

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2022

Subject Name : Computer Networks

Subject Code : 4TE05CNW1

Branch: B.Tech (CE)

Semester: 5

Date: 22/11/2022

Time: 02:30 To 05:30

Marks: 70

Instructions:

- (1) Use of Programmable calculator & any other electronic instrument is prohibited.
 - (2) Instructions written on main answer book are strictly to be obeyed.
 - (3) Draw neat diagrams and figures (if necessary) at right places.
 - (4) Assume suitable data if needed.
-

Q-1 Attempt the following questions: (14)

- a) What is the port number for (Simple Mail Transfer Protocol) SMTP?
(A) 20 (B) 25 (C) 23 (D) 24
- b) How many network bits does 125.140.128.16 have?
(A) 8 (B) 32 (C) 16 (D) 24
- c) Which is the device belongs to the OSI physical layer?
(A) Switch (B) Repeater (C) Gateway (D) Router
- d) Segmentation is done.
(A) Transport Layer (B) Network Layer (C) Application Layer (D) Data Link Layer
- e) Name server is a?
(A) host with full of names (B) Translate name into an IP address (C) network protocol (D) program answering name queries
- f) Which error detection method uses ones compliment arithmetic ?
(A) two-dimensional parity check (B) checksum (C) simple parity check (D) CRC
- g) What are the types of class full addressing?
- h) Write full form of HTTPS and DHCP ?
- i) Define Topology.
- j) Write difference between Switch and Hub.
- k) What do you mean by ARP?
- l) What are the issues in data link layer?
- m) How can the routing be classified?
- n) What is mean by Ethernet?

Attempt any four questions from Q-2 to Q-8

Q-2 Attempt all questions (14)

- A Explain the OSI model for networking in brief. How does it differ from 07



	TCP/IP model ?	
B	Explain Link-State routing algorithm.	07
Q-3	Attempt all questions	(14)
A	Differentiate between Connection oriented and Connection-less services.	07
B	Write a short note on “ALOHA”.	07
Q-4	Attempt all questions	(14)
A	Explain Distance Vector routing with example.	07
B	Explain Guided Transmission Media such as Twisted Pair, Coaxial Cable, and Fiber Optics.	07
Q-5	Attempt all questions	(14)
A	Write difference between LAN WAN and MAN.	04
B	What is network topology? Explain different types of network topology with example.	10
Q-6	Attempt all questions	(14)
A	Write a short note on DNS.	07
B	Explain three handshake process with suitable diagram.	07
Q-7	Attempt all questions	(14)
A	Explain functionality of Bridge, Hub, Switch, Router, and Gateway.	07
B	Write a short note on Leaky Bucket Algorithm.	07
Q-8	Attempt all questions	(14)
A	Compare IP4 Address and IP6 Address	07
B	Deference between OSI and TCP / IP reference model.	07

