

[A-31] SARDAR PATEL UNIVERSITY

M.Sc.IT Examination, 4th Semester

Saturday, 25 April 2015

Morning Time: 10:30 A.M to 01:30 P.M

Subject Code: PS04CIIT02/ Paper No: 02

Subject: DATA COMMUNICATION & NETWORKING

Total Weight age/Marks: 70

Q.1 Multiple Choice Questions.

10

1. ____ network has a single communication channel that is shared by all machines on the network.
 - A. Broadcast
 - B. Point-to-point
 - C. Both (A) and (B)
 - D. None of the Above
2. A switch performs filtering on the basis of ____ address.
 - A. logical
 - B. port
 - C. IP
 - D. MAC
3. Mail and directory service is responsibility of _____.
 - A. Presentation layer
 - B. Network layer
 - C. Application layer
 - D. Session layer
4. The signal from a satellite is normally aimed at a specific area called _____.
 - A. Channel
 - B. Footprint
 - C. Tower
 - D. Orbit
5. Dialog control and synchronization is responsibility of _____.
 - A. Transport layer
 - B. Application layer
 - C. Network layer
 - D. Session layer
6. In a fiber-optic cable, the signal is propagated along the inner core by _____.
 - A. Reflection
 - B. Amplification
 - C. Modulation
 - D. Refraction
7. _____ Cable is used for voice and data communications
 - A. Coaxial
 - B. Twisted-pair
 - C. Fiber-optic
 - D. None of the above
8. A computer network permits sharing of _____.
 - A. Resources
 - B. Both a & b
 - C. Information
 - D. None of these
9. DQDB stands for _____.
 - A. Dual Queue Dual Bus
 - B. Distributed Queue Dual Bus
 - C. Double Queue Double Bus
 - D. Dual Queue Dual Bits
10. "Interconnected collection of autonomous computers" is known as _____.
 - A. Server
 - B. Subnet
 - C. Host
 - D. Computer Network

P.T.O

Q.2	Answer the following questions in short. (Any 10)	20
	1) Explain 1 persistent.	
	2) Explain Orbit.	
	3) Define: - Modem, Amplifier.	
	4) Difference between broadcasting and multi casting.	
	5) Difference between bridge & repeater.	
	6) Define Spectrum and Bandwidth.	
	7) Explain CAT 3 cable in brief.	
	8) Explain serial transmission in brief.	
	9) What is WAN?	
	10) Explain responsibilities of Transport Layer and Session Layer.	
	11) Explain phase modulation with in brief example.	
	12) What is OSI model? List all layers of OSI model.	
Q.3(A)	Explain fiber optic in detail.	06
(B)	Differentiate between guided and unguided media.	04
	OR	
Q.3(A)	Explain Twisted pair in detail.	06
(B)	Write a short note on Amplitude Modulation and Frequency Modulation.	04
Q.4(A)	Write a short note on OSI Layers.	06
(B)	Write a note on design issues for the layers.	04
	OR	
Q.4(A)	Explain Bluetooth and Wireless LANs with characteristics.	06
(B)	Write a short note on communication satellites.	04
Q.5(A)	Explain star topology and mesh topology with their advantages & disadvantages.	06
(B)	Write a short note on CSMA.	04
	OR	
Q.5(A)	Explain bus topology and ring topology with their advantages & disadvantages	06
(B)	Explain working of router & gateway. Also state difference between switch & router.	04
Q.6(A)	Define Computer Network. Explain Advantage and Disadvantages of Computer Network in detail.	10
	OR	
Q.6(A)	Write a short note on Classification of Computer Networks and explain LAN in detail.	10
