1510230054

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

COMPUTER HARDWARE AND NETWORKING

[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. Draw the pin details of a type A USB connector.

2. Distinguish between impact printer and non-impact printer.

3. Define cache memory.

4. Define the term ESD.

5. State the use of hub in computer networking.   (5 x 2 = 10)

PART-B
[Maximum Marks: **30**]

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

1. Write note on AGP type interface.

2. Explain the working of SRAM.

3. Draw the layout of an ATX motherboard and list the main components.

4. Explain the function of hard disk controller.

5. Compare DVD and blue ray discs.

6. Write note on two types of unguided transmission media.

7. Draw TC/IP reference model.   (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. Draw the block diagram of a VGA monitor and explain its working.   (8)

b. Explain the working of a dot matrix printer with necessary diagram.   (7)

OR

IV.   a. Explain the working of an SMPS with the help of its block diagram.   (8)

b. With necessary diagram explain the working of an optical mouse.   (7)

UNIT – II

V.   a. Explain the mechanism of POST.   (8)

b. Write note on (i) network interface card (ii) display card.   (7)

OR

VI.   a. Write note on motherboard chipset.   (8)

b. Describe the various types ROM.   (7)

UNIT- III

VII.   a. Explain FAT file systems.   (8)

b. Explain the structure of a hard disk.   (7)

OR

VIII.   a. Write note on electrostatic discharge and its causes.   (8)

b. Explain the technology for data storage in a USB drive.   (7)

UNIT - IV

IX.   a. Explain various network topologies.   (8)

b. Describe the concept of Internet and its applications.   (7)

OR

X.   a. Explain the operation of hub and switch in a network.   (8)

b. Explain wireless LAN architecture.   (7)

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