*Books* are the means by which we *build bridges* between *Cultures*.

*- Dr. Sarvepalli Radhakrishnan*
*Former President of India*

# Criterion 4

## Infrastructure & Learning Resources

## List of QL and QN Metrics for Appeal

| SI. No. | Criterion No. | Criterion Description | Website Link |
|---|---|---|---|
| **QL Metrics for Appeal** | | | |
| 1 | 4.2.2 | Collection of rare books, manuscripts, special reports or any other knowledge resources for library enrichment | |
| 2 | 4.3.1 | Institution frequently updates its IT facilities including Wi-Fi | **View** |
| 3 | 4.4.2 | There are established systems and procedures for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, class rooms etc. | |

| Infrastructure – A Glance | |
|---|---|
| Land Area | 17 Acres |
| Academic Built-up Area | 2.50 Lakh sq.ft |
| Hostel and other Amenities Built-up Area | 1.00 Lakh sq.ft |
| Number of ICT Enabled Classrooms | 52 Nos |
| Number of Smart Classrooms | 05 Nos |
| Number of Seminar Halls | 03 Nos |
| Number of Hostels | 02 Nos |
| Total number of laboratories | 55 Nos |

## Classrooms & Seminar Halls

| | |
|---|---|
| Number of ICT Enabled Classrooms | 52 Nos |
| Number of  Computer Centre | 12 Nos |
| Number of Seminar Hall | 03 Nos |
| Number of Rest Rooms | 17 Nos |
| Number of Common Rooms | 02 Nos |



**ICT Enabled Class Room**
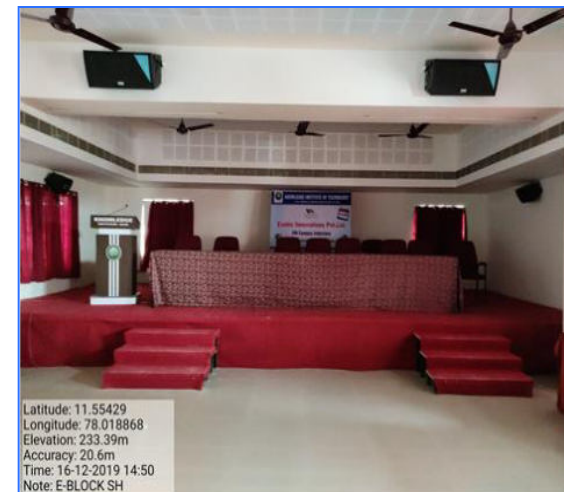


**ICT Enabled Seminar Hall**

## Civil Engineering Laboratories

1. Computer Aided Building Drawing

2. Construction Materials Laboratory

3. Surveying Laboratory

4. Strength of Materials Laboratory

5. Hydraulic Engineering Laboratory

6. Soil Mechanics Laboratory

7. Water And Waste Water Analysis Laboratory

8. Highway Engineering Laboratory

9. Irrigation And Environmental Engineering Drawing

10. Structural Design and Drawing (CADD Lab)



**Strength of Materials Laboratory**



**Soil Mechanics Laboratory**

## Computer Science and Engineering Laboratories

1. Communication Laboratory

2. Networks Laboratory

3. Database Management Systems Laboratory

4. Mobile Application Development Laboratory

5. Software Development Laboratory

6. Computer Practices Laboratory

7. Data Structures Laboratory

8. Object Oriented Analysis and Design Laboratory

9. Problem Solving and Python Programming Laboratory

10. PG - CSE Laboratory

11. IOT Laboratory



**Networks Laboratory**



**DBMS Laboratory**



**PG- CSE Laboratory**



**Data Structures Laboratory**

## Electronics and Communication Engineering Laboratories

1. Engineering Practices Lab

2. Digital Electronics Lab

3. Analog and Digital Circuits laboratory

4. Optical and Microwave Laboratory

5. Microprocessor and microcontroller Laboratory

6. Digital Signal Processing Laboratory

7. Computer Networks laboratory

8. VLSI Laboratory

9. Embedded Laboratory

10. Communication Systems Laboratory



**MPMC Laboratory**



**Networks Laboratory**



**Analog and Digital Circuits Laboratory**



**Digital Signal Processing Laboratory**

## Electrical and Electronics Engineering Laboratories

1. Engineering Practices Laboratory
2. Electric Circuits Laboratory
3. Electronics Laboratory
4. Linear and Digital Integrated Circuits Laboratory
5. Electrical Machines – I Laboratory
6. Electrical Machines – II Laboratory
7. Control and Instrumentation Laboratory
8. Power Electronics and Drives Laboratory
9. Microprocessors and Microcontrollers Laboratory
10. Power System Simulation Laboratory
11. Renewable Energy Systems Laboratory



**Electric Circuits Laboratory**



**Electronics Laboratory**



**Electrical Machines – I Laboratory**



**Microprocessors and Microcontrollers Laboratory**

## Mechanical Engineering Laboratories

1. Engineering Practices Laboratory
2. Manufacturing Technology Laboratory I
3. Manufacturing Technology Laboratory II
4. Metrology and Measurements Laboratory
5. Thermal Engineering Laboratory I
6. Thermal Engineering Laboratory II
7. Kinematics and Dynamics Laboratory
8. Mechatronics Laboratory
9. Analysis & Simulation Laboratory
10. Computer Aided Design Laboratory
11. Computer Aided Manufacturing Laboratory
12. Industrial Safety Engineering Laboratory
13. Computer Aided Machine Drawing Laboratory



**Thermal Engineering Laboratory I**



**Analysis & Simulation Laboratory**



**Manufacturing Technology Laboratory I**
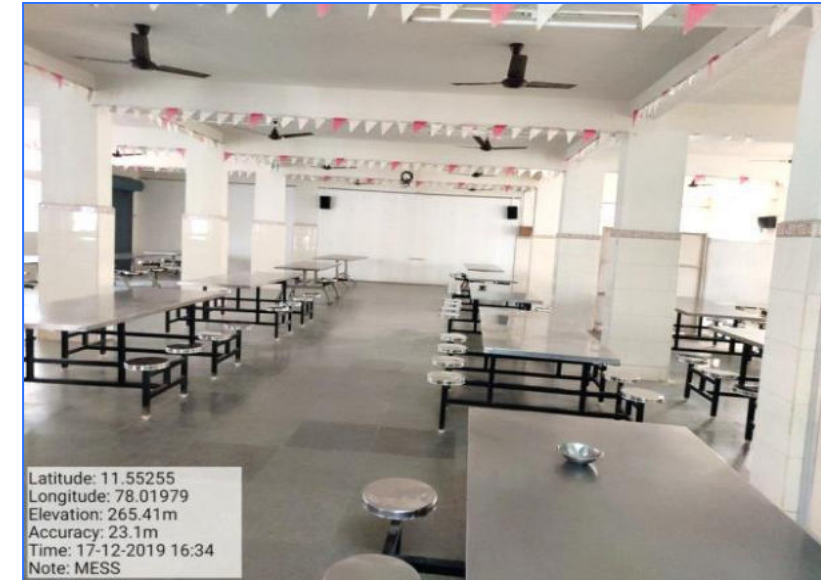


**Computer Aided Manufacturing Laboratory**

| Hostel Facility | |
| --- | --- |
| **Boys Hostel** | |
| Total Rooms | 72 Nos |
| AC Rooms | 5 Nos with Wi-Fi |
| Non-AC Rooms | 67 Nos with Wi-Fi |
| **Girls Hostel** | |
| Total Rooms | 24 Nos |
| AC Rooms | 01 No with Wi-Fi |
| Non-AC Room | 11 Nos with Wi-Fi |



**Boys Hostel**



**Internet Facility**



**Girls Hostel**

| Sports Facilities | |
|---|---|
| Indoor | |
| 1 | Table Tennis |
| 2 | Chess |
| 3 | Carrom |
| Outdoor | |
| 4 | Cricket Ground |
| 5 | Football Court |
| 6 | Hockey Ground |
| 7 | Volleyball Court |
| 8 | Throw ball Court |
| 9 | Kabaadi Court |
| 10 | Shuttle badminton Court |
| 11 | Basketball Ground |
| 12 | Cricket Net Practice |
| 13 | Athletics |

**Yoga and Meditation Club Activities**



**Power Gym**

**Food Court**

**Health Centre**

**FINE ARTS**



**Cultural events**

| S. No | Facility | Details |
|-------|----------|---------|
| 1. | Library Area | 700 Sq.m |
| 2. | Seating capacity | 200 |
| 3. | No. of Book Titles available | 6616 |
| 4. | No.of Book Volumes available | 32310 |
| 5. | No.of Newspapers available | 08 |
| 6. | No. of CDs and DVDs available | 1804 |
| 7. | No. of Students Project Reports available | 1676 |
| 8. | Availability of remote access for E-resource | Yes |
| 9. | Digital Library | Yes |
| | No. of Computers | 34 |
| | Sever available | Yes |
| 10. | Reprography available | Yes |
| 11. | Audiovisual Room | Yes |

| Library Working Hours | |
|-----------------------|---|
| Monday to Saturday | 9 am to 7 pm |
| Sunday | 9 am to 4 pm |



**Central Library – Front View**



**Digital Library**



**Circulation Table**



**Book Rack**

## Library Automation

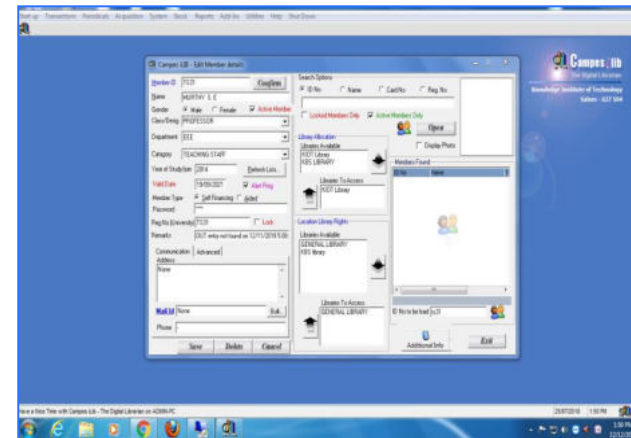| Library Automation | |
|---|---|
| Name of the Software | CampesiLIB |
| Mode of Automation | Fully |
| Version of Software | 6.3.9 |
| Year of Automation | 2009 |
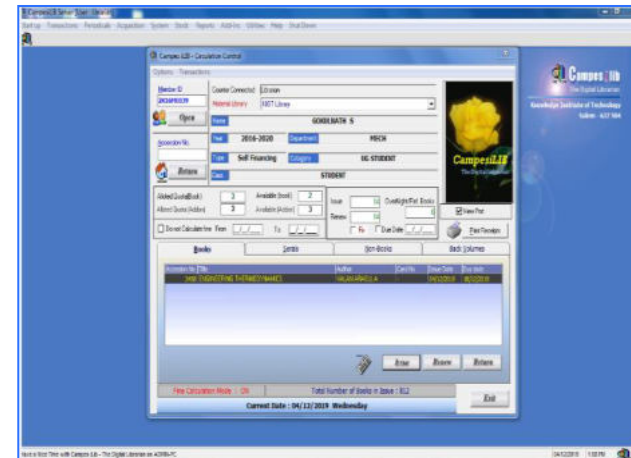


**Screenshot of CAMPESILIB**
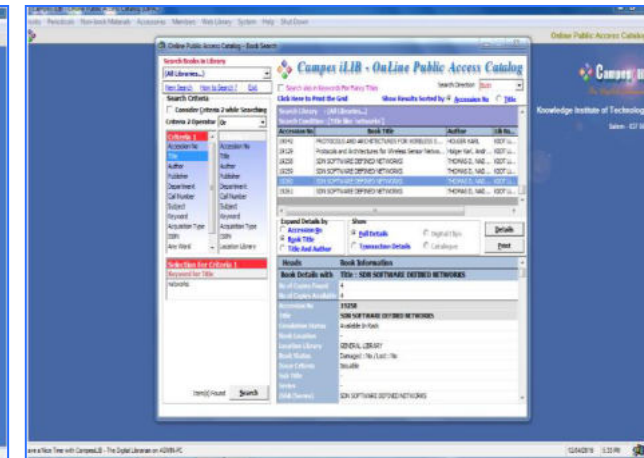


**Book Search – Access No**

## OPAC Facility

- Book Search by Accession Number
- Periodical and Non-Book Search Facility
- Member Due Check Facility
- Member Transaction History View
- Book Reservation Facility



**Member Due Check Facility**



**E-Gate Entry**

**Usage of Library by Faculty and Students per year : 21%**

## Rare Books, Manuscripts and Special Reports
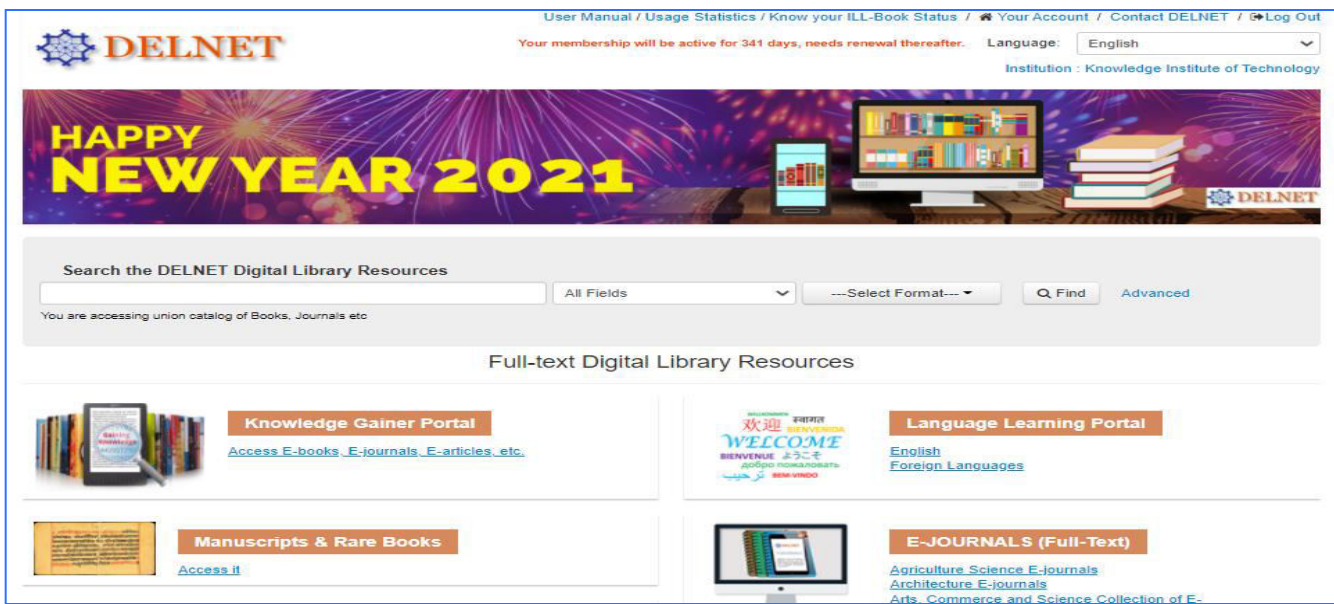
| S. No | Particulars | Details |
|-------|-------------|---------|
| 1. | No. of Rare Books available @ DELNET | **1250** |
| 2. | No. of Manuscripts available @ NDL | **1050** |
| 3. | No. of Rare Books available (Hard copy) | **250** |
| 4. | No. of Special Reports available | **41** |



**E- Journals @ DELNET**



**Rare Books @ DELNET**



**Manuscripts @ NDL**

| S. No | List of e-Resources |
|-------|---------------------|
| 1 | e - Journals |
| 2 | e - Shodhsindhu |
| 3 | Shodhganga Membership |
| 4 | Databases |
| 5 | e - Books |

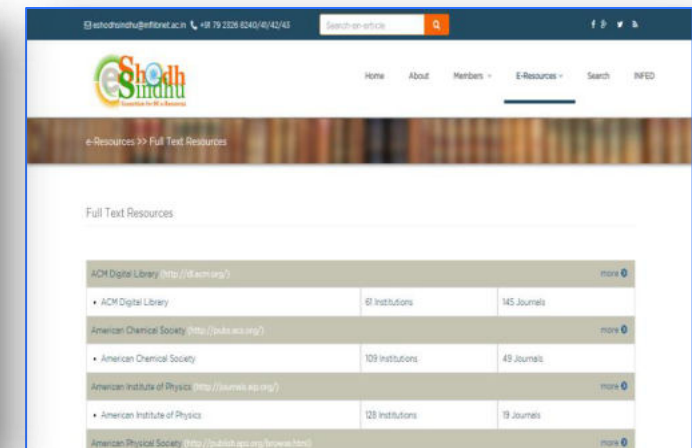| DIGIMAT Resources | |
|-------------------|---------|
| NPTEL Videos | 78400+ |
| Spoken Tutorial | 700+ |
| Khan Academy | 10000+ |
| Interactive Simulations | 150+ |
| Engineering Simulations | 120+ |

**Campus wide e-Resource access through Wi-Fi**
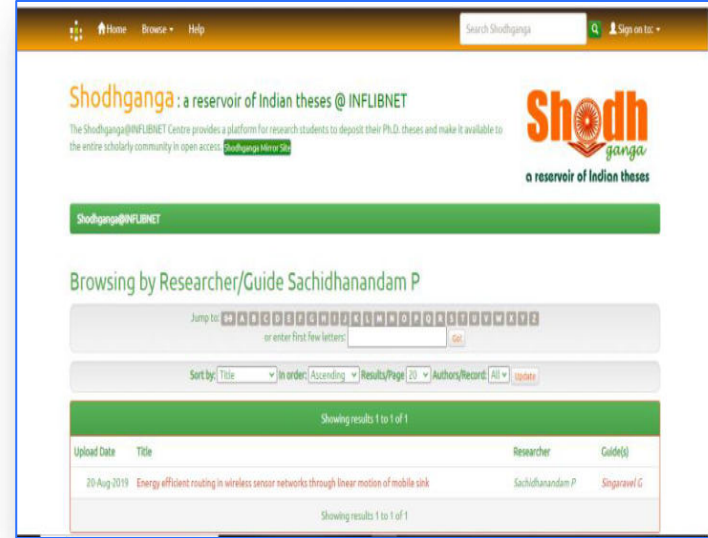


**Shodhganga Membership**
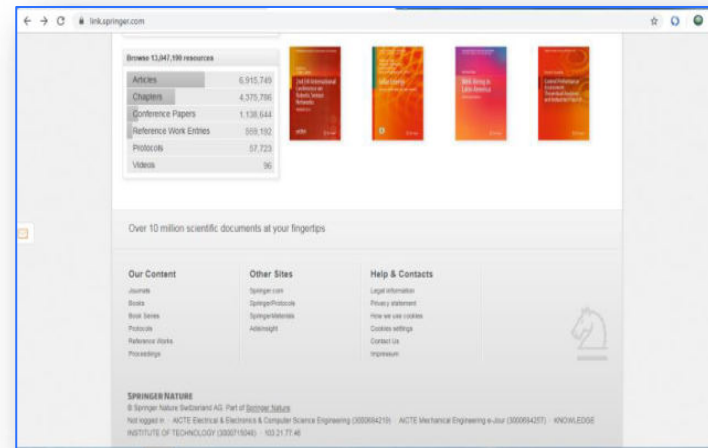


**DIGIMAT**



**E-Journals**



**E-Shodhsindhu**

## Computational Facilities

| S. No | Facility | Quantity | Value in (Rs. Lakh) |
|-------|----------|----------|---------------------|
| 1. | Number of Computers | 900 | 159.73 |
| 2. | Number of Servers | 10 | 4.97 |
| 3. | Number of Laptops | 63 | 13.78 |
| 4. | Number of Projectors | 70 | 22.89 |
| 5. | Number of Printers | 75 | 6.28 |
| 6. | Number of Scanners | 13 | 1.00 |
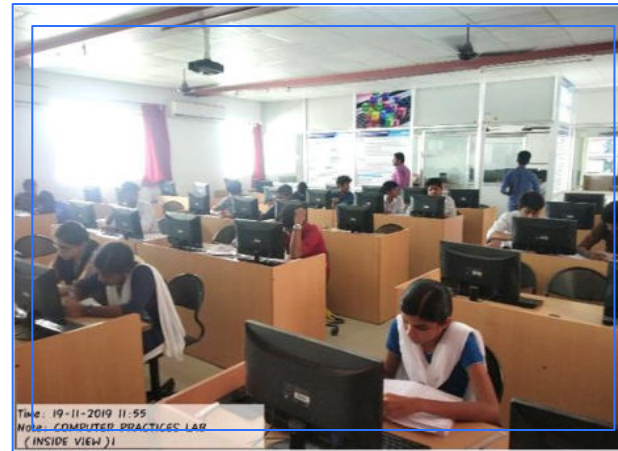


**Computer Practices Laboratory**
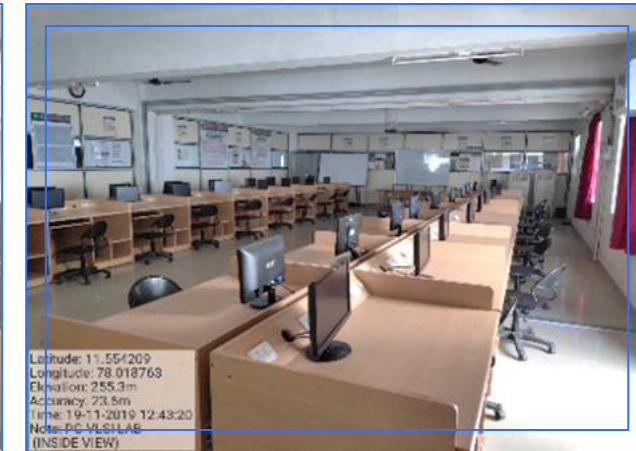


**PG VLSI Laboratory**



**Server Facility**



**UPS Facility**



**IOT Laboratory**



**MTLC Laboratory**

## Smart Classroom, Internet Bandwidth

| S. No. | Facility | Quantity | Value in (Rs. Lakh) |
|--------|----------|----------|---------------------|
| 1. | Number of Smart Classrooms | 5 | 6.51 |
| 2. | Wi-Fi (Digisol, D-Link Router) | 12 | 0.70 |

**Facilities :** Sony Video Camera HXR, Handycam, PA Wireless Amplifier, Raptor – Interactive White Board



**Smart Classroom**

| S. No | Service Providers | Bandwidth |
|-------|-------------------|-----------|
| 1. | Readylink | 50 Mbps |
| 2. | Minnal Electronics | 50 Mbps |
| 3. | BSNL | 2 Mbps |
| **Total Bandwidth Available** | | **102 Mbps** |



**Smart Classroom**

## Software Availability
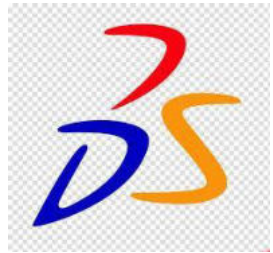


| S. No. | Name of the Software |
|--------|----------------------|
| 1. | Microsoft Campus License |
| 2. | Oracle |
| 3. | IBM Rational Rose |
| 4. | MATLAB |
| 5. | STAADPRO |
| 6. | Think 3 Design |
| 7. | Ansys 13 |
| 8. | CATIA –V6 |
| 9. | NX Design Academic  1 & 2 |
| 10. | Solid Works Education Edition Networks |
| 11. | ARCGIS 10.3.1 |
| 12. | Team Center |
| 13. | ORACD |
| 14. | Mentor Graphics HEP-C1 & C2 |
| 15. | NI Academic Site Lab View |

| Service Team | No. of Persons |
|---|---|
| House Keeping | 10 |
| Plumber | 1 |
| Electrician | 2 |
| Scavenger | 4 |
| Gardener | 1 |
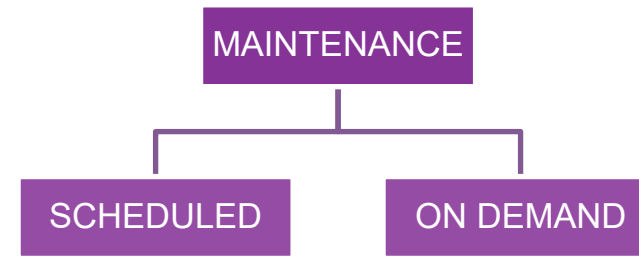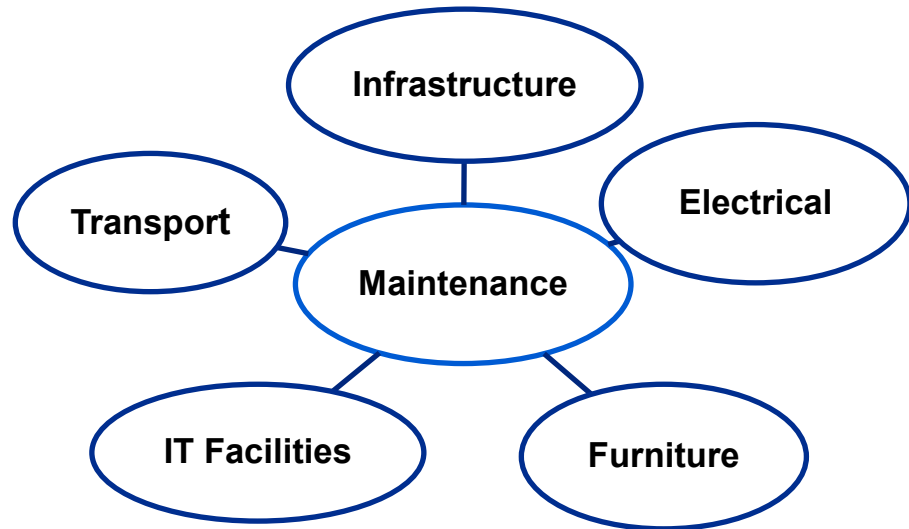
MAINTENANCE

SCHEDULED | ON DEMAND

| S. NO. | NAME OF COMMON UTILITY | PROPOSED MAINTENANCE SCHEDULE (Daily/Weekly/Fortnight/Monthly/ 3 months/6 Months/Yearly) |
|---|---|---|
| **Electrical Maintenance** | |
| 1 | Air Conditioner | 3 Months |
| 2 | Audio Amplifier / Speaker / Cable | Monthly |
| 3 | Intercom | Monthly |
| 4 | UPS / Invertor / Battery | 3 Months |
| 5 | Fan / Light / Switch board | Monthly |
| 6 | LIFT / Elevator | Monthly |
| 7 | Lab - Distilled Water Unit | Monthly |
| 8 | Black Board / Chalk Stand | 6 Months |
| 9 | Water Doctor | Monthly |

## ON DEMAND MAINTENANCE PROCEDURE

**Problem Identification Students / NTS / Faculty**

↓

**Entry in Complaint / Repair Register**

↓

**Reporting to HOD**

↓

**Report to Administrative Officer**

↓

**Informing Company Provided Equipment**

↓

**Check for Warranty**

**If Yes – Service by Company** ↔ **If No – Request made to Service Team**

**Spot Rectification** ↔ **Workshop for Service**

**Rectified**
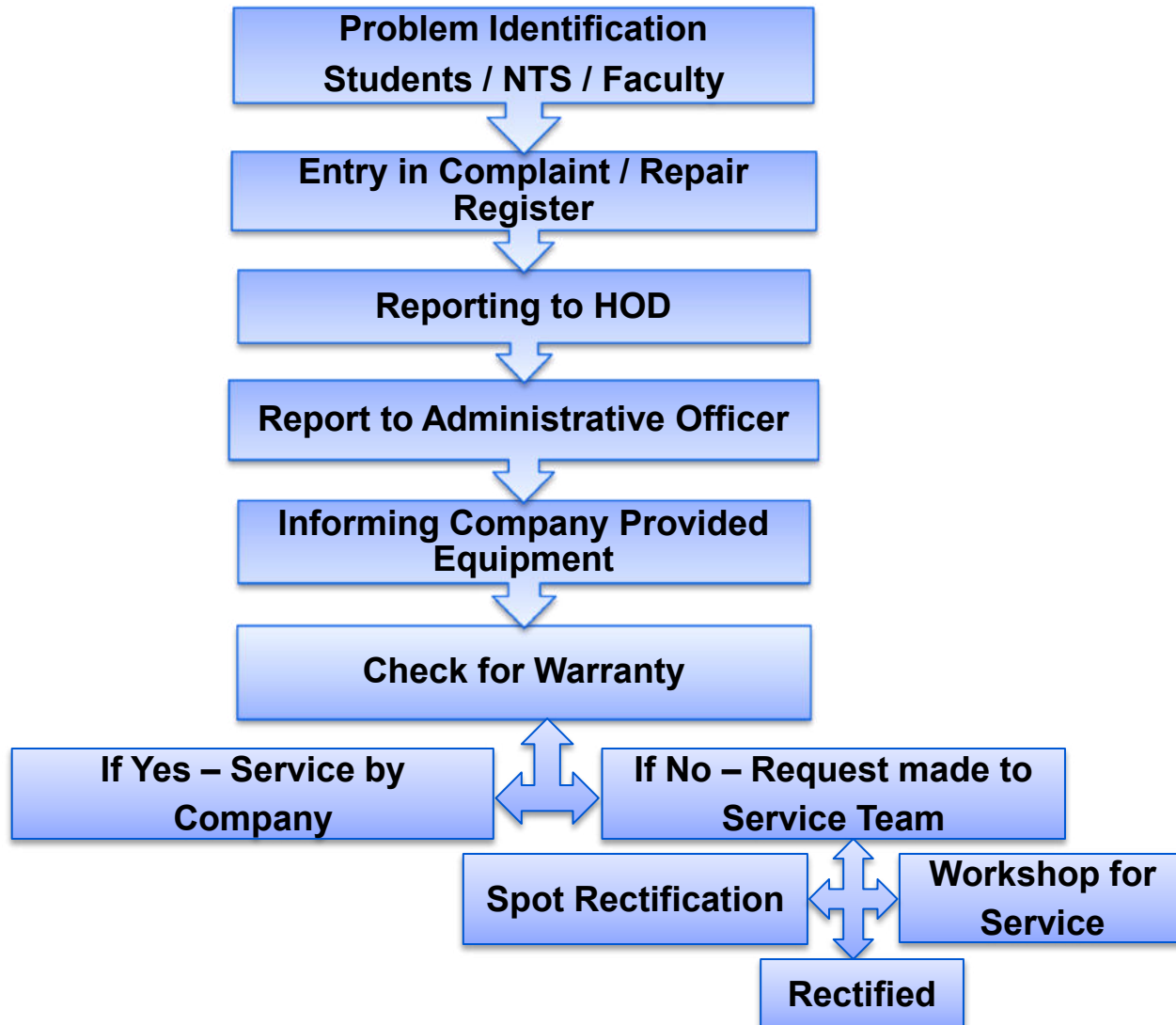
## Expenditure On Maintenance of Physical Facilities

| Financial Year | Expenditure on Maintenance of Academics (Rs. Lakh) | Expenditure on Green Initiatives and Waste Management (Rs. Lakh) | Expenditure on Transport (Rs. Lakh) |
|---|---|---|---|
| 2018-2019 | 16.26 | 3.31 | 157.00 |
| 2017-2018 | 18.82 | 2.72 | 142.00 |
| 2016-2017 | 41.80 | 4.23 | 155.00 |
| 2015-2016 | 24.80 | 6.60 | 129.00 |
| 2014-2015 | 3.80 | 18.72 | 73.31 |