

# **AMCS-21 INSTALLATION AND MAINTENANCE OF COMPUTERS**

## **UNIT-1 REPAIR, SERVICING AND MAINTENANCE CONCEPTS**

- 1.1 Introduction to servicing and maintenance concepts.
- 1.2 Meantime between failure (MTBF) meantime the repair maintenance policy,
- 1.3 potential problems preventive maintenance and corrective maintenance.
- 1.4 Circuit tracing techniques. Concept of shielding grounding and power supply requirements and considerations of computers and its peripherals.

## **UNIT-2 FUNDAMENTAL TROUBLE SHOOTING PROCEDURES**

- 2.1 Fault location, Fault finding aids, Service Manuals
- 2.2 Test and measuring instruments - Special tools

## **UNIT-3 HARDWARE AND SOFTWARE FAULTS**

- 3.1 Trouble shooting techniques. Different trouble shooting techniques and methods
- 3.2 Functional area approach, Split half method
- 3.3 Divergent, convergent and feedback path circuits, analysis measured techniques.

## **UNIT-4 TROUBLE SHOOTING OF COMPUTERS, COMPONENT AND PERIPHERALS**

- 4.1 Mother Board - FDD - HDD - CD ROM/DBD - Printers - Modems - Monitors – SMPs
- 4.2 Specification, Maintenance and Repair of CVTs and UPS
- 4.3 Environmental requirements of computer system and peripherals
- 4.4 Sight preparation and design of computer rooms.
- 4.5 Testing specifications and installation of computer systems and peripherals.

## **UNIT-5 INSTRUCTIONAL STRATEGY**

- 5.1 While taking the theory classes, the teachers should lay emphasis on the practical aspects of trouble shooting and maintenance.
- 5.2 As the given subject is based on hardware aspects of computer system, it needs lot of technical skills to study it thoroughly,
- 5.3 Field visit to maintenance repair and assembly centres will be beneficial to the students.

### **Reference Books:**

1. Electronic test equipment by RS Khandpur
2. Trouble shooting computer system by Robert C Benner
3. IBM PC and Clones Govinda Rajalu