of the Institute under the supervision of examination superintend.

**Redressal of external grievances with university (other than examination):** All other grievances of students pertaining to university like result queries, printing mistakes of mark sheets, corrections in name and address etc also taken care by the examination section of Institute as per policy of university.

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

#### 2.6 Student Performance and Learning Outcomes

#### 2.6.1

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website

#### **Response:**

Technocrats Institute of Technology (Excellence) is affiliated to Rajeev Gandhi Proudyogiki Vishwavidyalaya, Bhopal for it's engineering (UG and PG) and computer application programme whereas the PG programme in Business Administration is affiliated to Barkatullah University Bhopal. The programme curriculum is as per the scheme and syllabus of affiliating universities. The curriculum maintains the balance in the composition of basic science, humanities, professional courses and their distribution in core and elective offerings.

#### A) Programme Outcomes (PO):

Program outcomes are statements that describe what students are expected to know and be able to do upon graduating from the program.

» These relate to the skills, knowledge, analytical ability, attitude, and behavior that students acquire through the program at the end of 2/4 years.

» The POs essentially indicate what the students can do from the knowledge acquired by them during the program.

» As such, POs define the professional profile of a graduating professional.

#### i) PO for UG engineering programme :

NBA has defined 12 POs for engineering and computer application programme; **attached as attachment** - **A** 

#### ii) . PO for PG engineering programme:

NBA has defined three POs for a graduate of PG Engineering Programme; attached as attachment -B

#### iii) POs of master of business administration; attached as attachment -C

**B)** Course Outcomes (COs):

#### Guidelines for defining the statements of Course Outcome

- COs are the statements of Knowledge/ Skills/ Attitude that students are expected to know, understand and perform, as a result of learning experiences. It is a detailed description of what a student must be able to do at the end of a course.
- Faculty member handling a particular course is responsible for defining Course Outcomes (COs) and mapping of COs with POs for his/her course in consultation with the fellow faculty teaching the same course.
- COs defined by faculty members and its mapping with POs for that particular course is validated by Departmental Advisory Committee (DAC).
- While defining the COs; the entire course content in each module of a course is properly considered to prepare narrower and measurable statements.
- Focus of course faculty remains on the learning that results in students from the course rather than describing activities or lessons that are in the course.
- The keywords used to define COs are based on suitable Bloom's Taxonomy level.
- Well-written COs facilitates the course faculty in measuring the achievement of the COs at the end of the semester. It also helps the course faculty in designing suitable delivery and assessment methods to achieve the designed attainment level of COs.

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

#### 2.6.2

Attainment of POs and COs are evaluated.

Explain with evidence in a maximum of 500 words

**Response:** 

Attainment of POs and COs are evaluated.

Course outcomes of a course are the attributes that the students are expected to achieve after completing the course. The assessment results are used for continuous quality improvement and it is also used to improve the teaching and learning process in a particular course.

Institutional process and methods for direct CO assessment/attainment is based upon following CO assessment tools and related attributes

| Course Type | Assessment Tool          | Assessment Criteria | Data Collection     |
|-------------|--------------------------|---------------------|---------------------|
| Theory      | Mid Semester Test I & II | Based on student    | Twice in a semester |
|             |                          |                     |                     |

|         |                         | performance in internal<br>Exams |                          |
|---------|-------------------------|----------------------------------|--------------------------|
|         | Assignments/Quiz        | Based on student                 | Minimum one assignment   |
|         |                         | performance in                   | from each CO             |
|         |                         | Assignment/Quiz                  |                          |
|         | University Exams for    | Based on student                 | Once in a semester       |
|         | Theory                  | performance in University        |                          |
|         |                         | Exam                             |                          |
| Lab     | Lab Work Sessional      | Based on Student                 | Every turn of laboratory |
|         |                         | performance in labs              | performance              |
|         | Lab Assignment/Quiz     | Based on student                 | Once in a semester       |
|         |                         | performance in Lab               |                          |
|         |                         | Assignment/Quiz                  |                          |
|         | University Exam for Lab | Based on student                 | Once in a semester       |
|         |                         | performance in University        |                          |
|         |                         | Exam                             |                          |
| Project | University Results      | Based on student                 | Once in a semester       |
|         |                         | performance in University        |                          |
|         |                         | Exam                             |                          |
|         | Internal Presentations  | Based on student                 | Twice in a semester      |
|         |                         | performance in internal          |                          |
|         |                         | presentations for projects       |                          |

#### 1. Institutional process and methods for PO and PSO attainment

Technocrats Institute of Technology (Excellence), is considering following two types of assessment tools for computing attainment of Program Outcomes (POs) and Program Specific Outcomes (PSOs):

1. Direct Assessment Tool

2. Indirect Assessment Tool

#### 1. Direct Assessment Tool

These tools are used to assess the knowledge acquired and learning abilities of students. The assessment is carried out with the help of external and internal assessment processes conducted during the semester.

#### 1. Indirect Assessment Tool

Indirect methods of assessment are based on ascertaining opinion of stakeholders which include graduating students, alumni and employer. Feedback survey questions are designed to assess the attainment of POs and PSOs. The surveys conducted for indirect assessment of POs and PSOs are as follows:

1. Program Exit Survey (PES)

2. Parent's feedback Survey (PS)

#### 3. Alumni feedback Survey (AS)

4. Employers' feedback Survey (ES

#### Weightage of PO and PSO assessment tools

| Types of Assessment | Assessment Tools                    |                                 |  |
|---------------------|-------------------------------------|---------------------------------|--|
| Direct Assessment   | External Assessment                 | End Semester Theory Examination |  |
|                     |                                     | (Weightage 70%)                 |  |
| (Weightage 80%)     |                                     | End Semester Practical          |  |
|                     |                                     | Examination (Weightage 60%)     |  |
|                     |                                     | End Semester Project Evaluation |  |
|                     |                                     | (Weightage 70%)                 |  |
|                     | Internal Assessment                 | Mid-Sem Tests (Weightage        |  |
|                     |                                     | 66.67%)                         |  |
|                     |                                     | Assignments/Tutorial (Weightage |  |
|                     |                                     | 33.33%)                         |  |
|                     |                                     | Lab Work (Weightage 40%)        |  |
|                     |                                     | Industrial Training/Internship  |  |
|                     |                                     | (Weightage 100%)                |  |
|                     |                                     | Field Visit/Case Study/Seminar  |  |
|                     |                                     | Work (Weightage 100%)           |  |
|                     |                                     | Project Work (Weightage 30%)    |  |
| Indirect Assessment | Program Exit Survey (Weightage 50%) |                                 |  |
|                     | Parent's feedback Survey (W         | Weightage 15%)                  |  |
| (Weightage 20%)     | Alumni feedback Survey (W           | Veightage 15%)                  |  |
|                     | Employers' feedback Surve           | y (Weightage 20%)               |  |

#### **PO /PSO Attainment Targets**

| PO/PSO target for assessment of attainment | 80% of highest occurrence value i.e. 3 in CO-    |
|--|--|
|  | PO/PSO mapping as target for all PO/PSO. (80% of |
|  | 3 = 2.4 ,target for all PO/PSO attainment        |
|  | computation)                                     |
|  |  |

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

#### 2.6.3

Pass percentage of Students during last five years (excluding backlog students)

**Response:** 83.97

2.6.3.1 Number of final year students who passed the university examination year wise during the

#### last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 522     | 572     | 641     | 737     | 733     |

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

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 742     | 727     | 732     | 816     | 800     |

| File Description  | Document             |
|---|----------------------|
| Institutional data in the prescribed format   | View Document        |
| Certified report from Controller Examination of the affiliating university indicating pass percentage of students of the final year (final semester) eligible for the degree programwise / year-wise. | <u>View Document</u> |
| Annual report of controller of Examinations(COE) highlighting the pass percentage of final year students  | <u>View Document</u> |
| Provide Links for any other relevant document to support the claim (if any)   | View Document        |

#### 2.7 Student Satisfaction Survey

# 2.7.1 Online student satisfaction survey regarding teaching learning process Response: File Description Document Upload database of all students on roll as per 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 in the institution during the last five years (INR in Lakhs)

#### Response: 9.91

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

| 1 | File Description Upload supporting document |         |         | Document           View Document |      |         |
|---|---|---------|---------|----------------------------------|------|---------|
|   | 0   | 9.67354 | 0       | 0                                |      | .2375   |
|   | 2022-23                                     | 2021-22 | 2020-21 | 201                              | 9-20 | 2018-19 |

| Institutional data in the prescribed format | View Document |
|---|---------------|
|   |               |

#### **3.2 Innovation Ecosystem**

#### 3.2.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS),including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

#### **Response:**

Technocrats Institute of Technology (Excellence) has been working continuously for creating innovative environment and development of practices for the benefit for students, faculty members and society. Institute have created an ecosystem through MHRD's Institutional Innovation Council (IIC) to promote innovative research, Intellectual Property Right (IPR) and Technology transfer. Institute pays prominent attention and puts efforts to inculcate innovative thinking ability in the young students and motivate them to develop research environment.

In order to provide service to the society, various activities and initiatives has been taken up.

The institute has built an ecosystem for research, development and innovation by formation of Research development & Innovation Cell. The faculty members are encouraged by IQAC (Internal Quality Assurance Cell) to take up research activities utilizing the existing facility of the institute. The institute

has well structured setup of the Research development & Innovation Cell. This cell undertakes various coordinated activities for the career enhancement of students for fulfilment of different objectives like self-employment, start-up initiatives, collaboration with research institutions and other industrial manufacturing units. Industry oriented careers are enriched through various training programs throughout the session.

#### **Research Development & Innovation Cell**

The purpose of this cell is to develop their innovative skills and the Centre organizes training programs, seminars, and interactive sessions with successful entrepreneurs, innovative ideas competition to promote specialized knowledge in the fields of Information Technology.

The objectives of Research Development & Innovation Cell are: -

- Ensure and encourage student, faculty members participation in events related to entrepreneurship.
- Help in the execution of Business Plan and entrepreneurship.
- Serve as a strategic link between institute and industry. Provide opportunity for one-to-one interaction with a renowned technological institute.
- Opportunities to interact with Entrepreneurship Enthusiasts from all over the nation.
- Enhance professional knowledge, leadership, and communication skills of the students.
- To undertakes various activities to promote the culture of research and transfer of knowledge amongst its faculty members and under graduate and post graduate students.
- It encourages faculties and students to publish research papers in National and International Journals & Conferences.
- It encourages students and faculty members of the institute to visit renowned organizations. Research Events such as organizing International and National Conferences, Workshops, Faculty Development Programs, Guest Lectures, Seminars for faculty members and students to interact on research and innovation.
- This cell organizes conferences, symposium, and seminars, webinars and workshops regular basis on the relevant and current issues.
- This cell looks after the internships, expert lectures, and industrial visits.
- The institute has applied for active collaboration with Atal Community Innovation Centre (ACIC).

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

#### 3.2.2

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

#### **Response:** 78

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

| 2022-23                                   | 2021-22 | 2020-21 | 2019-20                | 2018-19 |
|---|---------|---------|------------------------|---------|
| 25  | 16      | 15      | 12                     | 10      |
|   |         |         |                        |         |
|   |         |         |                        |         |
| File Descriptio                           | n       |         | Document               |         |
| F <b>ile Descriptio</b><br>Upload support |         |         | Document View Document |         |

#### **3.3 Research Publications and Awards**

#### 3.3.1

Number of research papers published per teacher in the Journals notified on UGC care list during the last five years

#### Response: 0.48

3.3.1.1 Number of research papers in the Journals notified on UGC CARE list year wise during the last five years

| 19     25     29     35     65 | 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|--------------------------------|---------|---------|---------|---------|---------|
|                                | 19      | 25      | 29      | 35      | 65      |

| File Description  | Document             |
|---|----------------------|
| Link to the uploaded papers, the first page/full<br>paper(with author and affiliation details)on the<br>institutional website | <u>View Document</u> |
| Link to re-directing to journal source-cite website<br>in case of digital journals  | View Document        |
| Links to the papers published in journals listed in UGC CARE list or  | View Document        |
| Institutional data in the prescribed format   | View Document        |
| Provide Links for any other relevant document to support the claim (if any)   | View Document        |

#### 3.3.2

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: 0.18

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

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 3       | 11      | 13      | 17      | 19      |

| File Description   | Document      |
|--|---------------|
| List of chapter/book along with the links<br>redirecting to the source website   | View Document |
| Institutional data in the prescribed format  | View Document |
| Copy of the Cover page, content page and first<br>page of the publication indicating ISBN number<br>and year of publication for books/chapters | View Document |
| Provide Links for any other relevant document to support the claim (if any)  | View Document |

#### **3.4 Extension Activities**

3.4.1

## Outcomes of Extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues for their holistic development during the last five years.

#### **Response:**

Over the past five years, the extension activities carried out in the neighborhood community have yielded significant outcomes, impacting both the community and the students involved. These initiatives have played a crucial role in sensitizing students to various social issues, contributing to their holistic development.

One of the primary impacts of these extension activities has been the improvement of the overall wellbeing of the neighborhood community. Through initiatives such as health camps, awareness campaigns, and skill development workshops, residents have gained access to vital resources and information, leading to better health outcomes, increased employability, and enhanced quality of life. For instance, regular health camps conducted in collaboration with local healthcare professionals have facilitated early detection of health issues and promoted preventive measures, thereby reducing the incidence of diseases in the community. By actively engaging with members of the community and understanding their challenges, students have developed a deeper understanding of social issues such as poverty, inequality, and environmental degradation. This first-hand experience has sensitized them to the realities faced by marginalized groups and has motivated them to take action to address these issues. Through initiatives like community clean-up drives, food distribution programs, and educational support for underprivileged children, students have actively contributed to the welfare of the community, demonstrating their commitment to social change.

Moreover, the extension activities have provided students with valuable opportunities for experiential learning and personal growth. By stepping outside the confines of the classroom and actively participating in real-world projects, students have honed their leadership, communication, and problem-solving skills. They have learned to collaborate effectively with their peers and community members, navigate diverse perspectives, and adapt to unfamiliar situations. These experiences have not only enriched their academic learning but have also equipped them with the practical skills and competencies essential for success in their personal and professional lives.

Additionally, the engagement in extension activities has promoted cultural exchange and mutual understanding among diverse groups within the community. Through events such as cultural festivals, art exhibitions, and intercultural dialogue sessions, students have celebrated the rich diversity of their neighborhood and fostered a sense of inclusivity and belonging.

Furthermore, serving as ambassadors of social change, students have inspired their peers, family members, and local stakeholders to become more actively involved in community development efforts. They have raised awareness about pressing social issues and advocated for sustainable solutions, contributing to a culture of civic engagement and collective responsibility.

In conclusion, the extension activities carried out in the neighborhood community over the last five years have had a profound impact on both the community and the students involved. These initiatives have not only improved the well-being of residents but have also sensitized students to social issues, facilitated their holistic development, and fostered positive change at the individual, community, and societal levels. By continuing to prioritize community engagement and experiential learning, educational institutions can further cultivate socially responsible citizens who are equipped to address the complex challenges of the

21st century.

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

#### 3.4.2

### Awards and recognitions received for extension activities from government / government recognised bodies

#### **Response:**

Over the past five years, our extension activities in the neighborhood community have garnered significant recognition from government and government-recognized bodies for their impactful contributions to social welfare and community development. These awards and recognitions serve as testament to the dedication and effectiveness of our initiatives in addressing pressing social issues and fostering positive change.

These prestigious awards acknowledged our efforts in empowering marginalized communities and promoting social inclusion through various extension activities. Our initiatives, such as vocational training programs for persons with disabilities, advocacy campaigns for the rights of the elderly, and inclusive education initiatives for children from disadvantaged backgrounds, were commended for their effectiveness in addressing systemic barriers and empowering marginalized groups to lead dignified lives.

Additionally, our commitment to environmental sustainability and eco-conscious practices was recognized. Our initiatives, including tree planting drives, waste management campaigns, and renewable energy projects, were lauded for their positive impact on the local ecosystem and for inspiring environmental stewardship among residents.

Furthermore, our contributions to healthcare and public health were aimed at improving healthcare access, promoting preventive healthcare practices, and raising awareness about public health issues. Our health camps, vaccination drives, and awareness campaigns on topics such as hygiene, nutrition, and reproductive health were praised for their effectiveness in addressing health disparities and promoting community well-being.

Moreover, our commitment to education and youth empowerment aimed at enhancing educational opportunities, promoting lifelong learning, and fostering holistic development among youth in the neighborhood community. Our initiatives, such as after-school tutoring programs, scholarship schemes for deserving students, and career guidance workshops, were recognized for their impact in improving academic outcomes and empowering youth to realize their full potential.

In addition to government accolades, our extension activities have also received recognition from various

other government-recognized bodies and non-governmental organizations (NGOs). For instance, we were committed for our outstanding contributions to community development and social welfare. Similarly, our initiatives were featured in national and regional media outlets, further amplifying their impact and inspiring others to emulate our model of community engagement and social responsibility.

In conclusion, the awards and recognitions received for our extension activities from government and government-recognized bodies serve as validation of the effectiveness and impact of our initiatives in promoting social welfare, empowering marginalized communities, and fostering sustainable development. These accolades motivate us to continue our efforts towards creating positive change and inspiring others to join us in building a more equitable, inclusive, and sustainable society.

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

#### 3.4.3

Number of extension and outreach programs conducted by the institution through organized forums including NSS/NCC with involvement of community during the last five years.

#### **Response:** 52

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

| 2022-23 20 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|------------|---------|---------|---------|---------|
| 27 1       | 1       | 03      | 06      | 05      |

| File Description  | Document             |
|---|----------------------|
| Photographs and any other supporting document of relevance should have proper captions and dates.   | View Document        |
| Institutional data in the prescribed format   | View Document        |
| Detailed report for each extension and outreach<br>program to be made available, with specific<br>mention of number of students participated and the<br>details of the collaborating agency | <u>View Document</u> |
| Provide Links for any other relevant document to support the claim (if any)   | View Document        |

#### **3.5** Collaboration

#### 3.5.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years.

#### Response: 19

| File Description   | Document      |  |
|--|---------------|--|
| Summary of the functional<br>MoUs/linkage/collaboration indicating start date,<br>end date, nature of collaboration etc. | View Document |  |
| List of year wise activities and exchange should be provided   | View Document |  |
| List and Copies of documents indicating the<br>functional MoUs/linkage/collaborations activity-<br>wise and year-wise    | View Document |  |
| Institutional data in the prescribed format  | View Document |  |
| Provide Links for any other relevant document to support the claim (if any)  | View Document |  |

#### **Criterion 4 - Infrastructure and Learning Resources**

#### 4.1 Physical Facilities

#### 4.1.1

The Institution has adequate infrastructure and other facilities for,

- teaching learning, viz., classrooms, laboratories, computing equipment etc
- ICT enabled facilities such as smart class, LMS etc.

Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor), Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)

#### **Response:**

Technocrats Institute of Technology (Excellence), Bhopal with a vision to become a "Centre of Excellence" for quality education provides best of facilities in terms of infrastructure and physical facilities for quality teaching, learning, administrative & other activities so that the students can contribute in technological and socio-economic development of the nation. To accomplish our vision we provide following academic & other facilities at the institute.

- The Institute is spread over an area of 5.14 acres with lush green campus.
- The institute has a fully air conditioned indoor auditorium with seating capacity of 750, professional sound and lighting systems, screens, and multimedia projectors.
- The Institute has 46 ventilated class rooms out of which 25 are equipped with LCD projectors. 12 tutorial rooms are also available.
- 67 well-equipped Laboratories are established across all the departments. They contain all the latest equipments to help students learn with practical exposure.
- 07 ICT enabled seminars hall with a seating capacity ranging from 100 to 250 each with audiovisual facilities.
- 16 computer labs furnished with the latest systems and configurations..
- 2 Drawing Halls (60 seating capacity each)
- The institute owns a huge Central library on 908 sq. meter area with total seating capacity of 150. The library has a rich collection of 41401 books 120 print journals, 520 CD/DVDs, 860 e-Journals e-Books and also lecture videos from NPTEL. Library is administered by the Library Committee headed by a senior professor along with other senior faculty members and the library staff of the institute. It monitors, updates and utilizes library resources.
- All the laboratories contain equipments and instruments suiting the requirements of teaching and research.
- Institute's building and laboratories are well protected with fire safety devices.
- Canteen facility is available in the campus to provide good catering service to e staffs and students at low cost.
- 24 x 7 Security is provided to the entire campus including hostels. Adequate number of CCTV Cameras installed for surveillance.
- Boy's & Girls' Hostel with all facilities for comfortable living. Amenities like indoor games and recreation like TV/ reading rooms make students hostel life memorable.
- Girls' common room with all the facilities like a sanitary napkin vending machine.

- One medical dispensary with availability of a doctor, necessary staff & with first aid box & other medicines in case of any medical emergency.
- A well-equipped gymnasium facility with built up sports area of 750 sq. feet is available in the institute premises with all the equipments for physical fitness of students & staff.
- A playground which has facilities for all the outdoor games like cricket, football etc.
- The institute has adequate facilities to conduct different mega events in which 10000+ students can participate.
- An indoor playing area that contains facilities for all indoor games like chess, badminton, Carrom, Table Tennis etc.
- Yoga facility for enhancing wellness with a dedicated center and trained instructors for both students and staff.
- Fully equipped to facilitate career opportunities with experienced placement officers and corporate trainers.
- A fully furnished guest house within the campus premises for visiting faculty and guests.

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

#### 4.1.2

Percentage of expenditure for infrastructure development and augmentation excluding salary during the last five years

#### Response: 32.06

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

| 2022-23   | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|-----------|---------|---------|---------|---------|
| 558.50546 | 635.79  | 1.01    | 411.89  | 13.00   |

| File Description  | Document      |
|---|---------------|
| Institutional data in the prescribed format   | View Document |
| Audited income and expenditure statement of the<br>institution to be signed by CA for and counter<br>signed by the competent authority (relevant<br>expenditure claimed for infrastructure<br>augmentation should be clearly highlighted) | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |

#### 4.2 Library as a Learning Resource

#### 4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

#### **Response:**

The Library of institute is fully automated with RAMRAJ TECHNOLOGY Lib Tech Software with Bar Code System especially for searching, indexing, and issuing/returning records. Bar-Coding system enables effective management of library. For cataloguing, searching, user management, an OPAC (Online Public Access Catalogue) services has been created on terminals which provide information related to the availability of a particular book in the library, student and faculty can access this facility from their mobile phones also.

The library has adequate number of text books, reference books in the field of Engineering, Science, Management, Literature & Humanities, journals, CDs, DVDs, digital learning resources, online databases, digital library and newspapers etc. It has a total number of 40285 copies of books. There are 5047 titles, 3705 reference books, 120 journals & 04 newspapers. Our institute is a regular member of DELNET (Developing Library Software) by which library offers various service option including sharing of e-resources.

The library is wi-fi enabled with internet facility of 500 Mbps bandwidth. Library has the electricity backup using generator set of 125 KVA.

E-library provides collaborative search of all type of e-resources/on-line resources such as e-journals and books. Central library procured different type of e-books, online books for students and faculty via IP range in the campus. The different departments can also be accessing various types of e-books such as text books and reference books in the electronic form.

| Year    | Name of ILMS    | Nature of       | Version | Year of    |
|---------|-----------------|-----------------|---------|------------|
|         | Software        | Automation      |         | Automation |
| 2018-19 | LIBSYS          | Fully Automated |         | 2018       |
| 2019-20 | LIBSYS          | Fully Automated |         | 2018       |
| 2020-21 | LIBSYS          | Fully Automated |         | 2018       |
| 2021-22 | LIBSYS          | Fully Automated |         | 2018       |
| 2022-23 | Ramraj Lib Tech | Fully Automated |         | 2018       |

#### Key Features of Library Management System:

- **Category Management**: The LMS maintains a comprehensive list of categories, including books, journals, newspapers, magazines, etc., enabling users to easily navigate and access relevant resources. Thus enhances efficiency.
- **Book cataloguing**: LMS allows librarians to seamlessly update the library's collection, including pertinent information such as title, author, publisher, publication date, price, and purchase details.
- **Check-in/Check-out**: The LMS facilitates smooth check-in and check-out processes, enabling users to borrow and return materials efficiently.
- **Reporting**: It gives reports, such as the total number of issued books, returned books, book summaries, etc. It also identifies identifying the distribution of books to specific users, enhancing administrative oversight and decision-making.
- **Book Status Inquiry/pack facility**: Users can easily inquire about the status of a book, including its availability, location, and borrowing history. This feature enables patrons to make informed decisions when accessing library resources.
- **Digitalization**: The library provides access to databases of eBooks, e-Journals by using DELNET and other electronic resources through a well-equipped e-library. Users can access these resources seamlessly for educational and research purposes in a Wi-Fi-enabled environment.
- **Digital Library Resources**: The LMS offers access to a wide range of digital resources, including blogs from academics, biographies, dictionaries, competition exam preparation materials, and job portals. These resources enrich the learning and research experience, providing users with valuable information.

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

#### 4.3 IT Infrastructure

#### 4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet bandwidth within a maximum of 500 words

#### **Response:**

The institute regularly updates its IT facilities for maintaining efficiency, enhancing the learning experience, and ensuring that it remains competitive and relevant in the rapidly evolving digital landscape. With rapid advancements in technology, we regularly upgrade our IT infrastructure to support

modern pedagogical methods and facilitate a seamless educational experience.

The structure adopted to ensure the availability of both quality and quantity is as follows:

At the beginning of the academic year, a review is conducted to assess the need for updating or adding to the infrastructure stock, based on suggestions from the Head of the Departments. After reviewing the course requirements, student-to-computer ratio is calculated in accordance with AICTE norms. Budget allocation, the working condition of existing equipments, and the need for the latest computer configurations are also taken into consideration when determining infrastructure requirements.

The IT infrastructure is updated regularly. To maintain the computer systems, the institute enters into an Annual Maintenance Contract (AMC) to ensure the systems are always operational. The AMC is renewed at the beginning of the academic year for existing software, UPS, and generators. The institute has a total of 660 computers, which are regularly upgraded and interconnected through LAN. Currently, students have access to Core 2 Duo and Intel Core i3 processors. The computer labs are equipped with power backup, ensuring an uninterrupted power supply, supported by a dedicated 125 kVA diesel generator.

The institute currently has a dedicated leased line internet bandwidth of 500 Mbps with a 1:1 connectivity ratio. The internet service provider, Fibernet Solutions Pvt. Ltd, offers a high-fault-tolerance internet facility, which is available in ICT-enabled classrooms and laboratories. Following current trends, many students carry multiple Wi-Fi devices such as smart phones, tablets, and laptops. To accommodate these high-bandwidth devices, the institute provides 24x7 Wi-Fi facilities on campus for both faculty members and students. Separate Wi-Fi facilities are also available in the hostels. The institute offers a state-of-the-art e-learning platform that hosts e-notes and various learning resources. Additionally, we use an ERP system that consolidates all student information on a single platform, including student profiles, attendance records, marks history, contact details, and more. The library is also Wi- Fi enabled with large bandwidth (500 Mbps) internet facility.

We have upgraded to a PFSENSE firewall, which offers top-tier protection against threats such as crypto mining, bots, ransom wares, worms, breaches, and hacks. All students and faculty members have individual login profiles for internet access through the PFSENSE firewall. The institute features 28 ICT-enabled classrooms, each equipped with high-quality LCD projectors and screens. Additionally, the institute has 7 scanners and 32 printers to facilitate the teaching and learning process with ICT.

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

#### 4.3.2

#### **Student – Computer ratio (Data for the latest completed academic year)**

#### Response: 4.88

4.3.2.1 Number of computers available for students usage during the latest completed academic

#### year:

Response: 560

| Kesponse. 500   |                      |
|---|----------------------|
| File Description  | Document             |
| Purchased Bills/Copies highlighting the number of computers purchased                                     | View Document        |
| Extracts stock register/ highlighting the computers issued to respective departments for student's usage. | <u>View Document</u> |

#### 4.4 Maintenance of Campus Infrastructure

#### 4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years (INR in Lakhs)

**Response:** 30.36

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)

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 576.80  | 368.47  | 142.61  | 204.05  | 242.51  |

| File Description  | Document      |
|---|---------------|
| Institutional data in the prescribed format   | View Document |
| Audited income and expenditure statement of the<br>institution to be signed by CA for and counter<br>signed by the competent authority (relevant<br>expenditure claimed for maintenance of<br>infrastructure should be clearly highlighted) | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |

#### **Criterion 5 - Student Support and Progression**

#### **5.1 Student Support**

#### 5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

#### Response: 49.23

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and non-government bodies, industries, individuals, philanthropists during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 1343    | 1349    | 1310    | 1215    | 1296    |

| File Description  | Document             |
|---|----------------------|
| Year-wise list of beneficiary students in each scheme duly signed by the competent authority.                               | View Document        |
| Upload Sanction letter of scholarship and free ships (along with English translated version if it is in regional language). | <u>View Document</u> |
| Upload policy document of the HEI for award of scholarship and freeships.   | View Document        |
| Institutional data in the prescribed format   | View Document        |

#### 5.1.2

Following capacity development and skills enhancement activities are organised for improving students' capability

Soft skills
 Language and communication skills
 Life skills (Yoga, physical fitness, health and hygiene)
 ICT/computing skills

Response: A. All of the above

| File Description   | Document             |
|--|----------------------|
| Report with photographs on Programmes /activities<br>conducted to enhance soft skills, Language and<br>communication skills, and Life skills (Yoga,<br>physical fitness, health and hygiene, self-<br>employment and entrepreneurial skills) | <u>View Document</u> |
| Report with photographs on ICT/computing skills enhancement programs   | View Document        |
| Institutional data in the prescribed format  | View Document        |

#### 5.1.3

Percentage of students benefitted by guidance for competitive examinations and career counseling offered by the Institution during the last five years

Response: 29.71

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

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 747     | 746     | 751     | 846     | 840     |

| File Description                            | Document      |
|---|---------------|
| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | View Document |

#### 5.1.4

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

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

**Response:** A. All of the above

| File Description   | Document      |
|--|---------------|
| Proof w.r.t Organisation wide awareness and<br>undertakings on policies with zero tolerance  | View Document |
| Proof related to Mechanisms for submission of online/offline students' grievances  | View Document |
| Proof for Implementation of guidelines of statutory/regulatory bodies  | View Document |
| Details of statutory/regulatory Committees (to be notified in institutional website also)  | View Document |
| Annual report of the committee motioning the activities and number of grievances redressed to prove timely redressal of the grievances | View Document |

#### **5.2 Student Progression**

5.2.1

Percentage of placement of outgoing students and students progressing to higher education during the last five years

Response: 57.51

5.2.1.1 Number of outgoing students placed and / or progressed to higher education year wise during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 398     | 386     | 448     | 481     | 458     |

#### 5.2.1.2 Number of outgoing students year wise during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 735     | 720     | 731     | 794     | 795     |
| /35     | 720     | /31     | /94     | 195     |

| File Description   | Document             |
|--|----------------------|
| Number and List of students placed along with<br>placement details such as name of the company,<br>compensation, etc and links to Placement order(the<br>above list should be available on institutional<br>website)   | <u>View Document</u> |
| List of students progressing for Higher Education,<br>with details of program and institution that they<br>are/have enrolled along with links to proof of<br>continuation in higher education.(the above list<br>should be available on institutional website) | <u>View Document</u> |
| Institutional data in the prescribed format  | View Document        |

#### 5.2.2

Percentage of students qualifying in state/national/international level examinations during the last five years

#### Response: 1.25

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

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 0       | 3       | 1       | 6       | 10      |

| File Description   | Document      |
|--|---------------|
| List of students qualified year wise under each<br>category and links to Qualifying Certificates of the<br>students taking the examination | View Document |
| Institutional data in the prescribed format  | View Document |

#### **5.3 Student Participation and Activities**

#### 5.3.1

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

#### **Response:** 33

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

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 9       | 10      | 1       | 7       | 6       |
|         | ·       |         | ·       |         |
|         |         |         |         |         |

| File Description   | Document      |
|--|---------------|
| Upload supporting document                                   | View Document |
| list and links to e-copies of award letters and certificates | View Document |
| Institutional data in the prescribed format                  | View Document |

#### 5.3.2

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

#### Response: 20.2

5.3.2.1 Number of sports and cultural programs in which students of the Institution participated year wise during last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 30      | 18      | 16      | 20      | 17      |

| File Description                            | Document      |
|---|---------------|
| Upload supporting document                  | View Document |
| Institutional data in the prescribed format | 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:**

The Alumni of Technocrats Institute of Technology (Excellence) have been supportive and provide contributions voluntarily to their alma mater. This has been a major feature for the development of the organization. By establishing channels that can facilitate closer ties among the alumni, students, faculty members and staff, it provides benefits in enriching the student's experience while being at the institute and gets motivated by the alumni's expertise.

The institute has registered alumni association society under section 44 of the Madhya Pradesh Societies Registration Act, 1973. The main objectives of the alumni association are as follows:

1.To bring together all the Alumni and the faculty members of Technocrats institute of Technology (Excellence) to share their experiences with each other.

2.To maintain the database of all the alumni of the college.

3.To provide guidance and support to the present students in their endeavours for better employment and higher studies.

4. To encourage campus placements through Alumni working in reputed industries in India and abroad.

5.To get valuable feedback/suggestions of Alumni in the overall development of the college.

6.To publish periodical magazines with valuable information to the faculty members, students and alumni.

Alumni Meet:

The Alumni Association of TIT(E) in coordination with the Director organizes alumni meet almost every year. Sometimes these meets are fully sponsored by alumni themselves. Alumni Meet conducted on 18 March 2023 at The Pint Room, New Delhi was sponsored by our Alumni Mr. Arpit Sharma (CS,2019 passout).

Feedback:-

Traditionally, TIT(E) has been taking feedback of the alumni as and when it is possible on all its activities including curriculum and infrastructure.

Motivational Talk:-

A Motivational Talk was conducted by Alumnus Mr. Ankit Magardhe from CS branch (2011 passout) on 11 December 2018. This session was for first year student's career growth. An interactive Motivational session took by our proud Alumni Anugrah Mishra (ME, 2017 Passout) who is the Deputy Manager in NTPC, Singrauli on 28th September 2021.

Career Guidance Webinar:-

An interactive Webinar was organized by our proud Alumni, Ms. Shalini Singh from EC branch (2019

passout) on 23 July, 2022. A Career Guidance Webinar in Civil Engineering was conducted by our Alumni, Mr. Shubham Singh Rajpoot (CE,2017 passout) on 29 May 2021 working in IOCL, Gujrat.

Expert lecture:-

An Expert lecture on "SAP Basis" was delivered by Alumni Mr. Mohit Kumar (EC,2018 Passout) on 09 June, 2024. An interactive session on "Why Python Why not Java" was conducted on 11 Feb 2021 by alumni "Ms. Pooja Devi" passed out from 2019 batch (EX).

Workshops:-

Technocrats Institute of Technology (Excellence) conducted three days workshop on "Python" under the Alumni Activity from 8 to 10 January 2020. Alumni Ms. Archy Gupta (2017 batch,CS) took the session working as a Software Quality Assurance Engineer in Google.

Alumni Contributions:-

The alumni of TIT(E) have been meaningfully contributed in terms of sponsoring the functions, donating their books to needy students and various placement activities.

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

#### **Criterion 6 - Governance, Leadership and Management**

#### 6.1 Institutional Vision and Leadership

#### 6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

**Response:** 

Vision

To become a "Centre of Excellence" for quality education in the field of engineering, research and management so as to produce globally competent and socially responsible professionals, who can contribute in technological and socio-economic development of the nation as a whole and region in particular.

#### Mission

M.1: To educate students with deep professional knowledge through innovative teaching learning process and to make them aware of cutting-edge technology so as to become capable of understanding and addressing the issues of society, state and the country.

M.2: To create in- house facilities for research and innovation to provide solution to the industry problems.

M.3: To inculcate right human values and professional ethic, leadership qualities, communication and entrepreneurship skills in professionals to meet the need of society.

#### Governance and Leadership

Philosophy of Governance aims at ethical utilization of resources, and intellectual capital for technical overall development of the students and community. Board of Governors of institute is the supreme administrative body. The Governance of Technocrats Institute of Technology (Excellence) is a reflection of successful leadership in tune with the vision and mission of the institution as it includes all the stakeholders.

#### **Institutional Practices**

Innovative Teaching-Learning Practices towards OBE: Institute is committed to participate in multidimensional development of country through the innovative teaching-learning process. Flexible in learning, Collaborative learning, and skill-based practices to achieve the goals of outcome-based education (OBE). Which help students develop employability skills. The Institute focus on all around growth of students & faculty members with the help of participative, career training, curricular, co-curricular & extra-curricular activities leading towards a true professional with ethical values.

Institute follows the instruction of affiliating university ordinance 4(D) 2020 for implementation of New Education Policy for all course as implemented from 2023-24 by university.

#### Sustained institutional growth

Institution has made significant strides in terms of its infrastructure, academic programs, faculty and student strength. The Governing Body comprises eminent personalities from the Society, Academicians, Faculty representatives, State Government & University representatives for the smooth conduct of all institutional activities to meet the vision and mission of the institute.

#### Decentralization, Participation in Institutional Governance and Institutional perspective Plan.

The Institution strongly believes in participative leadership and delegation of power and authority at various levels. Governance and leadership are highly supportive and provides the necessary infrastructure to achieve the goals by short term and long-term perspective plan providing necessary support and efficient human resource in the form of faculty members.

The IQAC under the chairpersonship of the Director along with the HODs and faculty members actively involved in developing perspective plan through brainstorming, keeping in mind the vision and mission of the institute.

Various committees, cells and councils have been constituted such as Internal Quality Assurance Committee, Academic Council, Anti-Raging Committee Anti-sexual harassment Committee for smooth functioning of the institute.

The institute has a Perspective plan to develop in a systematic manner. The Plan is prepared for the development up to 2028 through participation of stakeholders considering vision plan of each department and feedback received from stakeholders.

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

#### **6.2 Strategy Development and Deployment**

#### 6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies is effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

**Response:** 

Institutional Perspective Plan effectively deployment.

In line with its vision statement, the institute has developed a perspective plan for five years. The major activities included in the perspective plan are academic excellence, teaching learning & evaluation process, research & development, infrastructure, learning resources, improved placement in core sector, facilities, engagement with alumni, industry & society, Accreditation by National Bodies.

The institutions based on the perspective plan is governed by coordination of different departments, committees and cell under the banner of IQAC. IQAC discusses the institutional policy through the innovative teaching-learning practices for the implementation of outcome base education (OBE) and intensification of campus placements, in order to develop required skill-set among all students and to develop relationship with promising companies. The training and placement cell has been constantly conducting various activities focussing on training and placement of the students.

#### Administrative setup

The Director is the overall administrative and academic head of the Institute. Director supervises the activities of the Institute for its smooth functioning and to act as bridge between staff of Institute and the Board of Governors.

The academic body consisting of HODs, Faculty Members and lab instructors work for overall academic ambience of the Institute. The administrative part is supported by Director, T&P cell, Dean academics, Dean student welfare, Librarian and Exam Superintendent.

#### Appointments and Service Rules, Procedures, etc.

Faculty selection procedure:

1. Institute shall conduct interview for selections of Assistant Professor/Associate Professor /Professor in all the discipline as per guideline /Procedure of AICTE / University where a selection committee constituted as per Code-30 (RGPV, Bhopal) & Code-28 (Barkatullah University, Bhopal) for selection of faculty.

2. Advertisement regarding recruitment / appointment of faculty as mentioned at no.1 shall be published in national level Hindi and English newspapers.

3. In case selection committee as per AICTE & university norms could not be formed then selection shall be through internal committee (management). In due course of time all such appointment shall be approved by duly constituted selection committee as per university norms.

Institution has also framed service rules, policies, procedures, and promotional policies, which are well documented in Service Rule Manual of Institute (3rd edition). The service rules are provided to all employees newly joining in the Institute. Amendments to service rules are done from time to time to ensure effective HR policy as per the need.

| File Description   | Document      |
|--|---------------|
| Upload Additional information  | View Document |
| Institutional perspective Plan and deployment documents on the website | View Document |
| Provide Link for Additional information                                | View Document |

#### 6.2.2

#### Institution implements e-governance in its operations

Administration
 Finance and Accounts
 Student Admission and Support
 Examination

#### Response: A. All of the above

| File Description   | Document      |
|--|---------------|
| Institutional expenditure statements for the budget<br>heads of e-governance implementation ERP<br>Document                        | View Document |
| Annual e-governance report approved by the<br>Governing Council/ Board of Management/<br>Syndicate Policy document on e-governance | View Document |
| Provide Links for any other relevant document to support the claim (if any)  | View Document |

#### **6.3 Faculty Empowerment Strategies**

#### 6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

#### **Response:**

The institute follows a transparent system of performance appraisal for teaching and non-teaching staff. The head of their respective department analysis the performance of the employees of their respective department and make recommendations in the prescribed Faculty appraisal pro-forma. Systematic evaluation of the performance staff /employee is done to understand the ability of a person for his/her growth and development. The faculty appraisal is based on following.

• Teaching, Learning & Evaluation

- Co-curricular, Extension,
- Professional Development Research & Academic Contribution
- Behavioral Skills and Values
- Student Feedback

TIT-Excellence is dedicated to making its workplace the "favorable place to work" by integrating all employee in its growth and development and encourage them to work efficiently in this ecofriendly environment. Human resource acts as a backbone for teaching and non-teaching's welfare. The welfare measures are continuously reviewed in various meetings of IQAC. The followings are the effective welfares for teaching and non-teaching staff of the institute.

#### Effective welfares for teaching and non-teaching staff

- 1. Duty leave, medical leave and earned leave.
- 2. Special Leaves are granted to the faculty members who are pursuing Ph.D.

3.C-off is given for all employees for extra working hours.

4. Sponsoring the faculty members for registration of online courses.

5. Wi-Fi internet connectivity of high bandwidth 100Mbps.

6. On campus free medical facilities.

7. Provident fund for all the employees who fall under the eligibility criteria as per Govt. norm. 8. Canteen facility.

9. Management funded training programs for teaching and non-teaching employees.

10. Advance payment to employees in emergencies.

11. Training to the teaching and non-teaching employees.

12. Free transport facility is provided to teaching and non - teaching staff.

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

#### 6.3.2

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

#### Response: 35.6

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

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |  |
|---------|---------|---------|---------|---------|--|
| 89      | 90      | 78      | 70      | 45      |  |

| File Description   | Document      |
|--|---------------|
| Policy document on providing financial support to teachers   | View Document |
| Institutional data in the prescribed format  | View Document |
| Copy of letter/s indicating financial assistance to<br>teachers and list of teachers receiving financial<br>support year-wise under each head.                             | View Document |
| Audited statement of account highlighting the<br>financial support to teachers to attend conferences /<br>workshop s and towards membership fee for<br>professional bodies | View Document |
| Provide Links for any other relevant document to support the claim (if any)  | View Document |

#### 6.3.3

Percentage of teaching and non-teaching staff participating in Faculty development Programmes (FDP), Management Development Programmes (MDPs) professional development /administrative training programs during the last five years

#### Response: 50.14

6.3.3.1 Total number of teaching and non-teaching staff participating in Faculty development Programmes (FDP), *Management Development Programmes (MDPs)* professional development /administrative training programs during the last five years

| 2022-23 | 2021-22 | 2020-21 | 2019-20 | 2018-19 |
|---------|---------|---------|---------|---------|
| 171     | 144     | 119     | 157     | 131     |

#### 6.3.3.2 Number of non-teaching staff year wise during the last five years

| 77 76 73 82 87 |  |
|----------------|--|

| File Description   | Document             |
|--|----------------------|
| Refresher course/Faculty Orientation or other programmes as per UGC/AICTE stipulated periods, as participated by teachers year-wise. | <u>View Document</u> |
| Institutional data in the prescribed format  | View Document        |
| Copy of the certificates of the program attended by teachers.  | View Document        |
| Annual reports highlighting the programmes<br>undertaken by the teachers   | View Document        |
| Provide Links for any other relevant document to support the claim (if any)  | View Document        |

#### 6.4 Financial Management and Resource Mobilization

#### 6.4.1

Institution has strategies for mobilization and optimal utilization of resources and funds from various sources (government/ nongovernment organizations) and it conducts financial audits regularly (internal and external)

#### **Response:**

Technocrats Institute of Technology (Excellence) has well defined financial system, before the commencement of every financial year a budget is planned giving major heads of its financial resources and optimal utilization of these resources ensuring compliance of its social objectives. Institute is self-financed and majorly depends upon fee collection from the students. As per the direction of the Directorate of Technical Education, Government of M.P., the institute gets fee for all its programs approved by the state statutory organization viz. The Admission & Fee Regulatory Committee (AFRC). Apart from tuition fee received from students, the institute also receives grants for organizing FDP, STTP from the affiliating university.

Institute put a firm focus on optimal utilization of resources. The institute has developed the system of indenting requisition of equipment and materials required in the department by the HOD. The Director approves genuine requirements. The institute has a well-defined purchase policy wherein major purchases are done by following the principle of three or more quotations from different vendors and comparison of their quotations on quality and cost. Sundry purchases are usually made with known vendors. The basic principle of no wastage and save more is the policy being followed in our institute that the resources are optimally used. Money is spent where it is required and no money is unnecessarily wasted by indulging in unscrupulous practices. That is the precise reason of healthy financial condition of our institute.

The Institute is a self-finance institute having a well drafted procedure of internal and external financial audit system. TITE being governed under a registered society has certain statutory obligations in terms of financial matter.

The institute gets Internal Auditors from the controlling society which ensures auditing of all fee's receipts and expenditure of the institute which as per the guidelines of Ministry of HRD, Government of

India is absolutely cashless i.e. only by means of online banking instruments. Institute financial stability and soundness is ascertained by the internal auditors. The internal

auditors ensure that the Institute is observing Corporate Governance, improve effectiveness in risk management and control processes. Internal Auditors ascertain that the internal business processes are consistent and in conformity with the defined financial system. The omissions and irregularities pointed out by internal auditor are rectified immediately.

The institute regularly at the end of every financial year undergoes external audit by the society appointed registered Chartered Accountants, Bhopal. The CA visits the institute regularly to scrutinize all the vouchers of fee collection, Banks reconciliation statements, TDS, EPF, ESIS, expenditure etc. The CA checks and verifies the salary and wages payment to staff / faculties / workers and ascertains payment of statutory dues e.g. Income Tax and Professional Tax etc. The CA also scrutinizes the payment of bills to vendors and payment of GST as per Govt. norms. The society is registered under clause 12 (AA), 10 (23) (C) and 80 G and therefore compliance to all these requirements are done by the institute as per the income tax rules and regulations.

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

#### 6.5 Internal Quality Assurance System

#### 6.5.1

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes. It reviews teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals and records the incremental improvement in various activities

#### **Response:**

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and process. IQAC works effectively towards quality achievements, enhancement by establishing all teaching-learning processes, student support system and progression, governance, leadership and management activities etc. It ensures the implementation, review and evaluation of all policies, procedures and contributes significantly. The institute level committees and professional bodies where academic, administrative and student centric programs are in progress.

The following two practices are provided which are exercised meticulously as a result of institutionalizing the quality assurance initiatives by IQAC.

Practice 1: Continuous Monitoring of Innovative Teaching Learning Process.

The institution has an active IQAC that looks into the proper functioning and quality of output of the different activities undertaken. It has made various plans to enhance the quality and monitoring of all the spheres of academic activities in the institute with the objective of quality academic delivery and timely completion of curriculum of all its programmes.

IQAC has taken up monitoring teaching learning process at the departmental level including academic

delivery of each course of the program. IQAC focused on the schedule of academic calendar and suggested quality parameters for completing the subject curriculum within the planned period. IQAC observed significant improvement in teaching learning process by continuous monitoring.

IQAC also focus on specific practical laboratory activities. Quality monitoring at the department level included reviewing of course file of individual faculty, the notes and handouts pertaining to subject prepared by faculty and maintenance of relevant academic records.

Further, the schedule of laboratory and practical work are monitored to ensure satisfaction level of individual students.

Practice 2: Implementation of Out Come Base Education (OBE).

IQAC is taking serious effort to propagate the idea of OBE among the faculties to implement in stages. As a part of this initiative, teaching staff prepared programme educational objectives (PEOs), programme specific outcomes (PSOs) and teaching staff members are able to write course outcomes (COs), Correlation of COs with POs and PSOs, Preparation of question papers

using Blooms Taxonomy levels of learning and attainment of POs, PSOs for each course which facilitates to implement OBE in the Institute.

The importance of the OBE system for the assessment of a learner's ability is based on evaluation being conducted as per policy of Institute towards OBE.

Mapping of CO-PO & CO-PSO: As per syllabus of RGPV, the CO for each course is prepared using action verbs of various learning levels recommended by Bloom's Taxonomy. Correlation levels of COs with POs and PSOs are also decided.

Assessing CO Based PO & PSO Attainment: At the end of a semester, results are analysed to generate CO based PO & PSO attainment report. The basic ideas of CO, PO, PSO and their attainment through different techniques are shared to adopt such practise.

Department were motivated to submit the application for NAAC, NBA and NIRF ranking. Already four engineering departments got NBA accreditation.

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

## 6.5.2

Quality assurance initiatives of the institution include:

- **1. Regular meeting of Internal Quality Assurance Cell (IQAC); quality improvement initiatives identified and implemented**
- 2. Academic and Administrative Audit (AAA) and follow-up action taken
- **3.** Collaborative quality initiatives with other institution(s)
- 4. Participation in NIRF and other recognized rankings
- 5. Any other quality audit/accreditation recognized by state, national or international agencies such as NAAC, NBA etc.

Response: A. Any 4 or more of the above

| File Description  | Document      |
|---|---------------|
| Quality audit reports/certificate as applicable and valid for the assessment period.  | View Document |
| NIRF report, AAA report and details on follow up actions  | View Document |
| List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date. | View Document |
| Provide Links for any other relevant document to support the claim (if any)   | View Document |
| Link to Minute of IQAC meetings, hosted on<br>HEI website   | View Document |

# **Criterion 7 - Institutional Values and Best Practices**

## 7.1 Institutional Values and Social Responsibilities

## 7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

#### **Response:**

Technocrats Institute of Technology (Excellence) constituted a **Women Empowerment Cell (WEC)** in the year 2018 for gender audit & for promotion of gender equity. Currently the cell comprises following female faculty & female students working for the cause.

| S.N. | Name of Faculty/student Designation                 |  |
|------|---|--|
| 1    | Dr. Ranjeeta Khare, Professor & Chairperson         |  |
|      | Head, Electrical Engineering                        |  |
| 2    | Dr. Archana Sharma, Professor & Faculty Member      |  |
|      | Head, Elec. & Comm. Engg.                           |  |
| 3    | Dr. Rachna Kamble, Professor, Faculty Member        |  |
|      | CSE (AIML)  |  |
| 4    | Dr. Sibi Jose, Professor ,Faculty Member            |  |
|      | Department of Chemistry & Vice                      |  |
|      | Principal   |  |
| 5    | Prof. Priya Patel, Asstt. Professor, Faculty Member |  |
|      | Civil Engineering                                   |  |
| 6    | Prof. Meenakshi Rangare, Asstt.Faculty Member       |  |
|      | Professor, Mechanical Engineering                   |  |
| 7    | Ms. Pooja Kumari, VI Sem, CivilStudent member       |  |
|      | Engineering   |  |
| 8    | Ms. Divyanshi Sunkar, IV Sem, Student member        |  |
|      | Mechanical Engineering                              |  |
| 9    | Ms. Priya Dubey, IV Sem,Student member              |  |
|      | Computer Science Engineering                        |  |
| 10   | Ms. Shanvi Kumari ComputerStudent member            |  |
|      | Science Engineering (AIML)                          |  |
| 11   | Ms. Komal Verma, IV SemStudent member               |  |
|      | Electrical Engineering                              |  |
| 12   | Ms. Sanjana Tiwari, IV Sem, Elec.Student member     |  |
|      | & Comm. Engg.                                       |  |

The WEC applies the following process of Gender Audit:

#### 1. Data Collection and Analysis:

• WEC gathers quantitative data on gender ratios across students, faculty, and staff.

#### 1. Identifying Issues:

- WEC analyzes the accumulated data to identify disparities faced by women in the institute.
- WEC recommends recruitment, retention, promotion, and leadership opportunities.

#### 1.SWOT Analysis:

• Assess strengths, weaknesses, opportunities, and threats related to gender equity.

#### 1. Benchmarking:

- Compare gender equity practices with peer institutions or industry standards.
- Learn from best practices and adapt strategies that have been successful elsewhere.

#### 1. Report and Recommendations:

- Prepare a comprehensive report summarizing findings from the audit.
- Include actionable recommendations for improving gender equity based on data analysis.

#### Measures for Promotion of Gender Equity:

#### **1. Policy Development and Implementation:**

- Develop clear policies against discrimination and harassment.
- Implement policies promoting equal opportunities in recruitment, promotion, and pay.

#### **1. Education and Training**:

- Provide training on unconscious bias, gender sensitivity, and inclusive practices for faculty, staff, and students.
- Offer mentorship and leadership development programs targeted at women in engineering.

#### 1. Community Engagement:

• Organize regular women safety and security awareness program .

#### 1. Monitoring and Evaluation:

- Regularly review progress towards gender equity goals.
- Collect feedback from stakeholders to assess the impact of implemented measures.

#### 1. Safety & security

• Installing CCTV cameras across the sensitive places for surveillance around the clock.

## 1. Counselling

The WEC regularly counsels the female students, faculty & staff members.

Currently following women are working at important positions.

| 1. | Name of Faculty    | Designation                   |
|----|--------------------|-------------------------------|
| 1. | Dr. Ranjeeta Khare | Professor & Head, Electrical  |
|    |                    | Engineering                   |
| 1. | Dr. Archana Sharma | Professor & Head, Electronics |
|    |                    | Engineering                   |
| 1. | Dr. Rachna Kamble  | Professor& Head, AIML         |
| 1. | Dr. Sibi Jose      | Vice Principal & Professor,   |
|    |                    | Department of Chemistry       |
| 1. | Dr. Neerja Nigam   | Head, Department of MBA       |
| 1. | Dr. Jyoti Pachori  | •                             |

Number of gender equity programs organized during last 5 years.

| 2023-24 | 2022-23 | 2021-22 | 2020-2021 | 2019-20 |
|---------|---------|---------|-----------|---------|
| 05      | 05      | 04      | 02        | 02      |

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

## 7.1.2

The Institution has facilities and initiatives for

- 1. Alternate sources of energy and energy conservation measures
- 2. Management of the various types of degradable and nondegradable waste
- **3.**Water conservation
- 4. Green campus initiatives
- **5.** Disabled-friendly, barrier free environment

**Response:** A. 4 or All of the above

| File Description  | Document             |
|---|----------------------|
| Policy document on the green campus/plastic free campus.                              | View Document        |
| Geo-tagged photographs/videos of the facilities.                                      | View Document        |
| Circulars and report of activities for the implementation of the initiatives document | <u>View Document</u> |
| Bills for the purchase of equipment's for the facilities created under this metric    | View Document        |
| Provide Links for any other relevant document to support the claim (if any)           | View Document        |

## 7.1.3

Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

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

#### Response: A. All of the above

| File Description   | Document      |
|--|---------------|
| Report on Environmental Promotional activities<br>conducted beyond the campus with geo tagged<br>photographs with caption and date | View Document |
| Policy document on environment and energy usage<br>Certificate from the auditing agency  | View Document |
| Green audit/environmental audit report from recognized bodies  | View Document |
| Certificates of the awards received from recognized agency (if any).   | View Document |

## 7.1.4

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and Sensitization of students and employees to the constitutional obligations: values, rights, duties and responsibilities of citizens (Within 500 words)

## **Response:**

Institute firmly believes in providing an inclusive environment i.e. tolerance and harmony towards cultural, regional, linguistic, communal, and socio-economic and other diversities. The institute follows the admission process governed by Government of M.P. which ensures the reservation of the students. Inclusivity means where everyone feels valued and everyone is treated at par. In our institute we make efforts to provide genuine environment for students and staff allowing open and honest discussion about differences between the groups, if any. The institute believes in respecting people from all abilities and backgrounds. Informal activities and staff meetings help in providing sense of belongingness. In our institute, supportive peer culture both inside and outside the classroom is created where the learners are empowered to respect and trust each other making empathy and caring relations. A fair approach is provided to learning and teaching in classrooms. Equal participation of students of heterogeneous backgrounds in competitions, events and activities promotes inclusive ambience in the institute.

Followings are the conscious institutional efforts to provide inclusive environment for students:

• The classrooms nurture students from all walks of life who interact and get equal opportunity and education.

• Individual students can participate freely in classes, aim to study better, target to achieve better academic results.

• Faculties are trained and become accountable to show that inclusivity is a core competency through daily interactions with students.

• Differences in terms of regional, linguistic, communal, socio- economic parameters in students are treated at par and an ambience is created on campus where students can feel free and comfortable.

• Underrepresented groups needs are identified and they are given necessary support and resources. SCs, STs, OBCs, EWSs, Minorities, Tuition fee waiver scheme are provided to the deserving poor candidates.

• Students are provided an environment where they feel safe from abuse, harassment or unfair criticism on the basis of caste, creed, religion and race.

Followings are the conscious institutional efforts to provide inclusive environment for staff:

• The institute follows the guidelines provided in the Code 30 of the affiliating university RGPV which ensures fair selection of deserving teaching and nonteaching staff and no discrimination on the basis of caste, creed, religion and race.

• The institute celebrates Constitution Day, Independence Day, Republic Day & National Voter's Day, Yoga Day every year. Several cultural activities are also celebrated for the benefit of everyone to diffuse the rich traditional values of various cultures. Different campaigns have been organized by the institute to ensure institutional social responsibility such as Digital India Campaign, Gaon Chale Hum, Nadi Abhiyan, Swachha Bharat Abhiyan, Women's Day, World Environment Day; Kargil Vijay Divas Celebrations have given ample opportunities to the students to inculcate the constitutional values such as awareness about fundamental duties, fundamental rights and civic ethics. NSS Wing helps the society and creates awareness in the students on Social Service. Tree plantation, Blood donation, Awareness Drives on cleanliness, save river, Girl child education and awareness about the various communicable diseases have been a part of campus activities.

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

## 7.2 Best Practices

#### 7.2.1

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

**Response:** 

**Best Practice-1** 

#### Title of Practice: Social Responsibility through Academics (SCA)

#### **Objectives:**

1) To inculcate social awareness, moral values and environmentally responsibility.

2) To nurture students as citizens with ethical and social values.

#### The context:

Following are the responsibilities towards the society and environment.

(1) **Protection of Environment:** Pollution is a major problem of present times, which is due to commercial organizations. Air pollution and water pollution are due to the industries, chemical plants, cement plants,

(2) **Reasonable use of Resources:** An institution should make proper use of available resources in the large interest of the society.

(3) **Reservation for Weaker Section:** An institution is expected to provide the jobs and employment opportunities for uplifting economically weaker section of the society.

(4) **Development of Villages and Backward Regions:** The society requires that an institution should start development in villages and backward areas

(5) Financial Assistance: The society expects donations and financial assistance for various social

causes, such as eradication of poverty, illiteracy, etc.

#### (6) Employment Generation: An institution generates employment in various fields.

#### The practice:

? Making students aware and encourage them for our responsibility for societal development.

? Arranging training and awareness drives for unprivileged school children, orphanage, old homage, etc.

? Adopted few of the surrounding villages for overall social development of the citizens of villages.

? Undertaking activities, schemes for village development.

? Developing education projects based on need for unprivileged school students, orphanage, old homage, etc.

- ? Organizing training and awareness drives in association with social organization, clubs.
- ? Planning and execute projects for physically challenged persons.
- ? Arranging seminars and lectures by social workers for faculty and students.

#### **Evidence of success:**

About 6-7 activities have been organized under Institute Social Responsibility practices in every semester during last five years (2019-20 to 2023-24).

#### **Problems Encountered and Resources required.**

The major challenge in implementing this practice is ensuring that the institution upholds both social responsibility activities and academic pursuits sustainably in four dimensions: ethics, economics, social, and environmental. While it is crucial to pay equal attention to all these aspects, many institutions view social responsibility as peripheral to their core mission, prioritizing student satisfaction instead. Some even consider social responsibility irrelevant to their business. However, social responsibility is essential for the holistic development of students, encompassing both knowledge acquisition and skill development. Focusing solely on academics can blind institutions to important nationwide changes, such as the growing emphasis on social responsibility, which presents a significant opportunity for the future.

#### Practice-2

## Title of Practice: Employability Enhancement Training Model (EETM)

**Objectives:** 

To develop a competent national workforce. Graduates and postgraduates who successfully complete their studies are expected to be skilled and capable of working independently in diverse environments.

#### The context:

In response to this, Technocrats Institute of Technology (Excellence) has introduced an Employability Enhancement Training Model for setting up a high standard of employability enhancement which ensures training of undergraduates and postgraduates, Self Study Report of Technocrats Institute of Technology (Excellence) who can function independently as engineers, experts, researchers or technical teachers when they complete their course. This model is a progressive step that addresses variability of standards within and across the departments.

#### The practice:

Entrusted professional activities is an essential professional work, activity or task for future engineers that requires specialized knowledge and skills, and encompasses multiple competencies. Once done, it ensures that the outgoing graduates can be trusted to perform that professional activity at any level.

| S. No. | Table showing Steps involved in Employability         End |
|--------|---|
|        | Enhancement Training Model (EETM)                         |
| 1.     | Department prepare a list of competencies required.       |
| 2.     | Competency level are evaluated two times in a             |
|        | semester  |
| 3.     | Appropriate actions are taken if it required and          |
|        | improvement over this practice is found out if any.       |
| 4.     | The students are graded by the faculty after              |
|        | admission and the difference in levels.                   |
| 5.     | On admission, each student is allotted Tutor              |
|        | Guardian (TG) who will mentor with the student till       |
|        | the completion of the course.                             |
| 6.     | The mentor follows and records the progress of the        |
|        | student on regular intervals.                             |
| 7.     | The students are encouraged to discuss aspects of         |
|        | their training, the difficulties perceived in the course  |
|        | and other relevant issues with the mentor.                |
| 8.     | The mentor responds to the queries and records            |
|        | his/her observations in his/her weekly post.              |
| 9.     | Students not showing 'Satisfactory' progress,             |
|        | intervention by the institute is required.                |
| 10.    | In addition to the TG, other HoD can also monitor         |
|        | the progress of the student & provide constructive        |
|        | feedback.   |

#### **Evidence of success:**

The main highlight of model is preparation of a list of EPAs. Each EPA is mapped to respective and appropriate domains of competency and level of competency at the end of 1st to 8th semester of

undergraduate course and at the end of 1st to 8th semester of Postgraduate course. Outcome of this process is we have successfully made our students competent and ready for the industry. Our placed students themselves show the evidence how effective we have executed this practice.

#### Branch wise Placements:

| S. No. | Branch | No. of Students Placed |           |           |           |           |
|--------|--------|------------------------|-----------|-----------|-----------|-----------|
|        |        | 2019-2023              | 2018-2022 | 2017-2021 | 2016-2020 | 2015-2019 |
| 1      | CSE    | 156                    | 119       | 146       | 95        | 108       |
| 2      | EC     | 40                     | 40        | 50        | 59        | 33        |
| 3      | EE     | 39                     | 55        | 39        | 44        | 40        |
| 4      | ME     | 58                     | 82        | 90        | 102       | 137       |
| 5      | CE     | 31                     | 38        | 61        | 72        | 65        |
| 6      | IT     | -                      | -         | -         | 39        | 31        |
| 7      | MCA    | 30                     | 21        | 19        | 22        | 15        |
| 8      | MBA    | 34                     | 22        | 34        | 36        | 16        |
| Тс     | otal   | 388                    | 377       | 439       | 469       | 445       |

| File Description                                      | Document      |
|---|---------------|
| Best practices as hosted on the Institutional website | 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:**

One area distinctive to the priority & thrust area (Academics Activities) of Technocrats Institute of Technology (Excellence) is Training & Placement activities. Institute has identified this particular area as unique or noteworthy as the Institute understands that academic excellence alone isn't adequate in today's cutthroat competitive world, practical skills and industry exposure are also equally crucial. Our dedicated Training & Placement cell works tirelessly to connect our students with leading companies, organizing recruitment drives and networking events throughout the academic year. It has a crucial role in bridging the gap between academic learning and industry requirements. Cell provides quality training programs throughout the year to endow the skills to face the world of employers and to get imbibe ethics of professionalism. Extensive training programs prepare them to face challenges of life and excel in different campus drives.

Following are the distinctive features of our Training & Placement Cell.

1. **Industry Interface:** One of the primary functions of our T&P Cell of Technocrats Institute of Technology (Excellence) is to establish and maintain strong relationships with various industries.

This includes inviting industry experts for seminars, workshops, and guest lectures. Cell also invites various alumni, working on important positions at prestigious installations to help their juniors understand the working culture of various organizations. They also make the students understand what an industry expects from a beginner & how to prepare oneself to make their dream careers.

- 2. **Skill Development Programs:** T&P Cell of Technocrats Institute of Technology (Excellence) regularly conducts training classes through in house prepared Training modules on various domains such as soft skills (communication, teamwork), technical skills (coding, software proficiency), and aptitude tests (quantitative, logical reasoning).that enhance the employability of students.
- 3. **Career Counseling:** T&P Cell of Technocrats Institute of Technology (Excellence) regularly provides guidance and counseling sessions to students regarding career choices, interview techniques, and personal development. This helps students make informed decisions and prepare effectively for job opportunities.
- 4. **Placement Drives:** T&P Cell coordinates various campus recruitment drives, job fairs. Cell also prepares students to get internships as per their domain. The T&P Cell acts as a facilitator between students and potential employers, ensuring suitable job placements and internship opportunities for students. Since four of our departments namely Computer Science Engineering, Civil Engineering, Electronics & Communication Engineering & Mechanical Engineering are accredited by National Board of Accreditation (NBA), are preferred by employers. The accreditation serves as an assurance of their competence and skills.
- 5. Alumni Network: Training & Placement Cell maintains and leverages an active alumni network which is very crucial. Alumni of Technocrats Institute of Technology (Excellence) who are working on crucial positions in various prestigious companies, both in India & abroad, provide insights into industry trends, job opportunities of their companies, and mentorship for current students, enhancing overall placement prospects.
- 6. **Feedback Mechanism:** Our T&P Cell regularly collects feedback from employers and working students helping it understand the industry expectations and refine its training programs accordingly. This ensures that students are well-prepared to meet current market demands.
- 7. Career Development Workshops: Our T&P cell organizes workshops on resume writing, job search strategies, LinkedIn optimization, and professional networking prepares students for the job market and enhances their employability.
- 8. **Continuous Learning Initiatives:** Our T&P cell continuously encourages students to participate in online courses, certification programs, and workshops beyond the curriculum helps them stay updated with industry trends and technologies. Some of the certifications are Microsoft Azure Certification, Amazon Web Services (AWS) Certification, Red Hat Certification etc.
- 9. Association with Industries: The Training & Placement Cell of institute has association with various industries, training organization, research labs etc. Few examples are Capegemini "Centres of Excellence" & Hexaware "Centres of Excellence", Red Hat & Oracle Certification Labs, Texas Instruments Ltd, Microsoft Innovation Centre, and Pearson Interactive Lab etc. We have also signed with various reputed organizations include CEDMAP (The Centre for Entrepreneurship Development, Madhya Pradesh), Gong Labs Private Limited (GLPL), Capegemini (Center of Excellence), CRISP (Centre for Research and Industrial Staff Performance), Bhopal, Net link Ltd. etc.
- 10. **Dynamic Curriculum**: To prepare students for a variety of opportunities, training modules are constantly updated with the latest industry information, software versions, company requirements, and best practices. This ensures students learn what's actually relevant in the workplace. The T&P department identifies company-specific skills needed for particular job

profiles, customizing training for a competitive edge.

- 11. **Sharpening skills with continuous Mock Tests**: Complementing the unique training methods, the T&P cell conducts continuous mock tests. These simulated placement exams replicate the actual testing environment, allowing students to experience real-time pressure and refine their test-taking strategies. The tests cover a wide range of topics relevant to their chosen engineering discipline, ensuring comprehensive preparation. By participating in these ongoing assessments, students can identify their strengths and weaknesses, track their progress, and build confidence for the crucial placement season.
- 12. **Industry Guest Lectures**: Guest lecturers share their firsthand experiences in the engineering industry, discussing current challenges, emerging technologies, and the day-to-day realities of working in specific fields. These professionals also offer insights into their expectations of fresh graduates. Students gain valuable knowledge about the skills and knowledge companies actively seek, helping them bridge the gap between theoretical learning and practical application.
- 13. Holistic Development of students: To ensure students' overall personality development, the department offers dedicated soft skills sessions. These sessions focus on essential skills like communication, teamwork, problem-solving, and time management. Additionally, students can participate in workshops on presentations, where they hone their public speaking skills and learn to deliver compelling presentations. Grooming classes further enhance students' professional presence, ensuring they make a positive first impression during interviews and career events.

In conclusion, by offering comprehensive training programs, fostering industry connections, promoting entrepreneurship, and nurturing soft skills, we ensure that our students are well-prepared to embark on successful careers and make meaningful contributions to society. Our holistic approach to education equips students with the skills, knowledge, and confidence to navigate the complexities of the modern workplace and thrive in a rapidly evolving global economy.

| File Description                             | Document      |
|--|---------------|
| Appropriate web in the Institutional website | View Document |
| Any other relevant information               | View Document |

# **5. CONCLUSION**

# **Additional Information :**

The Institute continuously strives to realize its objective of providing quality higher education to the students at an affordable cost with measurable outcomes. Efforts have been made to meet the needs of students' by creating new learning and infrastructural facilities within the space, expanding offices and engaging skilled faculty members. To provide higher education opportunities to the students the Institute is offering Fee free ship policy to eligible students. Initiatives have been taken for complete digitization of library. The entire accounting system has been computerized for transparency and data preservation. Mentor mentee system is helping to identifying slow learners and advanced learners by following NACC guidelines. The Institute also collects online feedback from students regarding teaching learning process and takes appropriate action based on it.

## **Concluding Remarks :**

The Institute has been on the path to improve the quality of education since its inception by leveraging small and collective effort and trying its level best to emerge as a premier higher learning institution by creating, advancing and disseminating knowledge with collective wisdom, through value imbued holistic education for peaceful, sustainable and humane society. Institute proactively pursues its mission of educating and empowering the learners to realize their potential through righteous blending of knowledge, skills, and values for serving the society. The Institute is committed to its best as per its Vision and Mission.