

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE, APRIL - 2025**

**COMPUTER SYSTEM HARDWARE**

[Maximum marks: 100]

[Time: 3 Hours]

**PART – A**

**Maximum marks: 10**

**I.** (Answer *all* the questions in one or two sentences. Each question carries **2** marks)

1. Define form factor.
2. List any two components of motherboard.
3. Expand HDD and SSD.
4. List any two types of workstations.
5. Expand PCMCIA.

(5 x 2 = 10)

**PART – B**

**Maximum marks: 30**

**II.** (Answer any *five* of the following questions. Each question carries **6** marks)

1. Write the importance of North Bridge and South Bridge in motherboard.
2. Explain the functions of BIOS.
3. Discuss about the characteristics of storage devices.
4. Write short notes on SCSI.
5. Summarize the features of CAD/CAM design workstations.
6. Distinguish between thick clients and thin clients.
7. Discuss about Ultrabook.

(5 x 6 = 30)

**PART – C**

**Maximum marks: 60**

(Answer *one full* question from each unit. Each full question carries **15** marks)

**UNIT – I**

- III.** (a) Describe the working of a Personal Computer. (7)
- (b) Briefly explain the characteristics of memory. (8)

**OR**

- IV.** (a) Describe option ROM and device drivers. (7)  
(b) Explain different types of DRAM packaging. (8)

**UNIT - II**

- V.** (a) Write the uses of power connector and explain any two types of power connectors. (7)  
(b) Compare PATA and SATA hard disk drive interfaces. (8)

**OR**

- VI.** (a) Explain the working and organization of hard disk drive. (7)  
(b) With schematic diagram explain RAID 0 and RAID 1. (8)

**UNIT - III**

- VII.** (a) Explain any two input devices in detail. (8)  
(b) Describe the features of home theatre PC. (7)

**OR**

- VIII.** (a) Explain briefly any two printer types. (8)  
(b) Explain features of Biometric devices. (7)

**UNIT – IV**

- IX.** (a) Describe expansion buses in Laptops. (8)  
(b) Compare Laptops and Desktops. (7)

**OR**

- X.** (a) Explain the procedure for disassembling and reassembling Laptops. (8)  
(b) Explain Docking stations. (7)

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