

K S R INSTITUTE FOR ENGINEERING AND TECHNOLOGY

Tiruchengode – 637 215



Maintenance and Service Policy

Maintenance and Service Policy

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MAINTENANCE POLICY GOALS

1. Perform maintenance on a periodic basis.
2. Provide functional facilities that
 - (a) Meet the University's requirements;
 - (b) Have an environmentally acceptable atmosphere for students, faculty and staff
 - (c) ensure the health and safety of all personnel.
3. Identify potential problems early within the context of the preventive maintenance system so that corrective action may be planned, included in the budget cycle, and completed in a timely manner.
4. Follow an orderly program so that administrative costs are minimized and the workload for personnel is maintained at a relatively constant level.
5. Conserve energy and resources by ensuring maximum operating efficiency of energy- consuming equipment and systems.
6. Maintain credible relations with users by providing well-maintained facilities and information on preventive maintenance activities.
7. Identify and implement possible improvements that will reduce costs, improve service, and result in more efficient operation.

Purpose of the Policy

This policy provides guidelines for the maintenance of physical, academic and support facilities of the university to ensure that not to break down unexpectedly. Preventive Maintenance Program procedures are designed to fulfill the needs of the Facility.

The purpose of the program is to produce cost savings by:

- Reducing the downtime of critical systems and equipment.
- Extending the life of facilities and equipment.
- Improving equipment reliability.
- Ensuring proper equipment operation.
- Improving the overall appearance of facilities.

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Electrical Maintenance and Service

ELECTRICAL MAINTENANCE AND SERVICE

Maintenance of Electrical:

- Estate Officer should be appointed for looking after electrical maintenance works activities such as repair works of all electrical equipment like fans, lights, UPS, Intercoms, MCB's and exhauster fans etc.,

Maintenance schedule of Electrical:

Sr. No.	Frequency	Maintenance Work Undertaken
1.	Weekly	<ul style="list-style-type: none">• Checking the function of power supply and the main cord• Checking the power supply board and fuse plug• Preparing the weekly maintenance schedule
2.	Daily	<ul style="list-style-type: none">• Fans, lights, UPS
3	Weekly	<ul style="list-style-type: none">• Intercoms, MCB's and exhauster fans

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IT Maintenance and Service

IT MAINTENANCE AND SERVICE

Maintenance of IT:

- The hardware department and its support staff maintain the ICT facilities including computers, servers.
- The maintenance includes the required software installation, antivirus and up gradation.
- Campus Wi-Fi and internet is maintained by college system administrator.

Maintenance schedule of IT:

Service	Frequency	Responsible Authority
Software Installation	Weekly	System Administrator
Hardware Repairs		System Administrator
Computer Peripherals		System Administrator

1. NEED FOR IT POLICY

IT Policy is being documented for fair and transparent academic purpose for use of various IT resources in the Campus for Students, faculty, Staff, Management.

Due to the policy initiative and academic drives, IT resource utilization in the Campus has grown by leaps and bounds during the last decade.

Now, ksriet has network connections to every computer system covered campus and hostel.

Data Center is the responsibility of running the institute's intranet and Internet services.

Data Center is running the Firewall security, static, email, web and application servers and managing the network of the institute.

KSRIET is getting its Internet bandwidth from Pink Broadband services private ltd. Total Bandwidth availability 80 Mbps.(leased line 1:1)

With the extensive use of the Internet, network performance outreach in these ways:

This IT policy also applies to the resources administered by the central administrative departments such as Library, Data centers, Laboratories, Offices of the institute, or hostels and guest houses wherever the network facility was provided by the institute.

Further, all the faculty, students, staff, departments, authorized visitors/visiting faculty and others who may be granted permission to use the Institute's information technology infrastructure, must comply with the Guidelines.

Applies to Stake holders on campus or off campus

- Students: UG, PG, Research
- Faculty
- Administrative Staff (Non-Technical / Technical)
- Higher Authorities and Officers
- Guests

Resources

- Network Devices wired/ wireless
- Internet Access
- Official Websites, web applications
- Official Email services
- Data Storage
- Mobile/ Desktop / server computing facility
- Documentation facility (Printers/Scanners)
- Multimedia Contents

3. IT HARDWARE INSTALLATION POLICY

Institute network user community needs to observe certain precautions while getting their computers or peripherals installed so that supporting staff may face minimum inconvenience due to interruption of services due to hardware failures.

a. Primary User:

An individual in whose room the computer is installed and is primarily used by him/her is considered to be "primary" user. If a computer has multiple users, none of whom are considered the "primary" user, the department Head should make an arrangement and make a person responsible for compliance.

b. End User Computer Systems

Apart from the client PCs used by the users, the institute will consider servers not directly administered by Data center, as end-user computers. If no primary user can be identified, the department must assume the responsibilities identified for end-users. Computer systems, if any, that are acting as servers which provide services to other users on the Intranet/Internet though registered with the Data center, are still considered under this policy as "end- users" computers.

c. Warranty

Computers purchased by any Department/Cells should preferably be with 3-year on- site comprehensive warranty.

d. Network Cable Connection:

While connecting the computer to the network, the connecting network cable should be away from any electrical/electronic equipment, as they interfere with the network communication. Further, no other electrical/electronic equipment should be shared with the power supply from where the computer and its peripherals are connected.

e. File and Print Sharing Facilities :

File and print sharing facilities on the computer over the network should be installed only when it is absolutely required. When files are shared through network.

f. Maintenance of Computer Systems provided by the Institute

For all the computers that were purchased by the institute centrally and distributed by the Data center will attend the complaints related to any maintenance related problems.

g. Data center Interface

Data center upon finding a non-compliant computer affecting the network will notify the individual responsible for the system and ask that it be brought into compliance. Such notification will be done via email/phone. The individual user will follow-up the notification to be certain that his/her computer gains necessary compliance. The Data center will provide guidance as needed for the individual to gain compliance.

4. SOFTWARE INSTALLATION AND LICENSING POLICY

Any computer purchases made by the individual departments/cells should make sure that such computer systems have all licensed software (operating system, antivirus software and necessary application software) installed.

a. Operating System and its Updating

Individual users should make sure that respective computer systems have their OS updated in respective of their service packs/patches, through Internet. This is particularly important for all MS Windows based computers (both PCs and Servers).

b. Backups of Data

Individual users should perform regular backups of their vital data. Virus infections often destroy data on an individual's computer. Without proper backups, recovery of destroyed files may be impossible. Preferably, at the time of OS installation itself, one can have the computer's hard disk partitioned into many volumes typically C, D and so on. OS and other software should be on C drive and user's data files on the other drives (e.g. D, E). In case of any virus problem, generally only C volume gets corrupted. In such an event formatting only one volume, will protect the data loss. However, it is not a foolproof solution. Apart from this, users should keep their valuable data on CD / DVD or other storage devices such as pen drives, external hard drives.

5. NETWORK (INTRANET, INTERNET & WI-FI) USE POLICY

Network connectivity provided through an authenticated network access connection or Wi-Fi is governed under the Institute IT Policy. The Data center is responsible for the ongoing maintenance and support of the Network, exclusive of local applications. Problems within the Institute's network should be reported to Data center.

a. IP Address Allocation

Any computer (PC/Server) that will be connected to the institute network should have an IP address assigned by the Data center. Departments should follow a systematic approach, the range of IP addresses that will be allocated to each building.

An IP address allocated for a particular computer system should not be used on any other computer even if that other computer belongs to the same individual and will be connected to the same port.

b. Running Network Services on the Servers

Individual departments/individuals connecting to the institute network over the LAN may run server software.

c. Wireless Local Area Networks

This policy applies, in its entirety, department, or hostel wireless local area networks. In addition to the requirements of this policy, departments, or hostels must register each wireless access point with Data center including Point of Contact information.

Network access must be restricted either via authentication or MAC/IP address restrictions. Passwords and data must be encrypted.

If individual department wants to have inter-building wireless network, prior to installation of such network.

6. EMAIL ACCOUNT USE POLICY

To all faculties, staff and students, and the Institute's administrators, it is recommended to utilize the institute's e-mail services, Email for formal communications will facilitate the delivery of messages and documents to campus and extended communities or to distinct user groups and individuals.

Staff and faculty may use the email facility by logging on to <https://ksriet.ac.in> with their User ID and password. Institute's email account, user may contact Data center for email account and default password by submitting an application in a prescribed proforma.

Users may be aware that by using the email facility, the users are agreeing to abide by the following policies:

The facility should be used primarily for academic and official purposes and to a limited extent for personal purposes.

Using the facility for illegal/commercial purposes is a direct violation of the institute's IT policy and may entail withdrawal of the facility. The illegal use includes, but is not limited to, the unlicensed and illegal copying or distribution of software, sending of unsolicited bulk e-mail messages. And generation of threatening, harassing, abusive, obscene or fraudulent messages/images.

User should not share his/her email account with others, as the individual account holder is personally held accountable, in case of any misuse of that email account.

While using the computers that are shared by other users as well, any email account that was accidentally left open by another user, should be promptly closed without peeping into its contents, by the user who has occupied that computer for its use.

7. INSTITUTE DATABASE USE POLICY

This Policy relates to the databases maintained by the institute. Data is a vital and important Institute resource for providing useful information. Its use must be protected even when the data may not be confidential.

Data Administrators:

Data administration activities outlined may be delegated to some of the officers in that department.

8. RESPONSIBILITIES OF DATA CENTER

a. Campus Network Backbone Operations

1. The campus network backbone and its active components are administered, maintained and controlled by Data center.
2. Data center operates the campus network backbone such that service levels are maintained as required by the Institute Departments, and hostels served by the campus network backbone within the constraints of operational.

b. Maintenance of Computer Hardware & Peripherals

Data center is responsible for maintenance of the institute owned computer systems and peripherals that are under warranty or out of the warranty. Every

c. Receiving Complaints

Data center may receive complaints from the users if any of the computer systems or peripherals that are under maintenance through them is having any problems. The designated person in Data center receives complaints from the users of these computer systems and coordinates with the service engineers of the respective brands of the computer systems (which are in warranty) to resolve

the problem within a reasonable time limit. For out of warranty computer systems, problems resolved at Data center.

Data center may receive complaints from department/users, if any of the networks related problems are noticed by them such complaints should be made by email/phone. Data center may receive complaints from the users if any of the user is not able to access network due to a network related problem at the user end. Such complaints may be generally through phone call.

The designated person in Data center receives complaints from the users and coordinates with the user/service engineers of the network hardware or with internal technical team to resolve the problem within a reasonable time limit.

d. Scope of Service

Data center will be responsible for solving the hardware related problems or OS or any other application software that were legally purchased by the institute and was loaded by the company as well as network related problems or services related to the network.

e. Installation of Un-authorized Software

Data center or its service engineers should not encourage installing any unauthorized software on the computer systems of the users. They should strictly refrain from obliging such requests.

f. Campus Buildings' Network

1. Physical connectivity of campus buildings already connected to the campus network backbone is the responsibility of Data center.
2. It is not the policy of the Institute to actively monitor Internet activity on the network, it is sometimes necessary to examine such activity when a problem has occurred or when optimizing traffic on the Institute's Internet links.

g. Network Expansion:

Major network expansion is also the responsibility of Data center. Every 3 to 5 years, Data center reviews the existing networking facilities, and need for possible expansion.

h. Wireless Local Area Networks

1. Where access through Fiber Optic/UTP cables is not feasible, in such locations Data center considers providing network connection through wireless connectivity.
2. Data center is authorized to consider the applications of Departments, or divisions for the use of radio spectrum from Data center prior to implementation of wireless local area networks.
3. Data center is authorized to restrict network access to the Cells, departments, or hostels through wireless local area networks either via authentication or MAC/IP address restrictions.

9. RESPONSIBILITIES OF DEPARTMENTS

➤ **User Account**

Any Centre, department, or cell or other entity can connect to the Institute network using a legitimate user account (Net Access / Captive Portal ID) for the purposes of verification of affiliation with the institute. The user account will be provided by Data center, upon filling up the prescribed application form and submitting it to Data center.

Once a user account is allocated for accessing the institute's computer systems, network, mail and web services and other technological facilities, that account holder is personally responsible and accountable to the institute for all the actions performed using that user account. Hence, users are advised to take reasonable measures such as using complex passwords, not sharing the passwords with others, not writing down the password at a place which is accessible to others, changing the passwords frequently

and keeping separate passwords for Net Access Id and for email account ID to prevent un-authorized use of their user account by others. It is the duty of the user to know the IT policy of the institute and follow the guidelines to make proper use of the institute's technology and information resources.

➤ **Security**

In connecting to the network backbone, department agrees to abide by this Network Usage Policy under the Institute IT Security Policy. Any network security incidents are resolved by coordination with a Point of Contact (POC) in the originating department. If a POC is not available to contact, the security incident is resolved by disconnecting the offending computer from the network till the compliance is met by the user/POC.

➤ **Preservation of Network Equipment and Accessories**

Routers, Switches, Fiber optic cabling, UTP cabling, connecting inlets to the network, Racks, UPS, and their batteries that are installed at different locations by the institute are the property of the institute and are maintained by Data center and respective departments. Tampering of these items by the department or individual user comes under violation of IT policy.

➤ **Additions to the Existing Network**

Any addition to the existing network done by department or individual user should strictly adhere to the institute network policy and with prior permission from the competent authority and information to Data center. Institute Network policy requires following procedures to be followed for any network expansions:

1. All the internal network cabling should be as on date of CAT 6 UTP.
2. UTP cabling should follow structured cabling standards. No loose and dangling UTP cables are drawn to connect to the network.
3. UTP cables should be properly terminated at both ends following the structured cabling standards.

4. Only managed switches should be used. Such management module should be web enabled. Managed switches give the facility of managing them through web so that Data center can monitor the health of these switches from their location. However, the hardware maintenance of so expanded network segment will be solely the responsibility of the department/individual member. In case of any network problem created by any computer in such network, if the offending computer system is not locatable due to the fact that it is behind an unmanaged hub/switch, the network connection to that hub/switch will be disconnected, till compliance is met by the user/department.
5. As managed switches require IP address allocation, the same can be obtained from Data center on request.

➤ **Enforcement**

Data center periodically scans the Institute network for provisos set forth in the Network Use Policy. Failure to comply may result in discontinuance of service to the individual who is responsible for violation of IT policy and guidelines.

10. RESPONSIBILITIES OF ADMINISTRATIVE DEPARTMENTS

System Administrator responsibilities include:

- Installing and configuring software, hardware and networks.
- Monitoring system performance and troubleshooting issues.
- Ensuring security and efficiency of IT infrastructure.

11. GUIDELINES FOR RUNNING APPLICATION OR INFORMATION SERVERS

Departments may run an application or information server. They are responsible for maintaining their own servers.

- Obtain an IP address from Data center to be used on the server.
- Get the hostname of the server entered for IP Address resolution.
- Make sure that only the services that are essential for running the server for the purpose it is intended for should be enabled on the server.
- Make sure that the server is protected adequately against virus attacks and intrusions, by installing the appropriate software such as anti-virus, intrusion prevention, personal firewall, anti-spam etc.
- Operating System and the other security software should be periodically updated.

12. GUIDELINES FOR DESKTOP USERS

1. All desktop computers should have the latest version of antivirus. And should retain the setting that schedules regular updates of virus definitions from the central server.
2. When a desktop computer is installed, all operating system updates and patches should be applied. In addition, operating system updates and patches should be applied regularly, on an ongoing basis. The frequency will be a balance between loss of productivity (while patches are applied) and the need for security. We recommend once in a week cycle for each machine. Whenever possible, security policies should be set at the server level and applied to the desktop machines.
3. The password should be difficult to break.
4. The guest account should be disabled.
5. In addition to the above suggestions, Data center recommends a regular backup strategy. It should be noted that even with all the procedures listed above; there is still the possibility of a virus infection or hacker compromise. Backing up data on a regular basis (daily and/or weekly) will lessen the damage caused by the loss of a machine.

13. WEB APPLICATION FILTER

Firewall : SOPHOS X

Application	Management	Staff	Student	Guest
Captive portal Session	2 concurrent sessions / user			
Sites Blocked	Porn, torrents, Proxy & Hacking, Gambling, Criminal Activity			
YouTube	Allow	Allow	Time based	Allow
What's App	Allow	Allow	Time based	Allow
Facebook	Allow	Allow	Time based	Allow
Skype or Video calling	Allow	Allow	Time based	Allow
Entertainment	Allow	Time based	Time based	Allow
TV news Channel	Allow	Allow	Time based	Allow
Online Games	Deny	Deny	Deny	Deny
Windows Update	Allow	Allow	Allow	Allow

Default Block Category in Firewall

- Weapon
- Phishing and fraud
- Gambling
- Pro-Suicide and self-Harm
- Criminal Activity
- Intellectual Piracy
- Hunting and Fishing
- Legal highs
- Anonymizers
- Sexually Explicit
- Nudity
- Advertisement
- Alcohol & Tobacco

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Guidelines for Laboratory Maintenance and Service

LABORATORY MAINTENANCE AND SERVICE

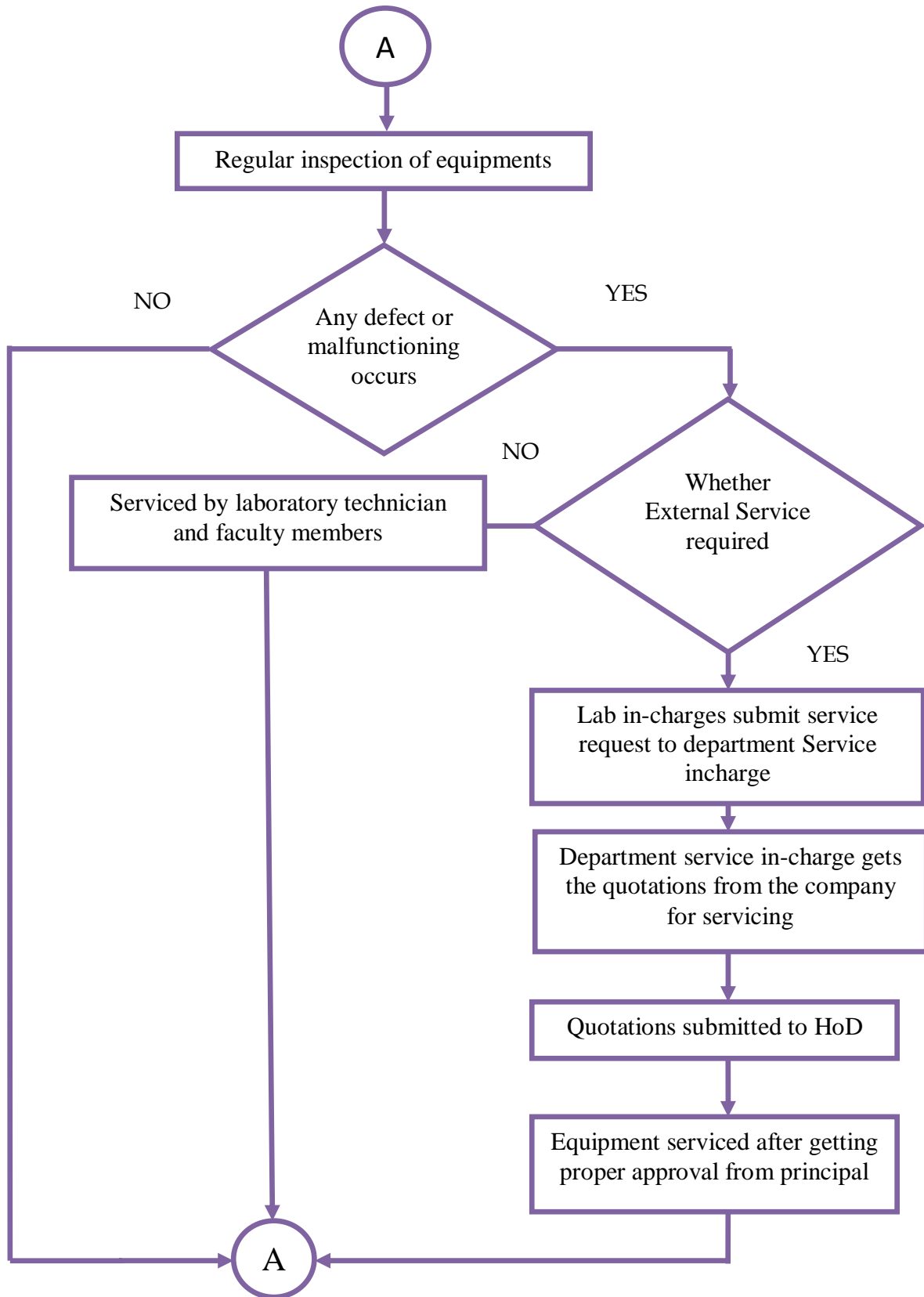
Maintenance of Laboratory Equipments:

- ❖ Well Technical Staff are available for maintenance of Electronic equipments and software.
- ❖ Laboratory instruments/equipments are calibrated regularly to ensure the standard.
- ❖ Regular inspection of equipment is carried out at the end of every semester.
- ❖ Checking the proper working condition of all equipments periodically.

Maintenance schedule of laboratory equipments:

Sr. No.	Frequency	Maintenance Work Undertaken
1.	Daily	<ul style="list-style-type: none">• Checking the workbench power supply and fuse plug• Checking the count of components and equipments• Checking the switches and knobs of the equipments
2.	Weekly	<ul style="list-style-type: none">• Checking the operation of equipments like CRO, Function Generator, Digital Storage Oscilloscope• Checking the function of power supply and the main cord• Checking the power supply board and fuse plug• Preparing the weekly maintenance schedule
3.	Monthly	<ul style="list-style-type: none">• Complete functional verification of the equipments• Software updates as necessary
4.	Quarterly	<ul style="list-style-type: none">• Equipments are calibrated to ensure its standard by lab-incharge• Testing and troubleshooting of each workbench
5.	Half-yearly	<ul style="list-style-type: none">• Servicing of essential equipments• Stock verification• Sending request to department HOD for consumable and equipment to next semester

Process for Servicing of Equipments in the Lab:



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Library Maintenance Policy

LIBRARY MAINTENANCE AND SERVICE

Maintenance schedule of Library

- The library staff is clearly instructed in the care and handling of library documents, particularly during processing, shelving and conveyance of documents.

Service	Frequency	Responsible Authority
Book Binding	Once in a semester	Asst. Librarian
Taking of Pest control measures		Asst. Librarian
Old Volumes maintenance	Once in a Year	Asst. Librarian
Cleaning of Tables, Chairs, and Bookshelves.	Daily	Attender
Floors dust mop, wet mop, High and low		

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Infrastructure Maintenance Policy

INFRASTRUCTURE MAINTENANCE AND SERVICE

Maintenance of Building:

- Cleaning of the campus areas including the academic buildings is performed daily in the morning before the regular classes begin with the help of the housekeeping team.
- Toilets are cleaned twice every day.
- The whole campus area is maintained by the housekeeping supervisor.
- Classrooms and Tutorial rooms with furniture and teaching aids are maintained by the respective department attendees and supervised by the respective Head of the Department.

Maintenance schedule of Building:

Service	Frequency	Responsible Authority
Cleaning of Classrooms, Seminar Halls, Conference Halls, Laboratory, Faculty and HoD Cabins, Floors and toilets in academic blocks	Daily	Housekeeper
Emptying wastebaskets		Housekeeper
Removing of unwanted circulars from Notice Boards		Attender
Working condition of computer system, projector, and projector screen in classrooms and seminar halls		Technician

Service	Frequency	Responsible Authority
Offices		
Cleaning of office rooms, furniture	Daily	Housekeeper

Floors dust mop, wet mop, High and low dusting		Housekeeper
Emptying wastebaskets		Housekeeper
Staircases and corridors		
Cleaning of steps and floor	Daily	Housekeeper
Wet mop		Housekeeper
Rest Rooms		
Cleaning of Toilets	Twice in a Day	Housekeeper
Disinfecting all Washbasins and restrooms		Housekeeper
Wet mop, High and low dusting		Housekeeper
Emptying Waste Baskets	Daily	Housekeeper

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Sports Maintenance

SPORTS MAINTENANCE AND SERVICE

Maintenance of Sports:

- The sports equipments, fitness equipments, ground and various courts are supervised and maintained by the Physical Director and attender of Physical Education Department respectively.
- Ground level maintenance is done annually during vacation in addition to the seasonal maintenance done in once in every three months.
- Grounds men, vendors of Sports goods and students of Physical Education jointly maintain the sports equipments.
- Gymnasium and playgrounds are maintained by the staff of the Department of Physical Education.

Maintenance schedule of Sports:

Service	Frequency	Responsible Authority
Watering	Daily	Physical Education Staff
Rolling		Physical Education Staff
Marking		Physical Education Staff
Grass Pulling		House Keeper
Grass Cutting in Cricket Court	Weekly	House Keeper
Poles Painting in all courts	Once in a semester	Physical Education Staff
Basketball Court Painting		Physical Education Staff

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Lift Maintenance and Service

LIFT MAINTENANCE AND SERVICE

Maintenance of Lift:

- Breakdown maintenance of any asset, facility, and equipment whether under AMC or under preventive maintenance is urgent requirement where the institute works in mission-mode.
- The breakdown maintenance is a type of maintenance that involves using a machine until it completely breaks down and then repairing it to working order

Maintenance schedule of lift:

Sr. No.	Frequency	Maintenance Work Undertaken
1.	Weekly	<ul style="list-style-type: none">• Checking the function of power supply and the main cord• Checking the power supply board and fuse plug• Preparing the weekly maintenance schedule