

Seat No. **MAR_APR 2025 SUMMER EXAMINATION****11731 Bachelor of Technology (NEP-2.0)****Sub. Name: Computer Networks - I****Sub. Code: 73279****Day and Date: MAY ,08-05-2025****Total Marks: 70****Time: 10:30 AM To 01:00 PM**

- Instructions:**
1. All questions are compulsory
 2. Assume suitable data wherever necessary and mention it boldly
 3. Draw neat labelled diagrams wherever necessary
 4. Figures to the right indicate full marks
 5. No drawing paper, tracing paper or its cutting is to be brought from outside or taken out from examination hall
 6. Use Sketches/Diagrams wherever necessary
 7. Use of Scientific calculator is allowed

- Q1)** Solve any two of the following. [7 each] [14]
- a. Describe the types of communication between the devices with suitable diagram and examples. [7]
 - b. Perform bit stuffing at sender side and de stuffing at the receiver side for given data Message:11011111110111110010 [7]
 - c. Explain Underlying technologies for LANs, WANs [7]
- Q2)** Solve any two of the following. [7 each] [14]
- a. Explain the slotted ALOHA technique [7]
 - b. Outline OSI Reference model and explain the each layer in detail [7]
 - c. List and explain design Issues of the Data Link Layer. [7]
- Q3)** Solve any two of the following. [7 each] [14]
- a. Explain IEEE 802.4 [7]
 - b. Explain Collision tree Protocols: Polling methods. [7]
 - c. Define routing. Discuss the Properties of good Routing Algorithm [7]
- Q4)** Solve any two of the following. [7 each] [14]
- a. Explain in brief Fragmentation. [7]

- b. Explain in detail three way handshake in TCP [7]
- c. List and explain the Approaches to control the congestion [7]
- Q5)** Solve any two of the following. [7 each] [14]
- a. Explain Wireless LANS 802.11 standards [7]
- b. Explain UDP in Detail [7]
- c. Explain IGMP messages [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.

1] (1154) B.Tech. CBCS (73279) Computer Networks - I Part 2 SEM 3