

Seat No. **OCT-NOV 2025 WINTER EXAMINATION****1154 B.Tech. CBCS****Sub. Name: Computer Networks****Sub. Code: 83825/84051****Day and Date: Friday ,05-12-2025****Total Marks: 70****Time: 02:30 PM To 05:00 PM****Instructions: 1. All questions are compulsory
2. Assume suitable data wherever necessary and mention it boldly****Q1) Solve following MCQ.****[14]**

- i. The slowest transmission speeds are those of
A. Twisted pair cable
B. Optical Fiber Cable
C. Coaxial Cable
D. Microwave Cable
- ii. Automatic repeat request error management mechanism is provided by _____
A. logical link control sublayer
B. media access control sublayer
C. network interface control sublayer
D. application access control sublayer
- iii. The header length of an IPv6 datagram is _____
A. 10 bytes
B. 20 bytes
C. 30 bytes
D. 40 bytes
- iv. Which of the following is not the Networking Devices?
A. Gateway
B. Linux
C. Routers
D. Firewalls
- v. To deliver a message to the correct application program running on a host, the _____ address must be consulted
A. IP
B. MAC
C. Port
D. None of the above
- vi. Which of the following routing algorithms can be used for network layer

design?

- A. Shortest path algorithms
- B. Distance vector routing
- C. Link state routing
- D. All above

vii. In FTP protocol, client contacts server using ____ as the transport protocol. a.

b. d.

- A. transmission control protocol
- B. user datagram protocol
- C. Internet protocol
- D. stream control transmission protocol

Q2) Attempt any Two [14]

1. Explain IP addressing in details. [7]
2. Describe design issues of data link layer in details. [7]
3. What are different types of static routing methods? Explain shortest path algorithm in brief. [7]

Q3) Attempt any Two [14]

1. With a neat schematic explain link state routing algorithm [7]
2. Explain the Modem and describe various types of modem. [7]
3. What are different random access protocols? Explain CSMA CD technique. [7]

Q4) Attempt any Two [14]

1. Explain UDP and its working [7]
2. Explain Voice over IP (VoIP) [7]
3. Explain Real-time transport protocol (RTP) [7]

Q5) Attempt any Two [14]

1. Explain different types of TCP timers [7]
2. Describe Real-time transport control protocol (RTCP) in detail [7]
3. Compare IPv4 and IPv6 [7]

End Of Question Paper

Important Note for Chief Exam Officer / SRPD Coordinator / Sr Supervisor/ Student -

This Question Paper may be distributed for following Subjects as common code.

सदरची प्रश्नपत्रिका खालील विषयांकरिता वितरित करता येईल.

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