

B.C.A. Sem.-5 Examination

CC-303

Computer Network

March-2025

Time : 2-30 Hours]

[Max. Marks : 70

1. Write the following:

- 1) Explain Analog and Digital Transmission. 7
 2) Explain Mode of Transmission. 7

OR

- 1) Explain Two Modulation Techniques. 7
 2) Explain Simplex, Half Duplex and Full Duplex. 7

2. Write the following:

- 1) What is Multiplexing? Explain FDM and TDM. 7
 2) Explain Error Classification. 7

OR

- 1) Explain Checksum, VRC, LRC with an Example. 7
 2) Describe Sliding Window Error Recovery Method. 7

3. Write the following:

- 1) What is Guided media Explain Twisted Pair Cable. 7
 2) What is Topology? Explain any Three. 7

OR

- 1) What is switching? List Switches and explain Message Switching. 7
 2) What is Unguided media? Explain Cellular telephones. 7

4. Write the following:

- 1) Explain TCP/IP. 7
 2) Explain Bridge and its types. 7

OR

- 1) Explain CSMA/CD. 7
 2) Explain ISDN Architecture and it's Channel types. 7

5. Answer the following: (Any Seven) 14

- 1) Protocols govern a set of rules for data communications. (T/F)
 2) The fundamental basis of data communications is _____.
 (a) light (b) electricity
 (c) voltage (d) signal propagation
 3) The term modem is derived from a single component, i.e., modulator. (T/F)
 4) A _____ is used to send digital data over analog telephone lines.
 (a) multiplexer (b) repeater
 (c) amplifier (d) modem
 5) Hybrid topology cannot be used for large networks because it is too complex to manage. (T/F)
 6) _____ is a communication system which connects multiple entities using common pathway or channel.
 (a) Internet (b) Network
 (c) Intranet (d) None of the above
 7) CDMA is the most widely used technique. (T/F)
 8) Optical fibres use _____ for data transmission.
 (a) voltage (b) current
 (c) light (d) sound
 9) Coaxial cable has an inner central conductor surrounded by an insulating sheath, which in turn, is enclosed in the other conductor. (T/F)
 10) _____ layer of the OSI model is concerned with routing.
 11) BRI contains three B channels (T/F)
 12) Repeaters are used in _____ transmission of _____ signals.
 (a) analog, digital (b) digital, analog
 (c) digital, digital (d) analog, analog