



QUALITY MANUAL

SOP FOR INFRASTRUCTURE MAINTENANCE



4.3.0 INFRASTRUCTURE

In order to implement, maintain and continually improve the effectiveness of QMS, resources requirements including infrastructure facilities, buildings and work space, communication facilities, library facilities and human resources are identified and provided. Additional requirements are provided as decided in MRM or in line with the institution's future plans.

4.4.0 WORK ENVIRONMENT

Faculty ensures that classrooms are provided with adequate lighting / ventilation. The institution premises are located away from industrial area, thickly populated residential area and from roads /highways with heavy traffic in order to create an atmosphere conducive for imparting education. It is ensured that faculty and students follow the discipline procedure of the institution. In laboratories where electrical machineries are to be used, protection through ELCB and fire fighter is provided to protect from electrical shock and fire.

4.8.0 PURCHASE OF LABORATORY EQUIPMENTS AND CONSUMABLES

Based on the past experience, approved list of suppliers (only for consumable items) is maintained as per PR 03 with the approval of the Principal. In case of poor performance, based on the feedback from the concerned faculty, the Principal decides to remove such suppliers from the list. New suppliers are included with the Principal's approval. At the end of the semester, the laboratory in-charge identifies the requirement of equipment's / consumable items for laboratory based on the syllabus and stock positions. These are consolidated and submitted to the Principal as per PR 01. In case of equipment's quotations are sought from various suppliers. After analyzing and comparing

the quotations as per PR04, on approval from the trust office, purchase order is placed as approved by the Principal. In case of consumables approval is obtained for the budget required and based on this purchase is made from the approved suppliers. After receiving the items from the suppliers, these are verified by the laboratory in-charge and recorded in purchase register PR 02. The stock register (Capital Equipment - ST 02 /Consumable Items- ST 03) is also updated. At the end of every semester, after stock verification based on the balance stock position, stock register is updated.

4.8.1 EQUIPMENT IDENTITY AND TRACEABILITY

EIN: A unique Equipment Identity Number is assigned and shall be affixed on each equipment's in the Department by the laboratory in-charges. The EIN is an eight-digit alphanumeric code. First three digits.

4.8.2 MAINTENANCE OF LABORATORY EQUIPMENTS

For computer laboratories preventive maintenance schedule as per MN 02 is maintained. Based on the schedule, maintenance is carried out and recorded in MN 03. For other laboratories, equipment's are checked before the commencement of the cycle of experiment. Problems if any identified are recorded in MN 03. HoD initiates necessary action to service the equipment on the approval of Trust Office through the Principal. If the requirement of the syllabus cannot be fulfilled by the end of the semester, it is brought to the notice of the Principal through HOD. The laboratory technician / programmer verifies the condition of the components/equipment at the end of every laboratory session. The breakage of the components/equipment's is recorded in the breakage register (MN 04) against the student's name (if known) with the signature of the course coordinator. Students shall replace the broken components; otherwise breakage amount shall be collected from them before they are appearing for final practical examination. The general breakage based on MN 03 and MN 04 shall be collected from the students at the end of the semesters. Laboratory-wise list of equipment's shall be prepared as per MN 07 with EIN by the laboratory in-charges appointed by the HoD. During audits/stock verification/Inspection these items are verified. The MN07 is updated on every new

purchase by the lab in-charge Maintenance pertaining to building, classroom rooms, furniture, electrical fittings, and plumbing are to be recorded in the Maintenance complain Register (MN 05) kept in the office. Complains shall be noted on daily basis by the Maintenance Engineer and actions initiated/taken are recorded immediately and reviewed by the Principal. Complaints of immediate attendance can also be informed directly to the Maintenance Engineer.

Principal formulates a committee and appoints convener and members for stock verification for all the laboratories, furniture in the department, library and office at the end of the year to verify the stock position and to monitor the maintenance. Principal reviews the report and suitable corrective and preventive actions are initiated as required. The general breakage based on the committee report shall be collected from the students at the end of the semesters. The report is maintained by the Office.

11.0.0 INFRASTRUCTURE MAINTENANCE

(a) Maintenance Engineer maintains the list of Block-wise Rooms/Halls (MN 01) in the campus with unique 4-digit room number (first digit of alphabet species the block, second digit number specifies the floor and last two digits specify the serial number). The furniture details are also maintained in the MN01 which can be used during inspection and stock verification. Any observation made during inspection is recorded as per (MN 01). The Maintenance Engineer also maintains the copy of documents related to the buildings with layout, electrical and plumbing details.

(b) Maintenance Engineer prepares and maintains preventive and maintenance schedule as per MN 02 for the follow-up of AMC related maintenance works.

(c) Complains pertaining to building, classroom rooms, furniture, electrical fittings, and plumbing shall be recorded by the faculty/staff members in the Maintenance complain Register (MN 05) kept in the office. Complains shall be noted on daily basis by the Maintenance Engineer and actions initiated/taken are recorded immediately and reviewed by the Principal. Complaints of immediate attendance can also be informed directly to the Maintenance Engineer.

(d) Principal formulates a committee and appoints convener and members for stock verification for all the laboratories, furniture in the department, library and office at the end of academic year to verify the stock position and to monitor the maintenance. Principal reviews the report and suitable corrective and preventive actions are initiated as required. The general breakage based on the committee report shall be collected from the students at the end of the semesters.

(e) Purchase: Based on the past experience, approved list of suppliers (only for consumable items) is maintained as per PR 03 with the approval of the Principal. In case of poor performance, based on the feedback, the Principal decides to remove such suppliers from the list. New suppliers are included with the Principal's approval. The Maintenance Engineer identifies the requirement of capital equipment's / consumable items for infrastructure maintenance based on the new requirements and stock positions. These are consolidated and submitted to the Principal as per PR 01.

In case of capital equipment's, the Trust office purchases and issues the items on the requisition of PR01 or quotations are sought from various suppliers, after analyzing and comparing the quotations as per PR 04, on approval from the trust office, purchase order is placed as approved by the Principal. In case of consumables approval is obtained for the budget required from the Trust office and based on this purchase is made from the approved suppliers. After receiving the items from the suppliers, these are verified by the Maintenance Engineer and recorded in purchase register PR 02. The stock register (Capital Equipment - ST 02 / Consumable Items- ST 03) is also updated. At the end of every semester, after stock verification based on the balance stock position, stock register is updated.

(f) In addition, the duties and responsibilities of Maintenance Engineer are,

- House keeping
- Repairs and maintenance of buildings and infrastructure facilities
- Services and maintenance of Generators, ACs, fire extinguisher and electrical appliances

- Follow-up of AMC service related equipment's as per MN02
- Services and maintenance of water resources
- Maintenance of landscapes
- Furniture and electrical arrangements in Seminar Halls during Department/College functions
- Services and maintenance of audio equipment's in the Seminar Halls
- Services and maintenance of class room furniture and electrical fittings
- Services and maintenance of rest rooms
- Ensuring the class room furniture arrangements (one dual desk for every two students, one staff table, and one black board per class room) as per the strength updated in the Nominal roll AD09
- Placing and maintaining sign boards in the campus and in each class rooms with room number and class allotted details
- Placing temporary sign boards in the campus during important events
- Hall arrangements as per seating plan during End Semester Examinations issued by chief superintendent