



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034
B.SC. & B.C.A. DEGREE EXAMINATION – COMPUTER SCIENCE & APPLI.
FIFTH SEMESTER – APRIL 2016
CA / CS 5404 - DATA COMMUNICATION NETWORK

Date: 29-04-2016
Time: 01:00-04:00

Dept. No.

Max. : 100 Marks

PART-A

Answer all the questions

2X10=20 marks

1. What is a data communication?
2. Define the term topology.
3. Categorize the OSI layers by their functionality.
4. What is frequency?
5. How does NRZ-L differ from NRZ-I?
6. What are the functions of a DTE and DCE?
7. What is refraction?
8. Write any four bell modem names.
9. List the types of multiplexing?
10. What is redundancy?

PART-B

Answer all the questions

8X5=40 marks

11. a) What is network? Explain the categories of network with examples.
(OR)
b) Explain in short about standards and organization.
12. a) Write the functions of transport layer of the OSI model?
(OR)
b) Write in brief about Aperiodic signal.
13. a) Explain the various Polar encoding schemes.
(OR)
b) Write in brief about EIA-232 standards.
14. a) What are transmission rate? Explain in brief with examples.
(OR)
b) Write short notes on co-axial cable.
15. a) Explain any two types of multiplexing with examples.
(OR)
b) Write a note in brief on Single Bit Error with an example.

PART-C

Answer any two questions

2X20=40 marks

16. a) Explain in detail about topologies with neat diagram and examples.
b) Discuss the major functions performed by the Presentation layer and Application layer of the ISO OSI model.
17. a) Discuss in detail about analog to analog encoding
b) Discuss the mode for propagating light along optical channels.
18. a) Describe the telephone system in multiplexing?
b) Explain the various error detection Mechanisms used in computer network
