

## **SECTION-B**

**Note:** Short answer type questions. Attempt any six questions out of Eight questions.  $(6 \times 5 = 30)$

- Q.11 Describe the characteristics that make a network a platform for communication.
- Q.12 Explain the concept of routing in the network layer . How does routing work in computer networks?
- Q.13 List any five difference between TCP and UDP.
- Q.14 Explain various function of application layer of OSI model.
- Q.15 What is MAC addressing. What are its various techniques.
- Q.16 Briefly explain the architecture if Internet.
- Q.17 List any five characteristics of LAN.
- Q.18 Explain why communication is considered an essential part of our lives in the context of computer networks.

## **SECTION-C**

**Note:** Long answer type questions. Attempt any one question out of two questions.  $(10 \times 1 = 10)$

- Q.19 What are IPv4 addresses. Explain in detail various IPv4 address classes with example.
- Q.20 What do you mean by layer-based mode. Explain in brief various models which are based on layered architecture.

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DVOC (Level 4 )

Sem 2nd / SD

Subject : Computer Networks

Time : 2 Hrs.

M.M. : 50

## **SECTION-A**

**Note:** Very short answer type questions . Attempt all ten questions.  $(10 \times 1 = 10)$

- Q.1 What is the primary purpose of computer networking ?
- a) Data storage
  - b) Information sharing and communication
  - c) Gaming
  - d) Graphics processing
- Q.2 What is the purpose of network addressing ?
- a) To identify the type of device
  - b) To determine the device's manufacturer
  - c) To uniquely identify devices on a network
  - d) To specify the devices' color
- Q.3 Which layer of the OSI model is responsible for providing network services directly to end-users?
- a) Application Layer
  - b) Transport Layer
  - c) Network Layer
  - d) Data Link Layer

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Q.4 Which transport layer protocol offers reliable, connection-oriented communication?

- a) UDP
- b) HTTP
- c) TCP
- d) SMTP

Q.5 Which of the following is NOT a valid IPv4 address class?

- a) Class A
- b) Class B
- c) Class C
- d) Class G

Q.6 What is the format of IP address ?

- a) 34 bit
- b) 64 bit
- c) 16 bit
- d) 32 bit

Q.7 What is the role of IPv4 addresses in the OSI model ?

- a) Ensuring reliable data transmission
- b) Providing a user interface to network services
- c) Identifying devices on a network
- d) Managing flow control

Q.8 Which of the following is an example of a wide area network (WAN)?

- a) Home Wi-Fi network
- b) Local Area Network (LAN)
- c) The internet
- d) Blue tooth connection

Q.9 Which part of a network address typically identifies the network itself?

- a) Host portion
- b) Subnet mask
- c) Network portion
- d) Broadcast address

Q.10 What are LANs and WANs in the context of networking?

- a) Types of network security Protocols.
- b) Programming languages used in networking.
- c) Network topologies
- d) Types of network technologies.