

Enrollment No: _____

Exam Seat No: _____

C. U. SHAH UNIVERSITY

Winter Examination-2022

Subject Name : Fundamentals of Networking

Subject Code : 5CS01CFN1

Branch: MCA

Semester : 1

Date : 15/03/2023

Time : 10:30 To 01:00

Marks : 70

Instructions:

- (1) Use of Programmable calculator and 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.
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SECTION – I

Q-1 Attempt the Following questions. (07)

- a) Differentiate between UDP and TCP. **02**
- b) What is Data Packet? **02**
- c) Differentiate between network and networking. **02**
- d) Routing algorithm is part of which layer? **01**

Q-2 Attempt all questions (14)

- A** What is networking? Discuss various components of networking. **07**
- B** Explain Ethernet Networking Architecture. **07**

OR

Q-2 Attempt all questions (14)

- A** Explain CSMA /CA protocol with differentiate between non persistent, 1 persistent and p persistent. **07**
- B** Explain the TCP/IP reference model. Explain each layer protocol. **07**

Q-3 Attempt all questions (14)

- A** List and explain various network topologies. **07**
- B** Write note on cable media. **07**

OR

Q-3 A Explain Network performance in terms of bandwidth, throughput and latency . 07

- B** What are the IEEE 802.11 Wireless LAN Standards? **07**

SECTION – II

Q-4 Attempt the Following questions. (07)

- a) What is peer-to-peer network? **02**
- b) Differentiate between internet and intranet. **02**
- c) What is MODEM? **02**
- d) Differentiate between Hub and Switch. **01**



- Q-5 Attempt all questions (14)**
- A** Explain role of Transport layer. What is connection oriented and connection less protocol? Explain importance of transport layer protocol **07**
- B** What is packet switching? What are the advantages and disadvantages of packet switching? **07**

OR

- Q-5**
- A** What is addressing ? Explain different addresses used in a network. **07**
- B** Discuss why there are no session and presentation layers in the TCP/IP model. **07**

- Q-6 Attempt all questions (14)**
- A** Differentiate between adaptive and non-adaptive routing. Also explain Distance Vector Routing algorithm with example. **07**
- B** Explain Aloha, and CSMA-CA in brief. **07**

OR

- Q-6 Attempt all Questions**
- A** Explain Data link layer. How do the flow control and error control mechanism works. **07**
- B** Explain OSI reference model in brief. **07**

