

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2024**

COMPUTER HARDWARE AND NETWORKING

(Maximum Marks:100)

(Time: 3 Hours)

PART - A

(Maximum Marks : 10)

Marks

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

1. Write short note on USB.
2. Define Form factor.
3. List different Memory Modules used in Computer.
4. Define Formatting.
5. Write short note on VPN .

(5 x 2 = 10)

PART - B

(Maximum Marks: 30)

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

1. Explain the principle of Optical Mouse.
2. Explain DRAM and SRAM.
3. Describe the role of BIOS in a computer.
4. Explain types of ESD and methods for preventing ESD.
5. Compare CD and DVD.
6. Explain Network Topologies.
7. Briefly explain Wi-Fi.

(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 the block diagram and working principle of ATX SMPS. (8)

(b) Give the working principle of Flat bed Scanner. (7)

OR

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

(b) Distinguish between Impact and Non-impact Printers. (7)

UNIT – II

V (a) Explain the need for Cache Memory and its classification. (8)

(b) Write short notes on network interface card and video card. (7)

OR

VI (a) Explain Memory Refreshing and its necessity. (8)

(b) Explain the block diagram of ATX Mother board organization. (7)

UNIT – III

VII (a) Explain the Optical recording technique. (8)

(b) Define Partitioning of Hard disk and explain the need for partitioning (7)

OR

VIII (a) Explain Low level and High level formatting. (8)

(b) State the terms Track, Sector and cylinder of a hard disk. (7)

UNIT – IV

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

(b) Distinguish between LAN and MAN (7)

OR

X (a) Explain the structure of ISO/OSI seven layer model. (9)

(b) Compare HUB and Switch. (6)
