

TED (15) 6043  
(Revision-2015)

**A21-02749**

Reg.No.....  
Signature.....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE, APRIL-2021

**COMPUTER HARDWARE AND NETWORKING**

[Maximum marks: 75]

(Time: 2.15 Hours)

**PART – A**

I. Answer any **three** questions in one or two sentences. Each question carries 2 marks

1. Write any four input devices.
2. What is BIOS?
3. Define ESD.
4. Why memory refreshing is used?
5. Write the need for networking.

(3 x 2 =6)

**PART – B**

II. Answer any **four** of the following questions. Each question carries 6 marks

1. Explain display adapters.
2. Describe the working of inkjet printer.
3. Describe different memory module.
4. Why cache memory is used and describe its classification?
5. Write short notes on track, sector and cluster of a hard disk.
6. Explain digital subscriber line with diagram.
7. Write short notes on any three network topologies.

(4 x 6= 24)

**PART – C**

III. Answer **any of the three units** from the following. Each question carries 15 marks

**UNIT –I**

- (a) Explain the working of ATX SMPS with neat diagram. (8)
- (b) Why power ok signal is used in ATX power connector and draw 20 pin ATX power connectors (7)

**OR**

- IV. (a) Explain mouse connectors. (8)  
(b) Explain the working of optical mouse (7)

**UNIT-II**

- V.(a) Define form factor and explain different form factors. (8)  
(b) Explain the block diagram of ATX mother board organization. (7)

**OR**

- VI.(a) Write notes on (i) CMOS chip (ii) BIOS (8)  
(b) Explain network interface card and internal modem. (7)

**UNIT-III**

- VII.(a) Explain the following file systems (i) FAT32 (ii) NTFS (8)  
(b) Why formatting is used in hard disk and write notes on low level and high level formatting? (7)

**OR**

- VIII.(a) Explain antistatic devices. (8)  
(b) What are the types of ESD and explain them? (7)

**UNIT-IV**

- IX. (a) Draw ISO-OSI 7 Layer reference model and write the use of each layer (8)  
(b) What are different guided transmission media and explain any two (7)

**OR**

- X.(a) Explain TCP/IP protocol architecture (8)  
(b) Describe VPN with diagram (7)

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