SARDAR PATEL UNIVERSITY

B.C.A. Semester-6 Examination, 2018
US06CBCA02 : Computer Networks
Saturday, 31ˢᵗ March, 2018.

Time : 2.00 p.m. – 5.00 p.m.   Marks: 70

Q-1   **Select the appropriate option for the following questions:**   **10**

1   _____ is to make all programs, equipments & specially data available to anyone on a network without regard to the physical location of the resource & user.
a) High reliability   b) Resource sharing
c) Saving money   d) None of these

2   DQDB stands for _____.
a) Dual Queue Dual Bus   b) Double Queue Double Bus
c) Dual Queue Dual Bits   d) Distributed Queue Dual Bus

3   _____ cable can carry signals of higher frequency ranges than twisted-pair cable.
a) Twisted-pair cable   b) Coaxial cable
c) Fiber-optic cable   d) None of the above

4   Transmission media are usually categorized as _____.
   a) Fixed or unfixed
   b) Guided or unguided
   c) Determinate or indeterminate
   d) Metallic or nonmetallic

5   Routing is responsibility of _____.

   a) Presentation layer   b) Network layer
   c) Physical layer   d) Session layer

6   The signal from a satellite is normally aimed at a specific area called _____.
   a) Channel   b) Tower
   c) Footprint   d) Orbit

7   Which of the following is not a valid form of CSMA?
a) 1-persistent   b) p-persistent   c) non-persistent   d) persistent

8   A bridge operates at ____ layer(s).
a) physical   b) datalink   c) physical & datalink   d) datalink & network

9   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

10   OSI stands for _____.
   a) Open System Interface   b) Organization Standard interface
   c) Open System Interconnection   d) Open Standard Interconnection

Q-2   **Give short answers of the following questions: (ANY TEN)**   **20**

1)   Define: Server, Topology

2)   Explain SUBNET in brief.

3)   List three categories of computer network.

4) Explain parallel transmission in brief.

5) Discuss various categories of coaxial cable and state their use.

6) List various modulation techniques.

7) Define: Protocol Stack and Network architecture

8) What is satellite? List categories of satellite.

9) Explain orbit.

10) Write full form of CSMA. List different types of CSMA

11) Explain Gateway in short.

12) What are the two types of network according to connection type? What is the basic difference between them?

Q-3	A	Explain LAN in detail.	05
	B	What are the uses/advantages of computer networks? Explain in detail.	05

OR

Q-3	A	Write a short note on MAN.	05
	B	Explain classification of computer networks.	05

Q-4	A	Explain twisted pair cable in detail.	5
	B	What do you mean by Multiplexing? Explain FDM in detail.	5

OR

Q-4	A	Explain modes, advantages and disadvantages of fiber optics.	5
	B	Write the difference between circuit switching and packet switching.	5

Q-5	A	List all layers of OSI model. Explain any two of them.	6
	B	Write a note on protocol hierarchies.	4

OR

Q-5	A	Write a note on wireless network.	3
	B	Write a note on geosynchronous satellite.	3
	C	Write a note on design issues for the layers.	4

Q-6	List topologies. Explain any two topologies in detail. Provide their differences too.	10

OR

Q-6	Which are the network components? Explain repeater and router in detail. What are the differences among them?	10