LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FIFTH SEMESTER – NOVEMBER 2012

# CS 5506 - INTRODUCTION TO DATA COMMUNICATION

Date : 06/11/2012 Dept. No. Max. : 100 Marks

Time : 9:00 - 12:00

**PART – A**

**Answer ALL the questions: (10 x 2 = 20 marks)**

**1. Define protocol.**

**2. Write about star topology.**

1. **Differentiate periodic signal and aperiodic signal.**
2. **Define peak amplitude.**
3. **What is meant by data encoding?**
4. **Define Data Terminal Equipment.**
5. **Write the use of Fiber-optic cable.**
6. **Differentiate Radio wave and micro wave.**
7. **Define Wave Division Multiplexing.**
8. **What is meant by burst error?**

**PART – B**

**Answer ALL the questions: (5 x 8 = 40 marks)**

**11. a) List and Explain about the components involved in data communication system.**

**(OR)**

**b) Write about the different transmission modes in detail.**

**12. a) Write about the organization of the layers in the OSI model.**

**(OR)**

**b) Explain about the Digital signals in detail.**

**13. a) Explain about the analog – to – analog conversion.**

**(OR)**

**b) Write notes on EIA232 standards.**

**14. a) Explain about the modem standards in detail.**

**(OR)**

**b) Write about the advantages and disadvantages of optical fiber.**

**15. a) Explain about the Time Division Multiplexing.**

**(OR)**

**b) Write about the Error correction.**

**PART – C**

**Answer any TWO questions: (2 x 20 = 40 marks)**

**16. a) Explain in detail about the categories of networks.**

**b) Explain about the Functions of layers in detail.**

**17. a) Discuss in detail the Data Terminal Equipment.**

**b) Explain about the digital – to – digital conversion.**

**18. a) Describe about the Frequency Division Multiplexing.**

**b) Explain the following:**

**i) Parity Check**

**ii) Cyclic Redundancy Check.**

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