

## **35264 – COMPUTER SERVICING AND NETWORK PRACTICAL**

### DETAILED SYLLABUS

#### **LAB EXERCISES**

#### **PART A - COMPUTER SERVICING AND NETWORK PRACTICALS**

Identification of system layout (Study Exercise)

- a) Front panel indicators & switches and front side & rear side connectors.
- b) Familiarize the computer system Layout: Marking positions of SMPS, Motherboard,
- c) HDD, DVD and add on cards.
- d) Configure bios setup program and troubleshoot the typical problems using BIOS utility.

#### 1. HARD DISK

- a) Install Hard Disk.
- b) Configure CMOS-Setup.
- c) Partition and Format Hard Disk.
- d) Identify Master /Slave / IDE Devices.
- e) Practice with scan disk, disk cleanup, disk De-fragmentation, Virus Detecting and Rectifying Software.

2.
  - a. Install and Configure a DVD Writer & Blu-ray Disc Writer.
  - b. Recording a Blank DVD & Blu-ray Disc.

#### 3. Printer Installation and Servicing

- a) Install and configure Dot matrix printer and Laser printer.
- b) Troubleshoot the above printers

4. Assemble a system with add on cards and check the working condition of the system and install Dual OS.

#### 5. Identification of mobile phone components (Study Exercise)

- a) Basic mobile phone components.
- b) Familiarizing the basic circuit board components: Marking position of different IC and Switches in the Network and Power sections of the PCB.

6.
  - a) Assembling and Disassembling of Mobile Phones.
  - b) Fault finding and troubleshooting of Ear piece, Microphone, Keypad and Display Sections of Mobile Phones.

7. Flashing, Unlocking and Formatting memory cards in Mobile phones.

#### 8. Do the following cabling works in a network

- a) Cable Crimping
- b) Standard Cabling

- c) Cross Cabling
- d) I/O Connector Crimping
- e) Testing the Crimped cable using a Cable tester
- 9. a) Configure Host IP, Subnet Mask and Default Gateway in a system in LAN (TCP/IP Configuration).
- c) Configure Internet connection and use IPCONFIG, PING / Tracert and Netstat utilities to Debug the Network issues.
- 10. a) Install and configure Network Devices: HUB, Switch and Routers
- b) Install and Configure Wired and Wireless NIC and transfer files between systems
- 11. Transfer files between systems in LAN using FTP Configuration. Install a printer in LAN and share it in the network.

**PART B – SYSTEM ADMINISTRATION PRACTICAL**

- 1. Installation of Windows 2008 / 2013 Server.
- 2. Installation and configuration of DHCP Server.
- 3. Installation and configuration of Mail Server.
- 4. a) Installation of Red Hat Linux using Graphical mode.
- b) Installation of Red Hat Linux using VMware.
- 5. a) Configuring and troubleshooting of /etc/grub.conf
- b) Configuring and trouble shooting of /etc/passwd