



C20-EC-505

7644

BOARD DIPLOMA EXAMINATION, (C-20)

OCTOBER / NOVEMBER—2023

DECE - FIFTH SEMESTER EXAMINATION

COMPUTER HARDWARE AND NETWORKING

Time : 3 Hours]

[Total Marks : 80

PART—A

3×10=30

Instructions : (1) Answer **all** questions.

(2) Each question carries **three** marks.

(3) Answers should be brief and straight to the point and shall not exceed five simple sentences.

1. List any six expansion slots available on motherboard.
2. List the features of DDR3 SDRAM.
3. State the use of windows registry.
4. List any six popular antivirus softwares available in market.
5. State the need for data communication and networking.
6. Differentiate between repeater and switch.
7. State the need for protocols in computer networks.
8. State the use of Wi-Fi analyzer.
9. State the use of routers in networking.
10. Define network topology.

PART—B

8×5=40

- Instructions :** (1) Answer **all** questions.
(2) Each question carries **eight** marks.
(3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.

- 11.** (a) Explain the working principle of LED monitor with the help of a suitable diagram.

(OR)

- (b) What is optical mouse? Explain its working.

- 12.** (a) Explain the editing of CMOS setup.

(OR)

- (b) Explain the booting procedure of a PC.

- 13.** (a) Draw the TCP/IP reference model and explain the functions of each layer.

(OR)

- (b) Explain the functions of different layers of ISO : OSI seven layer reference model with the help of a diagram.

- 14.** (a) Explain the cross-sectional diagrams of UTP, STP, co-axial and fiber optic cables and their use in networking.

(OR)

- (b) Explain Ethernet LAN and its frame format.

- 15.** (a) Explain the internal architecture of ISP with a neat diagram.

(OR)

- (b) Describe the architecture of web browser.

PART—C

10×1=10

- Instructions :**
- (1) Answer the following question.
 - (2) The question carries **ten** marks.
 - (3) Answer should be comprehensive and the criterion for valuation is the content but not the length of the answer.

16. Explain end-to-end connectivity in TCP using ports and sockets.

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