



Code No. : 5441/N

FACULTY OF ENGINEERING

**B.E. 2/4 (CSE) II Semester (New) (Main) Examination, May/June 2012
DATA COMMUNICATIONS**

Time : 3 Hours]

[Max. Marks : 75

Note : Answer *all* questions from Part – **A**. Answer *any five* questions from Part – **B**.

PART – A

(25 Marks)

1. What are the advantages of Layered approach to protocols ? 3
2. What are the functions of data link layer ? 3
3. Write the rules of different scrambling techniques. 3
4. What is the principle of frequency reuse technique ? 2
5. List different types of issues in error control for a link control protocol. 2
6. Write main requirements of wireless LAN. 2
7. Define Null-Modem with neat diagram. 3
8. What are the different types of Noises ? 2
9. What is ethernet ? What are the different types of ethernet ? 3
10. Differentiate bridge and route. 2

PART – B

(50 Marks)

11. a) List the layers of TCP/IP Model. What is their functionality ? 5
b) Define channel capacity and different types of Data transmission modes. 5
12. a) Explain about PCM. 5
b) Explain flow control protocols. 5



- 13. a) Explain in detail CRC error detection technique with suitable examples. 7
 - b) Describe the ATM cell header format in brief. 3
 - 14. a) Describe how MAC is done in IEEE 802.11. 5
 - b) Explain about RS-232 interface. 5
 - 15. a) Explain the event timing diagram and difference between circuit switching and packet switching. 7
 - b) Explain briefly CDMA. 3
 - 16. Explain bluetooth architecture in detail. 10
 - 17. Write short notes on :
 - i) Near-far problem 2
 - ii) X.25 4
 - iii) HDLC frame format 4
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