



TED (10) – 4048

Reg. No.

(REVISION — 2010)

Signature .

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/  
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018**

**COMPUTER HARDWARE AND NETWORKING**

[Time : 3 hours]

(Maximum marks : 100)

**PART — A**

(Maximum marks : 10)

**Marks**

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

1. List any two display adapter standards.
2. What is meant by mother board form factor ?
3. Define seek time.
4. List any two guided and unguided media.
5. State the basic function of switch.

(5×2 = 10)

**PART — B**

(Maximum marks : 30)

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

1. Describe the working principle of optical mouse.
2. Distinguish between impact and non-impact printer.
3. Describe the need of memory refreshing.
4. How cache memory improves processor's speed and states the different types of cache memory.
5. Explain free software.
6. State the terms track, sector and cluster.
7. Describe LAN and WAN.

(5×6 = 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 working of SMPS with necessary diagram. | 9 |
|     | (b) Describe the working principle of Digital Camera.   | 6 |

OR

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|----|--|---|
| IV | (a) Describe encoding technique of matrix keyboard organization. | 8 |
|    | (b) Explain the working principle of laser printer.              | 7 |

UNIT — II

- |   |  |   |
|---|--|---|
| V | (a) Distinguish between SRAM & DRAM.         | 8 |
|   | (b) Describe the role of BIOS in a Computer. | 7 |

OR

- |    |  |   |
|----|--|---|
| VI | (a) Explain the memory modules SIMM and DIMM.          | 8 |
|    | (b) Briefly explain need and the functions of chipset. | 7 |

UNIT — III

- |     |   |   |
|-----|---|---|
| VII | (a) With necessary diagram explain the constructional details of hard disk. | 9 |
|     | (b) Explain boot sector and root directory of FAT file system.              | 6 |

OR

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|------|---|---|
| VIII | (a) List the need for hard disk partitioning and explain two types of partitioning. | 9 |
|      | (b) Compare CD and DVD.   | 6 |

UNIT — IV

- |    |  |   |
|----|--|---|
| IX | (a) List the layers of ISO-OSI reference model and describe functions of each layer. | 9 |
|    | (b) Explain Digital Subscriber Line.   | 6 |

OR

- |   |   |   |
|---|---|---|
| X | (a) Describe different network topologies.    | 8 |
|   | (b) Explain the architecture of Wireless LAN. | 7 |

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