



RAN-2011000105030001

BCA (Winter Session) (Sem. V) Examination October - 2025 503 - Network Technologies (Old)

સૂચના : / Instructions

- (1) ઉપરોક્ત દર્શાવેલ વિગતો ઉત્તરવહી પર અવશ્ય લખવી.
Fill up strictly the above details on your answer book
- (2) Write to the point
- (3) Provide examples and diagrams wherever appropriate / necessary
- (4) Figures to the right indicate full marks to the question

Seat No.:

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Student's Signature

Q-1. Select an appropriate option.

(10)

1. The _____ carry signal in light form.

A) Fiber Optics	B) Twisted Pair Cable
C) Coaxial Cable	D) None
2. In a peer-to-peer network, each computer in a network is referred as

A) Server	B) Client
C) Peer	D) Sender
3. In the sending computer, UDP sends a data unit to the _____ layer.

A) Application	B) Transport
C) Network	D) Datalink
4. What is Full form of VANET?

A) Vehicular AdHoc Network	B) Vehicular Address Network
C) Vehicular Adhoc Neural Network	D) Wireless Sensor Networks
5. OSI stands for _____

A) open system interconnection	B) operating system interface
C) optical service implementation	D) open service Internet
6. Which layer is used to link the network support layers and user support layers?

A) Session Layer	B) Data Link Layer
C) Transport Layer	D) Network Layer
7. FTP is built on _____ architecture.

A) Client-Server	B) P2P
C) Data Centric	D) Service Oriented
8. Expansion of SMTP is _____

A) Simple Mail Transfer Protocol	
B) Simple Message Transfer Protocol	
C) Simple Mail Transmission Protocol	
D) Simple Message Transmission Protocol	
9. The number of layers in OSI model is _____

A) 4	B) 5
C) 6	D) 7
10. Full form of ARP.

A) Address Resolution Pattern	B) Address Resolution Protocol
C) Address Revolution Protocol	D) Address Revolution Pattern

Q-2. Answer the following (Any four) (24)

1. Write a note on types of networks.
2. What is a Topology? Explain Bus, Ring and Star topologies.
3. List different network devices and explain Router and Switch.
4. List out types of cables used for networking. Explain Fiber Optic Cable.
5. Explain Application layer protocols: SMTP, DNS and POP.
6. Write a short note on Network and Transport layers of OSI reference model.

Q-3. Answer the following (Any four) (24)

1. Write a note on architecture of internet.
2. Write a short note on Physical and Data Link layers of OSI reference model.
3. Write comparison between UTP and Co-axial cables.
4. Write a short note on MANET.
5. Differentiate: a) TCP & UDP b) HTTP & HTTPS
6. Write a note on concepts and working of email.

Q-4. Write short notes on following (Any two) (12)

1. Presentation layer protocols: FTP, SSL, HTTP.
 2. Search Engines.
 3. Unicast, Broadcast and Multicast.
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