



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

**B.Sc.DEGREE EXAMINATION – COMPUTER SCIENCE**

**FIFTH SEMESTER – APRIL 2017**

**CS 5506- INTRODUCTION TO DATA COMMUNICATION**

Date: 28-04-2017  
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

**PART – A (10\*2 = 20)**

**Answer all questions:**

1. List the components of data communication system.
2. Define protocol. Give the need for protocol.
3. Give the responsibility of data link layer.
4. Define bit rate and baud rate.
5. Differentiate Serial and Parallel Data Transmission.
6. What is encoding?
7. Define: modem.
8. List the types of transmission media.
9. What is multiplexing?
10. List the types of errors.

**PART – B (5\*8= 40)**

**Answer all questions:**

11. (a) Explain about protocols and its standards.  
(OR)  
(b) Explain the categories of networks.
12. (a) Explain about the fundamentals of data and signals.  
(OR)  
(b) Explain about the digital signals.
13. (a) [Explain Analog to Digital transmission techniques.](#)  
(OR)  
(b) Explain about DTE -DCE interface

14. (a) Explain in detail about the guided media.

(OR)

(b) Explain about the satellite communication.

15. (a) Explain the different types of multiplexing.

(OR)

(b) Explain about the telephone system .

**PART – C ( 2 \* 20=40)**  
**Answer any TWO questions:**

16. (a) Discuss about the network topologies with neat diagram.

(b) [Explain the functions of OSI layers.](#)

17. (a) Explain the different types of digital data transmission in detail.

(b) Discuss about the modem standards in detail.

18. (a) Discuss about the error correction and detection techniques

(b).Explain in detail about the unguided media.

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