[151/A-38] SEAT No. No. of Printed Pages: 9 SARDAR PATEL UNIVERSITY

B.C.A. Semester-6 Examination, 2019 US06CBCA02: Computer Networks Wednesday, 27th March, 2019.

Time: 2.00 p.m. - 5.00 p.m.

Marks: 70

Q-1		Select the appropriate option for the following questions:	10
	1	"Interconnected collection of autonomous computers" is known as a) Computer network b) Host c) Subnet d) Server	
	2	The data elements sent from one device to another per second is known as a) Bandwidth b) Modulation Rate c) Data Rate d) None of these	
	3	In a fiber-optic cable, the signal is propagated along the inner core by	
		a) Reflection b) Refraction c) Modulation d) Amplification	
	4	Transmission media are usually categorized as a) Fixed or unfixed b) Guided or unguided c) Determinate or indeterminate d) Metallic or nonmetallic	
	5	A is a set of rules that govern data communications.	
	6	a) Layers b) Network c) protocol d) Communication Physical addressing and framing is responsibility of	
		a) Data link layer b) Session layer c) Transport layer d) Application layer	
	7	CSMA stand for a) Carrier Sensitive Multimedia Access c) Code Sensitive Multiple Access d) Carrier Sense Multiple Access d) Carrier Sense Multiple Access	
	8	Which of the following topology requires maximum cabling? a) Bus b) Star c) Ring d) Mesh	
	9	Which of the following is not a guided medium? a) Twisted-pair cable b) Coaxial cable c) Fiber-optic cable d) Atmosphere	
	10	A repeater operates at layer. a) physical b) datalink c) network d) all of these	
Q-2		Give short answers of the following questions: (ANY TEN)	20
	1)	Define computer network. List the categories of computer networks.	
	2)	Explain DQDB in brief.	
	3)	Define Topology and Datarate.	
	4)	Explain serial transmission in brief.	
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	5)	List various transmission modes.	
	6)	What is modulation? List various modulation techniques.	
	7)	What is satellite? List categories of satellite.	
	8)	Define: Protocol Stack and Network architecture.	
	9)	Explain orbit.	
	10)	Write full form of CSMA. List different types of CSMA.	
	11)	What are the two types of network according to connection type? What is the basic difference between them?	
	12)	Explain Broadcast network.	
Q-3	A	What are the uses/advantages of computer networks? Explain in detail.	05
	В	Explain LAN in detail.	05
		OR	
Q-3	A	How can we classify computer Network? Explain.	05
	В	Explain WAN.	05
Q-4	A	What do you mean by Multiplexing? Explain FDM in detail.	5
	В	Explain Coaxial cable in detail.	5
		OR	
Q-4	A	Explain fiber optic with its advantages and disadvantages.	6
	В	Explain Synchronous transmission.	4
Q-5	A	List all layers of OSI model. Explain Physical layer and Application layers.	6
	В	Explain protocol hierarchies.	4
		OR	
Q-5	A	What are the types of satellite? Explain geosynchronous satellite.	5
٠	.B	Write a note on design issues for the layers.	5
Q-6		List different topologies. Explain any two topologies in detail.	10
		OR	
Q-6		List various network components. Explain repeater and router in detail.	10



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