(P.T.O.)

SARDAR PATEL UNIVERSITY B.Sc. V<sup>th</sup> Semester Examination (CBCS)

## **External Examination 2018**

US05CELC06: Data Communication and Network

Date: 3/11/2018 Time: 10:00 am to 1:00 pm Schurday

**Total Marks: 70** 

Que-1	Ch	oose the correct answer.	[10]
	1	What does CRC stand for?	S
		a) Cycle Redundancy Check b) Cyclic Reduction Check	
		c) Cycle Reduction Check d) Cyclic Redundancy Check	
	2	Terminators are used in topology.	
		(a) Linear Bus b) Star c) Mesh d) Ring	
	3	A network is located at Network layer of OSI Reference model.	
		a) Hub b) Switch c) Router d) RJ45 Connector	
	4	Communication between a computer and a keyboard involves transmission.	
		a) Simplex b) half-duplex c) full-duplex d) automatic	
	5	A is a set of rules that governs data communication.	
	_	a) Forum b) protocol c) standard d) none of the above	
	6	layer decides which physical pathway the data should take.	
	_	a) Application b) Network c) Physical d) Logical	
	7	A is a data communication system within a building, plant, or campus, or	
		between nearby buildings.	
	_	a) MAN b) LAN c) WAN d) none of the above Data flow between two devices can occur in a way.	
	8	Data flow between two devices can occur in a way.	
	0	a) Simplex b) half-duplex c) full-duplex d) all of the above	
	9	A is a topology for a Local Area Network (LAN) in which all nodes are	
		individually connected to a central connection point, like a hub or a switch.	
	10	a) Bus b) Star c) Mesh d) Ring	
	10	Which of the following architecture uses CSMA/CD access method?	
		a) ARCnet b) Ethernet c) CSNET d) ARPANET	
Que-2	And	swer in short [ANY TEN]	[0.0]
Que-2	1	Enlist name of various Physical Topology.	[20]
	2	Define Asynchronous transmission.	
	3	Give difference between Worm and Virus.	2 20
	4	Draw Ethernet Frame Structure of IEEE 802.3	<i>i</i>
	5	What is Collision detection?	*2
	6	Give short note on the need for standards.	*1
	7	What is CRC?	
	8	Define RS – 232 interface.	
	9	Give short note on mesh topology.	
	10	Compare error correction and error detection.	
	11	What is linear block code?	
	12	What is an Ethernet?	

Q-3		Explain Network application topologies and at least three Standard Creation	[10]
		Committees. OR	
Q-3		Describe the standard OSI layer with require diagram.	[10]
Q-4	A B	Define Simplex, half duplex and full duplex. Give the description about Transmission modes.	[05] [05]
Q-4	A B	OR  Explain Carrier sense multiple access with Collision Detection (CSMA/CD).  Explain Aloha protocol and token passing.	[05] [05]
			[05]
Q-5	A B	Explain Internet Virus and Worm.  Explain Double bit error detection with example.  OR	[05]
Q-5		Explain CRC in details.	[10]
		The Day of Correctness	[10]
<b>Q-6</b>		Explain Protocol Correctness. <u>OR</u>	[05]
Q-6	A B	Discuss about Sliding window Protocol.  Discuss about binary synchronous communication protocol.	[05]

