Unique Paper Code : 32345302

Name of the Course : B.Sc. (H) - Generic Elective (GE)

Name of the Paper : Computer Networks

Semester : III

Year of Admission : 2019 Onwards

Duration: 3 Hours Maximum Marks: 75

Attempt any **four** questions. All questions carry equal marks.

Q.1. List any two major responsibilities of each layer in the OSI Reference Model. Differentiate between TCP and UDP Services?

List the semantic elements in HTML. Write HTML code to create the following webpage.

## City Line

Company's Tag Line

Home Products Search Contact Us

Main content will include the introduction of the company, policies, newsletter with articles and featured products.

## Contact Us

feedback@cityline.com

Q.2. Briefly describe Data Communication System? Explain various components of a data communication system with the help of a neat labelled diagram.

Write HTML code to create the following webpage. List the purpose of each element/tag used.

## City Line Home Page

Description of the company

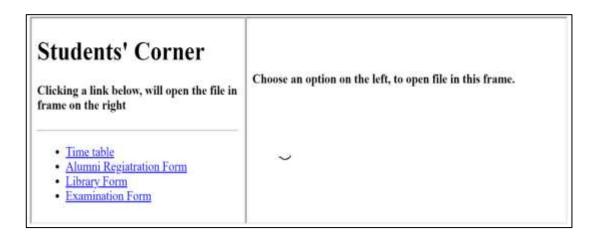
List of Products

- Item 1
- Item 2
- Item 3
- Item 4
- Item 5

Q.3. Write a short note on Transmission Media. Explain the Guided and Unguided types of Transmission Media with the help of a labelled diagram.
What are the different ways to include CSS code in an HTML webpage? Explain with the help of examples. How do you validate CSS code?

Q.4. What is FTP? Briefly explain the working of Control connection and Data Connection under FTP.

Compare and contrast the Client-Server model over the Peer-to-Peer model. Create an HTML document having two frames in the following format.



Q.5. Provide the name of one connecting device used at each the Physical layer, Data Link Layer, Network Layer, Transport Layer and Application Layer of ISO-OSI reference model and give a brief description of the functionalities of these devices. Write HTML code to create the following webpage.



Q.6. What are the different ways of adding Links to a webpage? Write HTML code that includes each type of link in the webpage.

Write short notes on:

- Infrared communication
- Line-in-Sight propagation
- URL
- HTTP
- Search Engines