# LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

### B.C.A. DEGREE EXAMINATION – COMPUTER APPLICATIONS
### FIFTH SEMESTER – NOVEMBER 2016
### CA 5506/CA 5502 – INTRODUCTION TO DATA COMMUNICATION

Date: 05-11-2016          Dept. No.                    Max. : 100 Marks
Time: 09:00-12:00

## PART – A

ANSWER ALL THE QUESTIONS:                                   10 x 2 = 20

1. Write the different modes of data transfer.
2. Define Hub.
3. What is peer – peer processes?
4. Define peak amplitude.
5. What is line coding?
6. Define bandwidth.
7. Give any two examples of guided media.
8. What is omnidirectional antenna?
9. What is Burst error?
10. What is multiplexing?

## PART – B

ANSWER ALL THE QUESTIONS.                                    5 x 8 = 40

11. a) Explain the application of Network in different fields.

    or

    b) Explain the categories of networks ?

12. a) Write note on analog and digital signals.

    b) Briefly explain periodic and Aperiodic signals.

13. a) Explain Digital data transmission in detail.

    or

    b) Explain Asynchronous transmission.

14. a) Explain the specification of Bell modems

    or

    b) Write short notes on i) Twisted pair cable    ii) Coaxial cable.

15. a) Explain Frequency – Division Multiplexing (FDM) with a suitable example

    or

    b) Explain the telephone system in detail.

# PART – C

ANSWER ANY TWO QUESTIONS: 2 x 20 = 40

16. a) Explain the different Network Topologies?

    b) Explain Open Systems Interconnection model (OSI) and its layers.

17. a) Briefly explain about polar category in Digital – to Digital conversion

    b) Explain in detail about unguided media.

18. a) Explain the error detection method in detail.

    b) Explain the protocols and standards used in networks.

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