TED (15) – 6043

(REVISION — 2015)

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/ MANAGEMENT/COMMERCIAL PRACTICE — APRIL, 2019

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. Define the term latency time in hard disk.

2. List any two display adapters.

3. State the need for memory refreshing in RAM.

4. List any two causes of ESD.

5. List any two unguided transmission medias.   (5×2 = 10)

PART — B

(Maximum marks : 30)

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

1. Explain the matrix key board organization.

2. Explain different USB interfaces.

3. Define the term motherboard form factor and describe different types.

4. Compare CD, DVD and Blue ray.

5. Explain the mechanism of POST.

6. Explain the principle of VPN.

7. Describe different guided transmission medias.   (5×6 = 30)

[184]   [P.T.O.

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks.)

UNIT — I

III (a) Explain AGP and PCI.   8

(b) Differentiate impact and non impact type printers with example.   7

OR

IV (a) Explain ATX SMPS with a suitable block diagram.   8

(b) Explain the working principle of dot matrix printer.   7

UNIT — II

V (a) Draw the block diagram of an ATX motherboard and mark relevant parts.   8

(b) List different RAM types and explain any two.   7

OR

VI (a) Briefly explain different expansion cards used in computer.   8

(b) Explain different ROMs used in computer.   7

UNIT — III

VII (a) Briefly explain FAT32 and NTFS file systems.   7

(b) Explain the terms track, sector, cluster and cylinder in a hard disk.   8

OR

VIII (a) Explain different antistatic methods to prevent ESD.   8

(b) Explain hard disk controller.   7

UNIT — IV

IX (a) Explain ISO-OSI 7 layer reference model.   8

(b) Explain cable modem and dial up modem.   7

OR

X (a) Explain the principle of DSL.   7

(b) Briefly explain different network topologies.   8