DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE, APRIL – 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. List the voltage levels in SMPS.

2. Define the form factor of motherboard.

3. Define seek time.

4. Write any four internet applications.

5. What is the use of hub in networking?   (5 x 2 = 10)

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

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

1. Draw and explain the block diagram of VGA monitor.

2. Describe the different types of memory module.

3. Explain high level and low level formating.

4. Explain different networks LAN, WAN and MAN.

5. Describe coaxial and twisted pair cables.

6. Explain 5 pin DIN keyboard connector.

7. Explain the purpose of Cache memory in motherboard.   (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. Explain ATX SMPS with block diagram.   (8)

          b. Explain the working of inkjet printer.   (7)

OR

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IV.   a. Explain the working of laser printer.   (8)

       b. Explain matrix keyboard organization.   (7)

UNIT – II

V.   a. Explain chipset and support chips in motherboard.   (8)

       b. Describe different types of Random Access memory.   (7)

OR

VI.   a. Explain any four expansion cards.   (8)

       b. Explain Read Only memory types.   (7)

UNIT- III

VII.   a. Explain optical recording techniques.   (10)

       b. Write the methods of preventing ESD.   (5)

OR

VIII. a. Explain NTFS and HPFS file systems.   (9)

       b. Explain the causes of ESD.   (6)

UNIT - IV

IX.   a. Explain ISO-OSI reference model.   (8)

       b. Describe different network topology.   (7)

OR

X.   a. Explain wireless LAN architecture.   (9)

       b. Define the following.

            1. WWW   2.WAP   3. WI-FI   (6)

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