GUJARAT TECHNOLOGICAL UNIVERSITY
MCA – SEMESTER-V   EXAMINATION –SUMMER-2020

Subject Code:4659308   **Date:07-11-2020**
Subject Name:Advanced Network (AN)
Time:10:30 AM to 01:00 PM   **Total Marks: 70**
Instructions:

    1. Attempt all questions.
    2. Make Suitable assumptions wherever necessary.
    3. Figures to the right indicate full marks.

Q.1	**(a)**	Answer the followings:	**07**
		(1) What is latency?	
		(2) Give names of latency components.	
		(3) Give full form of CDN.	
		(4) What is TCP Fast Open?	
		(5) What is congestion?	
		(6) Define term encryption.	
		(7) What is WebSocket?	
	(b)	Answer the followings:	**07**
		(1) What is datagram?	
		(2) Define term certificate authorities.	
		(3) XHR transfer begins with which event?	
		(4) Define term SNR	
		(5) Faster sites lead to better user engagement. [True/False]	
		(6) Bufferbloat is a great example of queuing delay. [True/False]	
		(7) Latency and bandwidth are two critical components that dictate the performance of all network traffic. [True/False]	
Q.2	**(a)**	(1) Draw and explain IPV4 header format.	**03**
		(2) Explain TCP head-of-line blocking.	**04**
	(b)	(1) Explain how ALPN save an extra roundtrip of latency.	**03**
		(2) How OCSP overcomes the limitation of CRL.	**04**
		OR	
	(b)	(1) Specify the reason for certificate revocation.	**03**
		(2) Compare high level features of XHR, SSE and WebSocket.	**04**
Q.3	**(a)**	(1) How NAT resolved the address depletion problem in UDP connectionless environment.	**03**
		(2) Compare Ethernet and wi-fi data and physical layers.	**04**
	(b)	Explain Three way handshaking.	**07**
		OR	
Q.3	**(a)**	(1) Explain audio and video delivery via SRTP over UDP.	**03**
		(2) Compare TCP, UDP, and SCTP.	**04**
	(b)	Explain types of wireless networks.	**07**
Q.4	**(a)**	Explain network security and send boxing.	**07**
	(b)	What is cross-origin resource sharing? How it offer resources to a script running in a different origin?	**07**
		OR	
Q.4	**(a)**	Differentiate polling and long-polling with XHR.	**07**
	(b)	Explain event stream protocol.	**07**

Q.5	**(a)**	How text and binary data send and receive using WebSocket?	**07**
	(b)	Explain WebRTC protocol stack.	**07**
		OR	
Q.5	**(a)**	Explain WebSocket protocol.	**07**
	(b)	Explain session description protocol.	**07**

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