QP Code: 9399QP

Seat No.	

Total No. of Pages: 3

Winter Examination Oct/Nov 2023

Subject Name: B.Tech. CBCS_83825_84051 - Computer Networks_05.12.2023_10.30 AM To 01.00 PM

Subject Code: 83825

Day and Date: - Tuesday, 05-12-2023 **Total Marks: 70**

Time: - 10:30 am to 01:00 pm

Instructions.:

1) **All questions are compulsory**
2) **Use Sketches/Diagrams wherever necessary**

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Q.1. **All questions are compulsory** **[14]**

i. Which of the following is the fastest media of data transfer?

a. Fiber optic
b. Co-axial cable
c. Untwisted wire
d. Telephone lines

ii. What is the default subnet mask for a class C network?

a. 127.0.0.1
b. 255.0.0.0
c. 255.255.255.0
d. 255.255.0.0

iii. Full form of NIC

a. National Interface Card
b. Network Inter Connection
c. Network International Connection
d. Network Interface Card

iv. Which of the following layer of OSI model also called end-to-end layer?

a. Presentation layer
b. Network layer
c. Session layer
d. Transport layer

v. 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

vi. Transport layer protocols deals with _____

a. application to application communication
b. process to process communication
c. node to node communication
d. man to man communication

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

a. transmission control protocol
b. user datagram protocol
c. Internet protocol
d. stream control transmission protocol

Q.2. **Attempt any Two** **[14]**

A. What are different types of static routing methods? Explain shortest path algorithm in brief.
B. What is network topology? Draw various topologies and compare them.
C. Draw TCP/IP reference model and explain in brief protocols at each layer.

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Q.3. **Attempt any Two** **[14]**

A. With a neat schematic explain link state routing algorithm
B. Describe HDLC and explain about modes of operation and frame format of HDLC.
C. Explain sliding window protocol and its advantages over stop and wait protocol

Q.4. **Attempt any Two** **[14]**
A. Explain UDP and its working
B. Explain HTTP and SMTP in detail
C. Explain Real-time transport protocol (RTP)

Q.5. **Attempt any Two** **[14]**
A. Explain different types of TCP timers
B. Explain Domain Name System in detail
C. Describe Real-time transport control protocol (RTCP) in detail

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