

AMHE21 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.
- 1.5 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,
- 2.2 Fault finding aids,
- 2.3 Service Manuals
- 2.4 Test and measuring instruments- Special tools

UNIT-3 HARDWARE AND SOFTWARE FAULTS

- 3.1 Trouble shooting techniques.
- 3.2 Different trouble shooting techniques and methods
- 3.3 Functional area approach, Split half method
- 3.4 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
- 4.2 Printers - Modems - Monitors – SMPs
- 4.3 Specification, Maintenance and Repair of CVTs and UPS
- 4.4 Environmental requirements of computer system and peripherals
- 4.5 Sight preparation and design of computer rooms.
- 4.6 Testing specifications and installation of computer systems and peripherals.

UNIT-5 INSTRUCTIONAL STRATEGY

- 5.1 While taking the theory classes,
- 5.2 The teachers should lay emphasis on the practical aspects of trouble shooting and maintenance.
- 5.3 As the given subject is based on hardware aspects of computer system,
- 5.4 It needs lot of technical skills to study it thoroughly,
- 5.5 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