

B.C.A. Semester-5 Examination

CC-303

Computer Network

Time : 2-30 Hours]

March-2024

[Max. Marks : 70

Q-1 Write the Following.

- 1 Explain fundamental concept of data communication? Explain characteristics of data communication. 7
- 2 Explain parallel and serial communication. 7

OR

- 1 Explain analog signal, digital transmission in detail. 7
- 2 Discuss the concept of simplex, half duplex and full duplex. 7

Q-2 Write the Following.

- 1 What is multiplexing? List types of multiplexing and explain TDM with its types. 7
- 2 Explain error with its types in data transmission and also explain CRC with example. 7

OR

- 1 Explain FDM and WDM multiplexing methods. 7
- 2 Explain Go-Back-N error recovery method. 7

Q-3 Write the Following.

- 1 What is transmission media? Discuss guided media with its types. 7
- 2 What is topology? List the topology and explain any three. 7

OR

- 1 Write a detailed note on satellite communication. 7
- 2 What is switching? Explain packet switching. 7

Q-4 Write the Following.

- 1 Write a detailed note on OSI Model. 7
- 2 Discuss the FDDI with its properties and Self-Healing Mechanism. 7

OR

- 1 What is ethernet? Explain properties of ethernet. 7
- 2 Write a note on repeater, bridge and router. 7

Q-5 Answer the Following. (Any Seven)

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- 1 _____ satellites are minimally required to cover the entire earth.

| | | | |
|---|---|---|---|
| A | 3 | C | 5 |
| B | 4 | D | 6 |

- 2 _____ detects zeroes and ones and regenerates them

| | | | |
|---|-----------|---|-------------|
| A | Amplifier | C | Multiplexer |
| B | Repeater | D | Modem |

P.T.O

- 3 Optical fibers use _____ for data transmission.
- | | | | |
|---|---------|---|--------------|
| A | Current | C | Light |
| B | Voltage | D | All of above |
- 4 _____ defines the structure or format of data.
- | | | | |
|---|-----------|---|---------------|
| A | Syntax | C | Standards |
| B | Semantics | D | None of Above |
- 5 Set of rules and conventions that govern data communication is known as _____.
- | | | | |
|---|-----------|---|---------------|
| A | Standards | C | Regulations |
| B | Protocols | D | None of these |
- 6 A checksum also called _____.
- | | | | |
|---|-------------|---|-----------|
| A | Fixsum | C | Hashsum |
| B | Functionsum | D | Doublesum |
- 7 Which internetworking device works at all the layers of OSI model?
- | | | | |
|---|---------|---|----------|
| A | Router | C | Repeater |
| B | Gateway | D | Bridge |
- 8 Wi-Fi stands for _____.
- | | | | |
|---|--------------------|---|----------------------|
| A | Wireless Frequency | C | Wireless Fidelity |
| B | Wireless Force | D | Wireless Feasibility |
- 9 The time taken by the signal for the completion of one cycle is called _____.
- | | | | |
|---|-----------|---|-----------|
| A | Period | C | Amplitude |
| B | Frequency | D | Phase |
- 10 Which switching technique first establish the path and then send the data?
- | | | | |
|---|---------|---|--------------|
| A | Packet | C | Message |
| B | Circuit | D | All of Above |
- 11 _____ is the most commonly used transmission medium.
- | | | | |
|---|---------------|---|------|
| A | Optical Fiber | C | UTP |
| B | STP | D | Coax |
- 12 _____ controls various cell offices and coordinates the communication between them.
- | | | | |
|---|------|---|------|
| A | MTSO | C | TCO |
| B | IMTS | D | AMPS |