



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

B.Sc. DEGREE EXAMINATION – COMPUTER SCIENCE

FIFTH SEMESTER – APRIL 2023

CS 5506 – INTRODUCTION TO DATA COMMUNICATION

Date: 05-05-2023

Dept. No.

Max. : 100 Marks

Time: 01:00 PM - 04:00 PM

PART – A

Answer ALL questions:

(10 x 2 = 20 Marks)

- 1 Define and classify standards.
- 2 What is the use of Data Communication?
- 3 Define IP address.
- 4 What is Internetworks?
- 5 Define Critical angle.
- 6 Define the term Frequency.
- 7 Mention any four Satellite types.
- 8 What does analog leased service offer?
- 9 List out the common methods of error detection.
- 10 Define and classify errors.

PART – B

Answer ALL the questions:

(5 x 8 = 40 Marks)

- 11 (a) List the types of transmission mode and enumerate any one in detail.

(Or)

(b) What are the components of a Data communication? Explain.

- 12 (a) Briefly explain Periodic signals with an examples.

(Or)

(b) Explain Aperiodic signals with an examples.

- 13 (a) How does NRZ L differ from NRZ I?

(Or)

(b) In detail, write about the terms DTE and DCE and its interface.

- 14 (a) Optical fiber – Explain and Classify.

(Or)

(b) Write a short note on Satellite Communication.

- 15 (a) Describe the checksum methods.

(Or)

(b) With an example, explain the procedure for locating single bit error.

PART – C

Answer any TWO questions:

(2 x 20 = 40 Marks)

16. (a) List out the types of topology and explain in detail.
(b) Explain the functions of the Transport Layer, Session Layer and presentation layer in the OSI reference model.
17. (a) Illustrate the functioning of EIA 232 with a neat sketch.
(b) Explain in detail about MODEM working mechanism with classification.
18. (a) List the error detection methods and explain any two in detail.
(b) With a neat sketch, explain in detail about types of network.
