



ANNAI VIOLET ARTS AND SCIENCE COLLEGE
QUALITY SYSTEM PROCEDURES
LABORATORY MAINTENANCE

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1.0 PURPOSE

To plan and to ensure the availability of all equipments, machines, instruments and common equipments for laboratory programmes, in good and accurate working conditions

2.0 SCOPE

All the Laboratories

3.0 RESPONSIBILITY

All the Heads and Laboratories-in-Charge

PROCEDURES

4.1 List of Laboratories under various Departments

Name of the Laboratories	Controlling Department
Computer Centre	Computer Science/ Computer Applications
Microbiology	Microbiology
Biochemistry	Biochemistry

4.2 Inventory and Identification

4.2.1 Each Department maintains stock registers of equipment, instruments and machines available in various laboratories including basic description and purchase details.

4.3 Maintenance

4.3.1 Preventive Maintenance

4.3.1.1 The Laboratory-in-Charge prepares a list of equipment/ machines and prepares a plan for preventive maintenance of the same to ensure smooth and uninterrupted functioning of equipment / machines.

4.3.1.2 The preventive maintenance schedule contains the details of parameters to be maintained with intervals for all equipment/ machines available with the laboratory.

4.3.1.3 The preventive maintenance plan and schedule is scrutinized, approved and validated by the laboratory-in-charge in consultation with the Head.



4.3.1.4 The laboratory-in-charge may assign the maintenance care of equipments to persons specifically assigned for the purpose.

4.3.1.5 Action on equipments, which need external maintenance, are initiated, followed and executed by the laboratory-in-charge in consultation with the Head.

4.3.1.6 For all maintenance activities, sufficient records are maintained by the laboratory-in-charge.

4.3.2 Breakdown Maintenance

4.3.2.1 Any breakdown of machines/ equipments is reported by the technician or lab assistant to the laboratory-in-charge.

4.3.2.2 If the breakdown is minor / temporary in nature, the same is attended to by the technician attached to the department.

4.3.2.3 If the breakdown is major, the laboratory-in-charge will initiate action to repair the same in the shortest possible time through an external agency.

4.3.3 Movement / Disposal of Equipments

4.3.3.1 In the event of an interdepartmental transfer, details of the same are recorded in Stock Register.

4.3.3.2 On condemnation of any equipment / machine the same is physically removed from the place or kept in a specific earmarked place with the board bearing the title 'not in use' and corresponding records are updated with the deletions.

4.4 Calibration

4.4.1 The laboratory-in-charge of each Laboratory prepares and maintains a list of meters, gauges and other measuring instruments and testing machines, which need periodical calibration.

4.4.2 The laboratory-in-charge in consultation with the Head scrutinizes the list to decide on the external and internal calibration of equipments.

4.4.3 For Internal calibrations, an instrument from the existing ones has to be calibrated by the external agency and on the basis of that all other similar instruments are calibrated internally or error of the instrument can be found out and recorded.

4.4.4 Actions on instruments, which need to be calibrated externally, are initiated, followed and executed by the laboratory-in-charge in consultation with the Head.



4.4.4.1 Technically competent persons from the department are nominated as staff-in-charge for items specified to undertake internal calibration.

4.4.4.2 For all the calibration activities, sufficient records are maintained by the laboratory-in-charge.

4.5 Compliance of Plan

4.5.1 Every Head scrutinizes the Maintenance and Calibration records of the laboratory once a year for updating, maintenance and calibration compliance.

4.6 Computers and Common Equipments

4.6.1 The maintenance of computers and common equipments is under the charge of the Department Faculty.

4.6.2 Maintenance work includes,

- a. Installation
- b. Maintenance

4.6.2.1 On receipt of the computers / equipments, the computer supplier takes up and completes the installation and after the performance test by the supplier, they are taken over by the administrative staff / faculty.

4.6.2.2 The faculty makes necessary entries in the inventory register and allots a unique number to the equipment.

4.6.2.3 The unit is allocated to the Laboratory/ Department based on priorities and the same is installed in the section.

4.6.2.4 The master record containing information regarding all computers and equipment with peripherals are maintained by the System Administrator.

4.6.2.5 The System Administrator prepares a maintenance schedule for periodic checking of all computers.

4.6.2.6 The maintenance process is planned in such a way that computers / equipment are rotationally made available to the external service engineer for maintenance without affecting academic or administrative activities.

4.6.2.7 When there is an operational problem in the computer system / equipment, the System Administrator or Department-in-Charge keeps the system apart with the



display board "not in use" and then executes the maintenance work or prepares problem report for external service.

4.6.2.8 The external service engineer visits the department and studies and records the exact nature of the problem and takes necessary action to solve the problem. Any purchase of spare parts regarding maintenance is as per purchase procedure.

4.6.2.9 When a system is declared "beyond repair" or obsolete a Service Report is prepared by the internal / external service engineer and is counter-signed by the Head of the department concerned and the Principal.

4.6.2.10 The Service Report is sent to the Principal and after getting the approval, the laboratory-in-charge updates the same in the stock.

4.6.2.11 The system is removed from the active list and considered as scrap and disposed off.

4.7 Maintenance of other Common Equipments

4.7.1 Maintenance of UPS

4.7.1.1 Administrative staff / faculty are responsible for the maintenance of UPS.

4.7.1.2 Periodic maintenance like refilling of water in the battery, switching off and on is the responsibility of the System Administrator of the particular department.

4.7.1.3 Incase of any problem in the intended system operation as noticed by the departmental staff the same is immediately reported to the faculty.

4.7.1.4 The faculty verifies if the system is still in the guarantee period and if so the supplier is informed immediately and ensures the repairs without delay.

4.7.1.5 The suppliers are asked to make available spare UPS to ensure that the work is not affected till the repair is over and the UPS is commissioned after repair.

4.7.1.6 In case of repair beyond the guarantee period, the laboratory-in-charge reports the matter to the faculty who takes care of the repair.

4.7.1.7 In case there is an Annual Maintenance Contract in vogue then the matter is referred to the contractor in the form of a letter by the Head with the approval of the Principal.

4.7.1.8 The necessary entries are made in the maintenance records for repairs carried out with essential technical details.



4.8 Consumables Control

- 4.8.1** The laboratory-in-charge in consultation with the subject faculty and the Head categorize and list out the consumables for each laboratory programme. The total requirement of consumables is worked out based on the number of students and also previous requirement.
- 4.8.2** An issue is raised detailing the requirements in the Purchase of materials/ consumables - Requisition and submitted to the Principal.
- 4.8.3** A consumable Stock and Issue Register is maintained for each consumable by the laboratory- in-charge with a periodic check by the Head.



**ANNAI VIOLET ARTS AND SCIENCE COLLEGE
QUALITY SYSTEM PROCEDURES
LIBRARY**

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1.0 PURPOSE

To plan and design the procedures for functioning of the Library

2.0 SCOPE

Functioning of Library

3.0 RESPONSIBILITY

Librarian and Supporting Staff

4.0 PROCEDURES

4.1 Acquisition of Books

4.1.1 Normal Purchase

4.1.1.1 The requirements of each Department for the ensuing year/semester are collected by the Librarian through a circular, well in advance. The Librarian consolidates all the requirements and works out the total financial requirements and books which are sanctioned by the Principal will be procured through vendors or publishers depending on the budgetary allotment.

4.1.1.2 On receipt of the Books, they are checked for their condition, price and edition and also the invoice details. After thorough verification, the bills are passed as requested.

4.1.2 Direct Purchase

4.1.2.1 Faculty of the Department concerned visit book houses and purchase books that are relevant to the subject after getting the approval of the Management through the Principal.

4.1.3 Purchase on Approval Basis

4.1.3.1 Booksellers visit the college and approach the librarian to introduce their latest editions and give some sample copies for reference.

4.1.3.2 After getting the approval and feedback from the department Heads concerned, the librarian suggests the purchase of the same to the Management through the Principal and returns books that are not approved.

4.2 Accession

4.2.1 Invoices are arranged chronologically and each book is given a unique number called Accession number. They are classified according to Universal Decimal Classification System.



4.2.2 All details of the books are entered in the Accession Register

1. Author
2. Publisher
3. Title
4. Edition
5. Supplier/ Publisher
6. Cost
7. Number of Pages
8. Voucher No.
9. Date of Purchase
10. No. of Copies
11. Language
12. Subject
13. Remarks

4.2.3 A database of books and other library resources is created in the system for easy access and effective control.

4.3 Acquisition of Journals and Magazines

4.3.1 The Librarian, in consultation with the Head of the respective Departments, arranges for the purchase of journals and magazines with due approval from the Management through the Principal.

4.3.2 A journal/ magazine register is maintained. On receipt of the journals / magazines, they are accessioned in the register.

4.4 Issue Of Library Cards And Books

4.4.1 Cards are issued to the students and staff and one book is issued towards each card. Two cards are issued to the students; five cards are issued to the staff members.

4.4.2 Books are issued through closed

4.4.3 Access system for students as well as staff.

4.4.4 A time limit of 14 days is given to the students and option is given for one renewal of 14days.

4.4.5 For delay in return of books a fine amount is levied for every day.

4.4.6 Issues of Books are entered in the register. Each book has a slip attached to the title page with the name of the college printed on the top. When the book is issued, the due date of return is affixed every time on the slip. Each book is provided with a book card with details of the book like accession number, call



numbers, author and title. When the book is issued this card is removed from the book and placed in the pouch of the member's token. Through this way the details of the book issued to the particular member is identified and traced.

4.4.7 These cards are arranged in trays according to the due date of each book. For each particular date the cards are arranged according to the accession number of the book issued, in ascending order. This facilitates easy retrieval of the token when a book is returned or brought for renewal.

4.5 Arrangement of Books and Journals in the storage racks

4.5.1 Books are segregated according to the discipline and call numbers are given. These Books are arranged in racks according to the call numbers for easy retrieval.

4.5.2 The spaces earmarked for a particular group of books is clearly demarcated by identification and some extra space is given for any future additions in that group.

4.5.3 Magazines are arranged according to the specific discipline.

4.5.4 A separate section is provided for reference books where the system of arrangement is discipline wise and call number wise.

4.6 Reservation System

4.6.1 A Reservation Slip is used for reservation of a particular book on a first come first serve basis. Availability of the book on reservation is ensured by the library-in-Charge giving prompt intimation to the holder of the book for the return on or before the expiry date.

4.6.2 When a book that is reserved is returned, the said book is automatically reserved for the person next in line. That book can be issued to any other member only if the reservation is cancelled.

4.7 Loss of Card

4.7.1 If a member happens to lose a token it is reported to the Librarian and a duplicate with proper identification is issued. A fine is imposed for loss of token.



4.8 Library Automation and Computerization

- 4.8.1** A database of books is created in the computer as it is entered in the accession register as also for the journals / magazines which are updated for any additions or deletions.
- 4.8.2** After the physical segregation of books under various disciplines, the same is carried out in the computer system with interlinking accession numbers and call numbers.
- 4.8.3** When books are issued, it is entered manually in the issue register. The member's name is entered and the accession number of the book borrowed by the member along with date of issue and the due date.
- 4.8.4 Retrieval**
 - a) Books can be retrieved either if the author is known or if only the title is known.
 - b) Books can also be retrieved according to a particular subject since all the available books on that particular subject are also displayed.

4.9 Damage Correction

- 4.9.1** The books that are damaged are re-claimed by binding.

4.10 Analysis on Issue

Periodically reviews are made on the issue (general and reservation) and a most wanted book list is prepared. Based on the requirements, new books are purchased for the next academic year.

4.11 Maintenance of Stock

- 4.11.1** At the end of every academic year a detailed stock verification is carried out to ascertain the book list and books damaged. Books lost are listed out and brought under the "missing" category and books that are damaged are sent for binding.

4.12 Maintenance of Files and Registers

- 4.12.1** Invoice Files are maintained for Books purchased
- 4.12.2** Subscription Invoices are maintained for Journals and Magazines
- 4.12.3** Books Accession Register is maintained for the stock of Books acquired
- 4.12.4** Separate registers are maintained for Journals