## **University of Mumbai**

## **Examinations Summer 2022**

Program: **Electronics Engineering**Curriculum Scheme: Rev2019
Examination: TE Semester VI

Course Code: ELC603 and Course Name: Computer Communication Networks

Time: 2 hour 30 minutes Max. Marks: 80

Q1.	Choose the correct option for following questions. All the Questions are compulsory and carry equal marks		
1.	Network topology in which you can connect each node to the network along a single piece of network cable is called		
Option A:	Star topology		
Option B:	Bus topology		
Option C:	Mesh topology		
Option D:	Ring topology		
2.	Which OSI layer is known as Medium Access control Layer (MAC)		
Option A:	Physical Layer		
Option B:	Application Layer		
Option C:	Transport Layer		
Option D:	Data Link Layer		
3.	Which of the following best suits the User Datagram Protocol (UDP)		
Option A:	Unreliable		
Option B:	Congestion Control		
Option C:	Flow Control		
Option D:	Velocity Control		
4.	What is the size of the IP address of IPv4 in bytes?		
Option A:	32		
Option B:	16		
Option C:	4		
Option D:	10		

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5.	In the network layer which addressing is done?		
Option A:	Physical addressing		
Option B:	Logical addressing		
Option C:	Port addressing		
Option D:	Specific addressing		
6.	Which of the following is used for short range communication?		
Option A:	Fiber optic cable		
Option B:	Infrared wave		
Option C:	microwave		
Option D:	Coaxial cable		
7.	The transition from IPv4 to IPv6 is not possible from the following strategies		
Option A:	Dual Stack		
Option B:	Subnetting		
Option C:	Tunneling		
Option D:	Header translation		
8.	In, the chance of collision can be reduced if a station senses the medium before trying to use it		
Option A:	MA		
Option B:	CSMA		
Option C:	CDMA		
Option D:	FDMA		
9.	Data field is not present in following frame		
Option A:	I-frame		
Option B:	U-frame		
Option C:	S-frame		
Option D:	A-Frame		

10.	Simple Mail Transfer Protocol (SMTP) is
Option A:	Pull Protocol
Option B:	Push Protocol
Option C:	Forward Protocol
Option D:	Backward Protocol

Q2	Solve any Two Questions out of Three	10 marks each
A	Describe different Addresses (MAC address, IP Specific address) used in networking with examples	
В	Describe ADSL with respect to channel confitechnique and Equipment setup	guration, Modulation
С	Explain Stop-And-Wait ARQ Protocol & list the adva of Stop-And-Wait ARQ Protocol	nntages & disadvantages

Q3	Solve any Two Questions out of Three 10 marks each
A	Draw and explain IPV4 header. Compare IPV4 with IPV6
В	Explain TCP/IP Protocol Suite. Distinguish between OSI model and TCP/IP model
С	Explain Sliding window flow control protocol with the help of suitable diagram

Q4	Solve any Two Questions out of Three	10 marks each
A What are causes & effects of Congestion in the Explain different congestion control mechanisms		Transport layer?
В	Explain Time Slot Interchange Switch with the help o	f suitable diagram
С	Explain Domain Name System (DNS) in application of suitable diagram	on layer with the