

GANGADHAR MEHER UNIVERSITY

Sambalpur, Odisha

MAINTENANCE
OF
INFRASTRUCTURE

Introduction

Gangadhar Meher University, Sambalpur, Odisha has an extensive infrastructure to deliver its teaching, research and extension programmes. The University has an established system for maintenance and utilization of infrastructure in its campus.

The University is responsible for regular maintenance of all the infrastructural facilities, providing plans for campus development and other allied and incidental activities. It performs civil, electrical and water supply works and operates under the supervision of duly appointed **officials**.

This document provides a framework and an outline on the allocation of responsibilities to ensure effective use and maintenance of existing infrastructure facilities.

Diagrammatic representations of a procedure for the maintenance of various infrastructural facilities are presented in this document.

1. Components of the maintenance system:

The maintenance system of the University includes the following components:-

- Prioritization of work

- Comprehensive work procedures

- Performance standards and goals

- Work order system

- E-Tender system

- Works being executed by the Construction Agencies nominated by Odisha Government.

- Long-range planning

By developing a maintenance policy that has these components in place, the University will have the tools it needs to control the performance of maintenance work at the University.

1.1 Prioritization of Work

The work priorities adopted by the Directorate exemplify its philosophy of delivering maintenance services. This priority system ensures that the most important maintenance work is done at a time it can be performed most cost-effectively. The maintenance priorities of the University assets and buildings are as follows:

- i. Emergency repairs
- ii. Planned maintenance
- iii. Resident requests
- iv. General cleaning
- v. Inspection
- vi. Preventive maintenance
- vii. Miscellaneous

This will ultimately decrease on-demand work and maintain the property in a manner that will keep students and staffs satisfied.

1.2 Comprehensive Work Procedures

The officer in charge will ensure that there are sufficient clear procedures in place to allow staff to implement the Maintenance Policy. All procedures will include the following:

- i. A statement of purpose.
- ii. The job title(s) of the staff member(s) responsible for carrying out the activities in the procedure.
- iii. Forms needed to carry out the activities.
- iv. An annual review of the maintenance procedures.

1.3 Performance Standards and Goals

The Executive Engineer (Civil) will establish measures that will allow the effectiveness of maintenance systems and activities to be evaluated. In establishing the standards, the University will take into consideration certain factors:

I. University Agreements

II. Job descriptions of works to be undertaken.

Nothing in the documents listed above will prevent the University from setting a standard that is higher than that contained in the documents. These standards and

goals will be used to evaluate current operations and performance and to develop strategies to improve performance and meet the standards that have been set.

1.4 Work Order Systems

The Directorate shall have a comprehensive work order system that includes all work request information, *viz.* source of work, description of work, priority, cost and period to complete. This information is required for the University to plan for the delivery of maintenance services as well as evaluate performance. To obtain the greatest effectiveness from the work order system, all work requests and activities performed by maintenance staff must be recorded on work schedules which will include at the minimum, the following:

- i. Source of request (planned, inspection, resident, etc).
- ii. Priority assigned.
- iii. Location of work.
- iv. Date and time received.
- v. Date and time assigned.
- vi. Worker(s) assigned.
- vii. Description of work requested (with task number).
- viii. Description of work performed (with task number).
- ix. Estimated and actual time to complete.
- x. Materials used to complete work.

1.5 E-Tender system

In accordance with the Odisha Government orders the works within a limit of Rs.10.00 lacs from University own receipts are being executed through e-tender.

1.6 The major construction/repair works are being executed by the construction agencies nominated by Odisha Government. Long Range Planning are to be carried out

along with maintenance planning capability in order to ensure the most cost effective use of University resources and to maximize the useful life of University properties. By developing a work plan, the University will be able to anticipate its staff, equipment and material needs. It will also be possible to determine for contracting particular services.

2. Maintenance of Physical facilities

The physical facilities in the campus of the university are maintained by the Maintenance section under the University Administration. The services of

plumbers, electricians, carpenters, etc. are available round the clock in the campus. Electrical staff is responsible for the uninterrupted power supply and maintenance of equipment like generator sets, general lighting, power distribution system, etc. Maintenance of water plumbing plants, sewerage and drainage system is undertaken by support staff.

In main campus, the electrical and the civil complaints are handled by maintenance cell. The team of members, monitors the maintenance of the buildings, classrooms, labs, campus ground, sports facilities, staff lounge, students amenity areas, canteen and 15 hostels.

Ensuring adequate fire-fighting arrangement in campus, at major events organized in campus such as Convocation, Annual Functions, Exhibitions etc. in coordination with respective departments for any such response in emergency, is a important responsibility of the.

3. Maintenance of Classrooms, Furniture and Laboratories

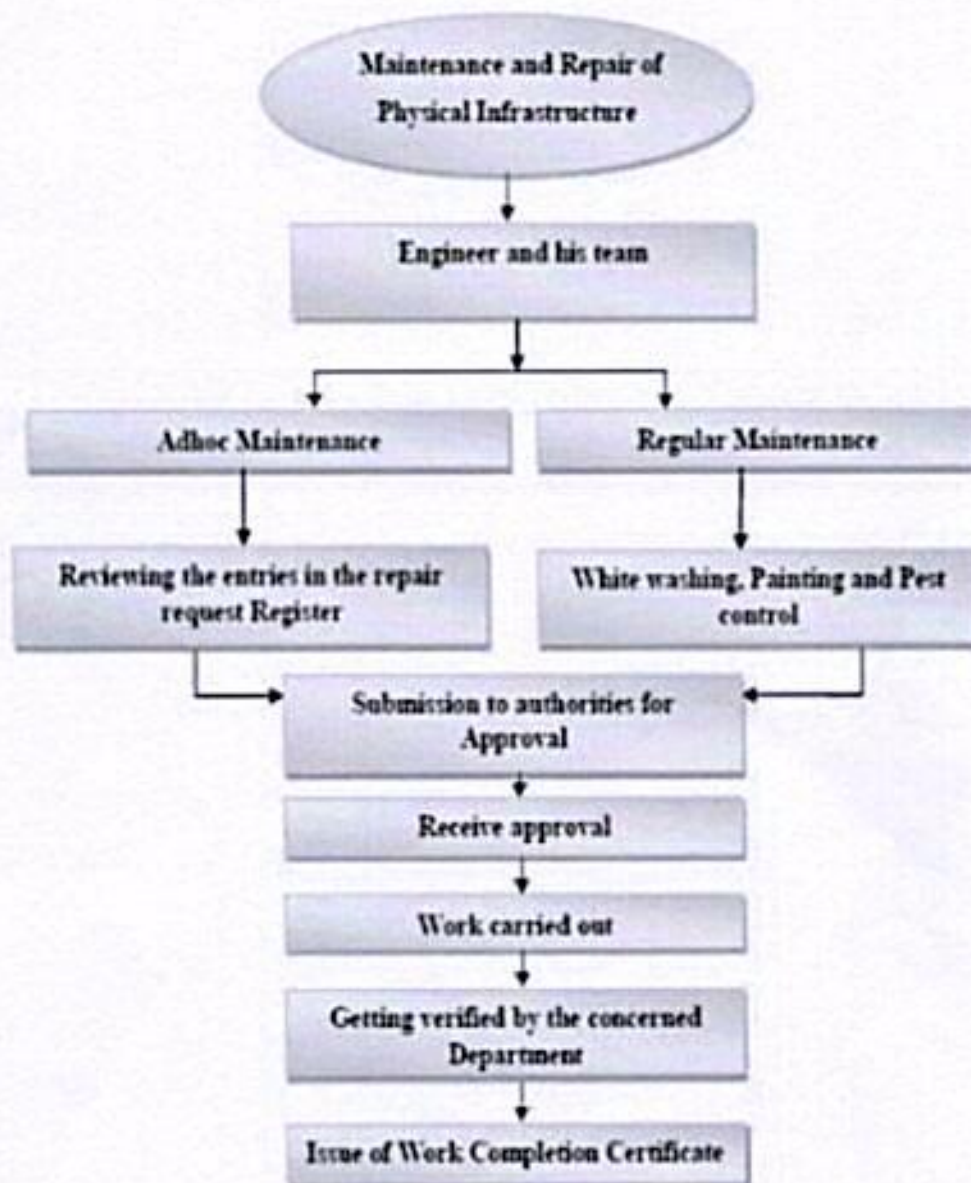
Classrooms with furniture, teaching aids and laboratories are maintained by the respective department staff and attendants and supervised by the respective Head of the School. The laboratory assistants take care of the respective laboratories. The Heads of School report to the administration periodically for all the maintenance works. Minor repairs are registered in a ledger maintained in the office and are attended on priority basis. Staffs of respective department monitor effective utilization of the laboratories. Students optimally utilize all classrooms during the day long working hours and are also mentored to up keep the furniture.

4. Maintenance of Library and Library Resources

The library staff takes care for library resources. They are trained in the handling of library documents, particularly during processing, shelving and conveyance of documents.

Dust should not be allowed to deposit on the documents because this causes staining of documents and promote chemical and biological problems. Cleaning and using vacuum should be done regularly and carefully. Magnetic discs or documents containing disc(s) should not be kept open or near any magnetic or electric equipment, i.e. tape recorders, air-conditioners ,etc. Such materials should be kept in a dust-free, temperature and humidity controlled room. Proper pest management is done to minimize the problems caused by insects. Borax or common salt is used to prevent cockroaches.

Sodium fluoride is applied to bound volumes to save them from silverfishes. Spread of kerosene oil, DDT or gammxene powder over the affected area can help in removal of termites or white ants. Proper cleaning, fumigation and exposure to sunlight to the documents are done to reduce the effect of insects in the library. Repellants are used to save materials from rats and insects.



**FLOWCHART
OF
PHYSICAL INFRASTRUCTURE MAINTENANCE**

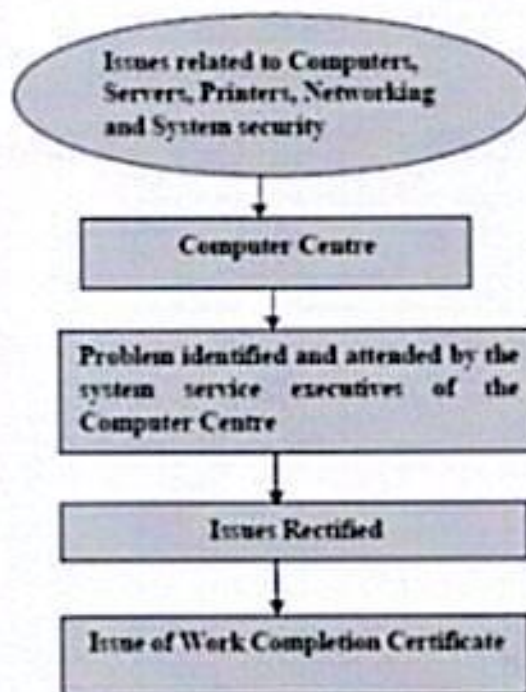
Figure-1

5. Maintenance and Utilization of Seminar Halls and Auditoriums

Maintenance of Seminar halls and auditoriums are under the purview of the Executive Engineer(Civil)/HeadofDepartments.Effectiveutilizationofseminarhallsandauditoria fororganizingacademicmeetings,seminars,conferencesandculturaleventsismade.

6. Maintenance of ICT Facilities

The Computer Centre and its support staff maintain the ICT facilities including computers and servers. The annual maintenance includes the required software installation, antivirus and up gradation. To minimize e-waste, electronic gadgets likeprojectors,computers,printers,photocopiersareservicedandreused.

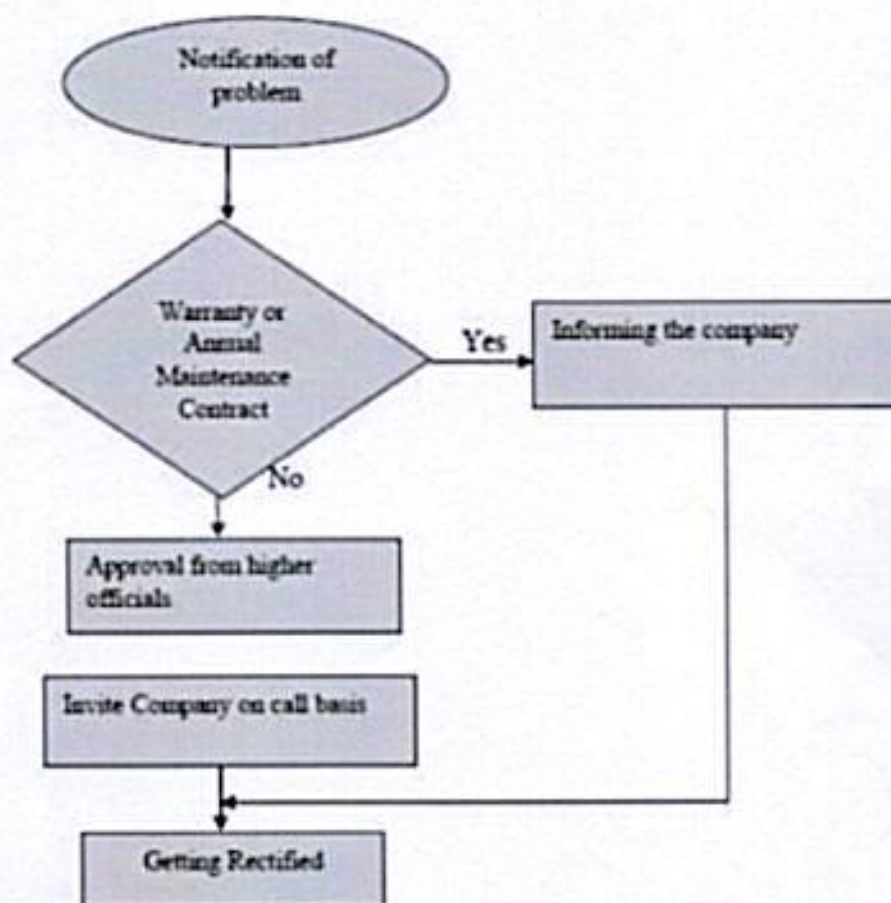


MAINTENANCE
OF
ICT FACILITIES

Figure-2

7. Maintenance of Sports Facilities

The sports equipments, fitness equipments, ground and various courts in Campus are supervised and maintained by the Officer-in-charge games of the University. Expensive equipments in the fitness lab are maintained through Annual Maintenance Contract. Ground level maintenance is done annually during vacation in addition to the seasonal maintenance done in every three months.



**FLOW CHART
FOR
MAINTENANCE OF SPORTS FACILITY**

Figure-3

8. Maintenance of Campus Cleanliness

Cleaning of the campus areas in all academic and administrative buildings is performed daily in the morning before the regular classes begin with the help of the outsourced housekeeping team. Toilets are cleaned every day. The whole campus area is maintained by the housekeeping supervisor who will be reporting the completion of work to the Public Relations Officer and his assistants.

9. Campus Development Activity

- i. To prepare proposals for infrastructural development in the campus as instructed by the Vice Chancellor for University funded projects or for seeking funding from ICAR/RKVY/ State Government and other Government projects through respective Dean of the Schools and Dean of Research.
- ii. To coordinate with nominated government executing agencies for successful execution of such funded projects and submission of utilization certification by the Finance Officer.
- iii. To execute approved proposals for demolition of such dilapidated building structures which are deemed unusable for safety reasons through due process of auction on as-is-where basis.

10. Allied and incidental maintenance

- i. To prepare estimates of maintenance, repair, renovation or new projects as per approved schedule of rates prescribed by the Public Works Department, seek administrative approvals, carry out due process of inviting quotation, tenders, Expressions of Interest etc. as applicable as per prescribed respective limits for quotations, tenders etc., assign work to successful bidder after ensuring prepared MOU to be signed by Finance Officer.
- ii. To monitor approved works for timely completion and adherence of quality, verify and process bills for payment to Finance Officer after due entry in measurement books, stock register etc.
- iii. To maintain record for all executed works and assist in provision of requisite

information as needed to authorities, RTI and audit.

- iv. To install electrical meters in residential units, carry out readings for monthly consumption and ensure deduction of electrical charges from the salary bill of residential allottees through advice note to Finance officer.
- v. To ensure handing over the new added infrastructure facilities to the concerned In-charge of the office after verifying the lists of assets, fittings and fixtures etc.
- vi. To ensure handing over the keys of the allotted residential quarters to the concerned teacher/employee as per the allotment by the Allotment Committee /Vice Chancellor and also take the vacated quarter keys from outgoing occupant.
- vii. To issue No-Dues Certification to teachers/employees after ensuring all rental dues, electrical charges are paid and all fittings and fixtures are intact.
- viii. To assist in removal of condemned and discarded items of furniture, fixtures and furniture on the request of HOD or In-charge concerned to the scrap yard or store for disposal under the directions of Registrar.

Glossary:

- i. **Maintenance:** Work performed on a facility or the fixed systems and building service equipment therein, for the purpose of maintaining quality and function.

- ii. **Planned maintenance:** Upkeep of property, machinery, and facilities, including buildings, utility systems, roads, and grounds. It is often characterized by its routine or recurring nature.
- iii. **Preventive maintenance:** Planned actions undertaken to retain an item at a specified level of performance by providing repetitive scheduled tasks that prolongs systems' operation and useful life: inspection, cleaning, lubrication, and part replacement.
- iv. **Repairs:** The reconstruction or renewal of any part of an existing facility for the purpose of maintenance or restoration of its state

Note:

Life Safety Systems

The University shall have a comprehensive program for maintenance of life safety systems to ensure that they will be fully functional in the case of an emergency. The maintenance cell shall be responsible for the development and implementation of a schedule that includes the inspection, servicing and testing of this equipment. The equipment to be included in the plan are the following:

- i. Transformers
- ii. Air conditioners

The plan will include testing and servicing as per manufacturer's recommendations. It will also include a determination of the most reliable and cost effective way to perform the work including the decision to hire a contractor.


REGISTRAR
GANGADHAR MEHER UNIVERSITY
SAMBALPUR


Director, IQAC
Gangadhar Meher University
Sambalpur