

# **BHARATI VIDYAPEETH INSTITUTE OF TECHNOLOGY**

## **QUESTION BANK**

### **Unit Test-I**

Program: - Computer Engineering Group

Program Code:- CM

Course Title: - Data Communication & Computer Network

Semester: - Fourth

Course Abbr & Code:-DCN (314318)

Scheme: IV

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### **CHAPTER-1 (Fundamentals of Data Communication & Computer Network) (CO1)**

#### **2 MARKS**

1. Define computer network and state applications of computer network.
2. Define bit rate and baud rate.
3. Define following term:
  - i) Protocol
  - ii) Bandwidth

#### **4 MARKS**

1. Draw network architecture for client server network with one file server with one print server and five client connected to it via network devices.
2. Explain components of data communication with neat diagram.
3. Differentiate between LAN MAN and WAN w.r.t Bandwidth, congestion, and maintenance and area coverage.
4. Differentiate between analog signal and digital signal
5. Consider a network with 8 computers which network architecture should be used peer to peer or client server? Justify your answer.
6. Describe various modes of data communication.
7. Explain with diagram client server and peer to peer network architecture.

### **CHAPTER-2 (Transmission Media and Switching) (CO2)**

#### **2 MARKS**

1. Define guided media with its examples.
2. Compare guided and unguided media.

3. State types of Multiplexing.
4. List four unguided media.

**4 MARKS**

1. Draw neat diagram of twisted pair cable and state its types..
2. Describe UTP and STP on basis of noise, easy of handling, cost and speed.
3. Draw neat sketch of fiber optics cable give transmission characteristics of fiber optics cable. State its applications.
4. Explain Satellite Communication.
5. Explain TDM with the help of diagram.
6. Define multiplexing? Compare TDM and FDM.
7. Explain with neat diagram working of circuit switching.
8. Compare circuit switching and packet switching network.

**CHAPTER-3 (Error Detection and Correction) (CO3)**

**2 MARKS**

1. Enlist types of errors.
2. Compare LRC and CRC.
3. Compare LRC and CRC.

**4 MARKS**

1. Compare LRC with example.
2. Explain working of CRC with example.