

C09-EC-606 A

3762

BOARD DIPLOMA EXAMINATION, (C-09) OCT/NOV-2014

DECE—SIXTH SEMESTER EXAMINATION

DATA COMMUNICATION AND COMPUTER NETWORKS

Time: 3 hours] [Total Marks: 80

PART—A

 $3 \times 10 = 30$

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

- (2) Each question carries three marks.
- (3) Answer should be brief and straight to the point and shall not exceed *five* simple sentences.
- **1.** Distinguish between Analogue transmission and Digital transmission.
- 2. Define baud rate, half-duplex and full-duplex communication.
- **3.** What is meant by BUS topology in computer networks?
- **4.** List out the features of circuit switching.
- **5.** What is the function of a router?
- **6.** Define Intranet.
- 7. What is meant by digital subscriber line?
- 8. List out the features of ISDN.

- **9.** How is a hyperlink established?
- 10. Mention the features of a Web server.

Instructions: (1) Answer any **five** questions. (2) Each question carries ten marks. (3) Answers should be comprehensive and the criterion for valuation is the content but not the length of the answer. **11.** (a) Compare the characteristics of transmission media. 5 (b) Explain infrared wave transmission. 5 5+5 **12.** Explain serial transmission and parallel transmission. **13.** Describe the star and ring topologies. 5+5 **14.** Explain the function of each OSI layer with a neat sketch. 10 **15.** Explain the IP addressing concepts in detail. 10 **16.** Describe high-level architecture of ISP. 10 **17.** (a) Explain remote login. 6 (b) What is the role of DNS server? 4 **18.** (a) Explain proxy server. 6 (b) Explain the working of a Web browser. 4

PART—B

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 $10 \times 5 = 50$