

BT-6/JX

8702

Computer Hardware Technologies

Paper—CSE-304

Time : Three Hours]

[Maximum Marks : 100

Note :— Attempt **FIVE** questions, selecting at least **ONE** question from each unit.

UNIT—I

1. (a) Name the two basic types a RAM chip in the PC can have, and compare the two. 4
- (b) What are the three major components that make up a memory module ? Also explain the following forms of memory types :
(i) SIMM (ii) SIPP (iii) DIMM and (iv) RIMM. 6
- (c) Explain the following :
(i) DDR-SDRAM (ii) EDRAM. 6
- (d) Write a short note on parity checking and its importance in memory chips. 4
2. (a) Name the different types of power supplies. Explain the working of Switch Mode Power Supply, its types, merits and demerits. 10
- (b) Discuss the significance of the form factor of a power supply. 4
- (c) Discuss some power supply fault symptoms and their troubleshooting. 6

UNIT—II

3. (a) List down the functions of a motherboard. 5

- (b) Name the three types of buses in PCs. Discuss expansion buses in detail. 15
4. (a) Write short notes on :—
(i) Bus Controller (ii) Programmable Interrupt Controller. 8
- (b) A typical PC BIOS consists of four main modules. State and explain in brief the function of each module. 7
- (c) What do you mean by CMOS and CMOS setup ? Are BIOS and CMOS setup the same things ? 5

UNIT—III

5. (a) State and explain the various commonly used data transfer modes for IDE devices. 15
- (b) Which of the two SCSI and IDE is better and why ? Explain. 5
6. (a) What types of connectors are used for serial ports and parallel ports ? 6
- (b) Differentiate between DTE and DCE. 4
- (c) Write a short note on video adapters and their troubleshooting. 10

UNIT—IV

7. (a) Explain the following :—
(i) Bootable CD ROM (ii) Multisession CDs (iii) Disc-at-once (iv) Track-at-once. 10
- (b) Briefly discuss the different types of connectors used in PC keyboards. 5
- (c) Write a short note on hard disc drive. 5
8. (a) State and explain the different types of Mice. 7
- (b) Discuss the basic building blocks of a laser printer. 6
- (c) Write short note on flat panel display technologies. 7