

BCA Sem-5 Examination

CC 302

Computer Network (New)

Time : 2-00 Hours]

August 2021

[Max. Marks : 50

Instructions: All questions in **Section I** carry equal marks.
 Attempt any **TWO** questions in **Section I**.
 Question V in **Section II** is **COMPULSORY**.

Section I

Q I A. What is Data Communication? Explain characteristics of Data Communication. Also Explain Digital signal and analog transmission with Modem. **10**

B. Write a short note on following: **10**

- Parallel and Serial Communication.
- Simplex, Half-duplex and full-duplex communication with example and diagram.

Q II A. What is Multiplexing? Also write a short note on FDM and TDM with its types. **10**

B. Explain two types of error. Also write a short note on Parity check and Stop-and-wait methods. **10**

Q III A. Write a short note on guided media **10**

B. Write a short note on any five topologies. **10**

Q IV A. Explain all seven layers of OSI model. **10**

B. Write a short note on Repeaters and Routers. Also Explain ISDN interface. **10**

Section II

Q V MCQs (Any 5 x 2 marks each) **10**

- When an analog signal suffers attenuation during transmission, _____ are used to amplify original signals.
 - Amplifiers
 - Repeaters
 - Noise
 - Modulation
- Parallel transmission is used for _____ distance.
 - Short
 - Long
 - Very Long
 - All of these
- Which of the following is an example of simplex transmission mode?
 - Television
 - Walky-talky
 - Two-way-lane
 - None of these

[P.T.O]

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- (iv) In _____ multiplexing technique time slice is allocated to all the nodes, even if it has no data to transmit.
- TDM
 - STDM
 - WDM
 - FDM
- (v) In which method of error detection, sender appends a single additional bit called parity bit.
- VRC
 - Modular sum
 - CRC
 - Checksum
- (vi) _____ multiplexing technique uses optical fiber as the communication medium.
- WDM
 - FDM
 - TDM
 - STDM
- (vii) _____ topology is a complete topology.
- Tree
 - Mesh
 - Hybrid
 - Bus
- (viii) In _____ each packet is considered totally independent from all other packets and follow different path to reach to the destination.
- Circuit Switching
 - Datagram Approach
 - Message Switching
 - Virtual Circuit Approach
- (ix) FDDI stands for _____.
- Fiber Distributed Data Interface
 - Fiber Distance Data Interface
 - Function Distributed Data Interface
 - Function Distance Data Interface
- (x) Which of the following OSI layer is concerned with sending raw bits between the source and destination nodes?
- Physical Layer
 - Data link Layer
 - Application Layer
 - Transport Layer
