

## B.C.A. Sem.-5 (Rep.) Examination

CC-303

Computer Network

November-2025

Time : 2-30 Hours]

[Max. Marks : 70

**Que:1 Answer the following.**

- (1) What is data communication? Discuss and differentiate analog and digital signals. (07)
- (2) Differentiate serial and parallel transmission. (07)

**OR**

- (1) Explain any three modulation techniques. (07)
- (2) Explain simplex, half-duplex and full duplex modes of transmission. (07)

**Que:2 Answer the following.**

- (1) Define error. Explain any one error detection technique. (07)
- (2) What is multiplexing? Explain WDM in detail. (07)

**OR**

- (1) Explain stop-and-wait method of error recovery. (07)
- (2) Differentiate FDM and TDM. (07)

**Que:3 Answer the following.**

- (1) Explain star, ring and mesh topology in detail. (07)
- (2) Discuss methods of packet switching. (07)

**OR**

- (1) Which are the types of guided media? Explain any one in detail. (07)
- (2) Explain circuit switching approach. (07)

**Que:4 Answer the following.**

- (1) Discuss OSI model. (07)
- (2) Explain ISDN architecture in detail. (07)

**OR**

- (1) Explain repeater and bridges for connecting networks. (07)
- (2) Discuss the terms LAN, VLAN, WLAN. (07)

**Que: 5 Answer following. (Any Seven) (14)**

1. The De facto standards apply because of \_\_\_\_\_.  
a. Conventions      c. Regulations

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- b. Agreement                      d. Choice
2. The receiver sends \_\_\_\_\_ if there is any error in the received data.  
a. NAK                              c. ACK  
b. NCK                              d. PAK
3. A \_\_\_\_\_ operates at the all seven layers of OSI model.  
a. Repeater                      c. Router  
b. Bridge                          d. Gateway
4. As a signal travels through any medium, its strength decreases due to \_\_\_\_\_.  
a. Delay Distortion              c. Noise  
b. Attenuation                      d. Retransmission
5. The set of rules and regulations governs for data communication is called \_\_\_\_\_.  
a. Standards                      c. Message  
b. Protocols                        d. None of the above
6. The time taken by a signal to complete one cycle is called \_\_\_\_\_.  
a. Amplitude                      c. Period  
b. Frequency                        d. Phase
7. \_\_\_\_\_ signals are continuous in nature.  
a. Analog                          c. Both Analog and Digital  
b. Digital                            d. None of the above
8. Minimum \_\_\_\_\_ satellites are required to cover entire earth surface in satellite communication.  
a. 1                                  c. 3  
b. 2                                  d. 4
9. Message switching is also called \_\_\_\_\_.  
a. Store and release              c. Store and safe  
b. Store and forward              d. None of these
10. FDDI stands for \_\_\_\_\_.  
a. Fiber Distributed Data Interchange  
b. Fiber Distributed Data Interface  
c. Fiber Data Distributed Interchange  
d. Fiber Data Distributed Interface
11. Ethernet is one of the \_\_\_\_\_ technology.  
a. LAN                              c. WAN  
b. MAN                              d. PAN
12. Optical fibers use \_\_\_\_\_ for data transmission.  
a. Voltage                          c. Light  
b. Current                          d. Sound
- X—