

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, APRIL – 2023**

**COMPUTER SYSTEM HARDWARE**

[Maximum Marks: 100]

[Time: 3 Hours]

**PART-A**

[Maximum Marks: 10]

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

1. Name any two motherboard form factors.
2. Write two benefits of Solid State Drives over HDD.
3. List any four multimedia devices.
4. Write down the common security settings used in a mobile device.
5. Name any two portable computing devices. (5 x 2 = 10)

**PART-B**

[Maximum Marks: 30]

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

1. List the functions of BIOS.
2. Explain any two types of memory packaging.
3. Write any two kinds of motherboard power connectors and explain their features.
4. Compare IDE and SATA hard drive interfaces.
5. Write the custom specification required for Gaming PCs.
6. List any two graphics input devices and explain its features.
7. Describe docking station. (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. List various components of a Motherboard and explain about any three of them.(9)  
b. Define CMOS and explain its features. (6)

**OR**

- IV. a. Explain any three varieties of Dynamic RAM. (9)  
b. Compare South Bridge and North Bridge chipsets. (6)

**UNIT – II**

- V. a. Draw the structure of a hard disk and explain its working. (9)  
b. Briefly explain SCSI. (6)

**OR**

- VI. a. Explain the following terms with respect to RAID.  
(i) Disk Mirroring (ii) Disk Striping (iii) Disk Duplexing (9)  
b. Describe about Flash memory. (6)

**UNIT- III**

- VII. a. How a laser printer works? Explain. (9)  
b. Differentiate thick client and thin client. (6)

**OR**

- VIII. a. Explain the features of any three display devices. (9)  
b. Briefly explain D- sub miniature connectors. (6)

**UNIT - IV**

- IX. a. Explain the procedure for disassembling and reassembling of laptops. (9)  
b. List any two types of touch screen technology and explain its features. (6)

**OR**

- X. a. Describe the features of the following portable computing devices:  
(i) Netbook (ii) Ultrabook (iii) Tablet PC (9)  
b. Describe any two expansion buses used in a laptop. (6)

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