C14-EC-506

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BOARD DIPLOMA EXAMINATION, (C-14) MARCH/APRIL—2021

DECE - FIFTH SEMESTER EXAMINATION

DATA COMMUNICATIONS AND COMPUTER NETWORKS

Time: 3 hours [Total Marks: 80

PART-A

 $4 \times 5 = 20$

Instructions: (1)

- (1) Answer any five questions.
- (2) Each question carries **four** marks.
- (3) Answers should be brief and straight to the point and shall not exceed five simple sentences.
- **1.** Define computer network and state its use.
- 2. Define simplex and half-duplex communication.
- **3.** State the need of protocols in computer networking.
- **4.** Write the applications of WAP.
- **5.** Define intranet.
- **6.** Define store-and-forward switch mechanism.
- 7. List different layers of TCP/IP protocol stack.
- **8.** State the use of gateways.
- **9.** List any four HTTP commands.
- **10.** State the use of remote login.

PART—B 15×4=60

Instructions: (1) Answer any four questions.

- (2) Each question carries fifteen marks.
- (3) Answers should be comprehensive and criterion for valuation is the content but not the length of the answer.
- **11.** Explain the use of UTP, STP, Co-axial and fibre optic cable in networking.
- **12.** Explain the working of token-ring network.
- **13.** Explain Ethernet frame format.
- **14.** Explain the concept of routers and routing in networking.
- **15.** Explain the internal architecture of ISP.
- **16.** Explain different layers of TCP/IP protocol stack.
- **17.** Explain the features of TCP.
- **18.** Describe the web browser architecture.

