TED (15) -6043
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## DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE –APRIL -2022.

## COMPUTER HARDWARE AND NETWORKING

(Maximum Marks : 100)                                                [Time : 3 hours]

### PART–A
(Max. Marks:10)                                                                    Marks

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

1.  List any two advantage of  SMPS

2.  Name any four expansion cards used in computer system.

3.  State the term ESD.

4.  Name any two protocols used in computer networks.

5.  Draw the pin details of a 5 pin DIN keyboard connector.

(5x2=10)

### PART -  B
(Max. Marks: 30)

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

1.  Explain the principle of  Optical Mouse.

2.  Describe and compare the centronics Interface and USB interface.

3.  Explain the need for Cache memory and its classification.

4.  Describe the procedure and tools for partitioning a hard disk.

5.  State and explain the need for networking.

6.  Describe different types of  wireless LAN.

7.  Describe memory refreshing and its necessity.

(5x6 =30)

## PART - C
### (Max. Marks: 60)

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

### UNIT I

**III**   a) Explain the block diagram and working principle of an ATX SMPS.   (7)

    b) Describe the method of encoding a key press on a matrix keyboard of a computer.   (8)

### OR

**IV**   a) Explain the block diagram of a VGA monitor.   (8)

    b) Explain the working principle of a Laser Printer.   (7)

### UNIT- II

**V**   a) Explain the mechanism of POST.   (6)

    b) Describe the importance of BIOS and its effect on the booting process.   (9)

### OR

**VI**   a) Write short note on Network interface card and Video card.   (6)

    b) Briefly explain different memory modules used in computer.   (9)

### UNIT- III

**VII**   a) Explain the construction of a Hard disk.   (7)

    b) Explain briefly various file systems used in computer Systems.   (8)

### OR

**VIII**   a) Describe the method of converting a new hard disk suitable for storing files.   (7)

    b) Compare CD and DVD.   (8)

### UNIT – IV

**IX**   a) Explain different Network Topologies used in computer networks.   (7)

    b) Explain ISO-OSI 7 – Layer Reference Model.   (8)

### OR

**X**   a) Describe the concept of Internet and its applications.   (8)

    b) Explain the Virtual Private Network (VPN).   (7)

      (4x15=60)

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