

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

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

 $(5 \times 2 = 10)$

PART -B

(Maximum marks: 30)

- II Answer any five of the following questions. Each question carries 6 marks.
 - Describe the working principle of optical mouse.
 - 2. Distinguish between impact and non-impact printer.
 - 3. Describe the need of memory refreshing.
 - How cache memory improves processor's speed and states the different types of cache memory.
 - Explain free software.
 - 6. State the terms track, sector and cluster.
 - 7 Describe LAN and WAN.

 $(5 \times 6 = 30)$

P.T.O.

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| | | | Marks |
|--------------|-----|--|-------|
| | | PART — C | |
| | | (Maximum marks : 60) | |
| | | (Answer one full question from each unit. Each full question carries 15 marks.) | |
| | | Unit I | |
| Ш | (a) | Explain the working of SMPS with necessary diagram. | 9 |
| | (b) | Describe the working principle of Digital Camera. | 6. |
| | | OR | |
| IV | (a) | Describe encoding technique of matrix keyboard organization. | 8 |
| | (b) | Explain the working principle of laser printer. | 7 |
| | | Unit — II | |
| \mathbf{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 | |
| VIII | (a) | List the need for hard disk partitioning and explain two types of partitioning. | 9 |
| | (b) | Compare CD and DVD. | 6 |
| | 2 | 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 OR | |
| Х | (a) | Describe different network topologies | 8 |
| 71 | (4) | Emplein the ambitratum of Wireless I AN | 7 |