C. U. SHAH UNIVERSITY
Summer Examination-2022

Subject Name: Next Generation Networks

Subject Code: 4TE08NGN1   **Branch: B.Tech (CE)**

Semester: 8   **Date: 05/05/2022**   **Time: 11:00 To 02:00**   **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:**
a)	Define Flow Control.	**(01)**
b)	What is the use of DHCP?	**(01)**
c)	What is Exterior Routing?	**(01)**
d)	Which are the applications of UDP?	**(01)**
e)	Define the term address transformation.	**(01)**
f)	What is daemon Process?	**(01)**
g)	Define the term Byte Ordering.	**(01)**
h)	What is DNS?	**(01)**
i)	List the key elements of Protocol.	**(01)**
j)	Write difference between Hub and Switch.	**(01)**
k)	What is Super netting?	**(01)**
l)	What is Multiplexing and De-multiplexing?	**(01)**
m)	What is Multicast Routing?	**(01)**
n)	What is i_net daemon?	**(01)**

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

Q-2   **Attempt all questions**
a)	What is a Daemon? Explain Syslog Procedure with suitable diagram.	**(07)**
b)	Discuss about State Transition diagram for Transport layer.	**(07)**

Q-3   **Attempt all questions**
a)	Write a note on ARP and RARP.	**(07)**
b)	Illustrate IP Addressing using Classful and Classless Addresses.	**(07)**

Q-4   **Attempt all questions**
a)	Explain OSPF (Open shortest path first Protocol) dynamic routing protocol.	**(07)**
b)	Illustrate Internet Control Message protocol with message types, Message format and Error reporting.	**(07)**

Q-5   **Attempt all questions**
  a) Describe Transition from IPv4 to Ipv6. **(07)**
  b) Briefly describe DVMRP and MBONE **(07)**

Q-6   **Attempt all questions**
  a) Explain TCP Socket? List down the advantage of using socket interface. **(07)**
  b) Compare Intra domain and Inter Domain routings protocols. **(07)**

Q-7   **Attempt all questions**
  a) Discuss about UDP Client Server Procedure with suitable diagram. **(07)**
  b) Describe LAN, Point-to-Point WAN, Switched WAN. **(07)**

Q-8   **Attempt all questions**
  a) What is Subnet? Subnet the Class C IP Address 205.11.2.0 so that you have 30 subnets. What is the subnet mask for the maximum number of hosts? How many hosts can each subnet have? What is the IP address of host 3 on subnet 2 ? **(07)**
  b) Write a short note on "BOOTP". **(07)**