



**SARDAR PATEL UNIVERSITY**  
**BCA (NC) EXAMINATION, 6<sup>th</sup> SEMESTER**

Friday, 24-6-2022

US06CBCA02[Computer Networks]

TIME: 10:00 am to 12:00 pm

Maximum Marks: 70

- Q-1 Multiple Choice Question. [Each Question carries one Mark] [10]
- 1) \_\_\_\_\_ network consists of many connection between individual parts of machines.
 

a) Point-to-Point network.	b) People network
c) Broadcast network.	d) Specialized network
  
  - 2) \_\_\_\_\_ consists of two distinct components: transmission lines & switching elements.
 

a) Host	b) Subnet
c) Intermediate System	d) Server
  
  - 3) Traditional LANs run at speeds of \_\_\_\_\_ to \_\_\_\_\_ Mbps.
 

a) 20 to 100	b) 10 to 1000
c) 100 to 1000	d) 10 to 100
  
  - 4) What is the major factor that makes coaxial cable less at risk to noise than twisted-pair cable?
 

a) Inner conductor	b) Diameter of cable
c) Outer conductor	d) Insulating material
  
  - 5) Transmission media are usually categorized as \_\_\_\_\_.
 

a) Fixed or unfixed	b) Guided or unguided
c) Determinate or indeterminate	d) Metallic or nonmetallic
  
  - 6) Which of the following physical connection is the fastest?
 

a) Twisted-pair	b) Coaxial cable
c) Fiber-optic	d) Radio waves
  
  - 7) Bit synchronization is responsibility of \_\_\_\_\_.
 

a) Data link layer	b) Network layer
c) Session layer	d) Physical layer
  
  - 8) An artificial satellite needs to have \_\_\_\_\_ which is the path in which it travels around the Earth.
 

a) Channel	b) Tower
c) Communication lines	d) Orbit
  
  - 9) Which of the following is not a valid form of CSMA?
 

a) 1-persistent	b) p-persistent
c) non-persistent	d) persistent
  
  - 10) \_\_\_\_\_ 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 these

- Q-2 Fill in the Blanks and True/False. [8]
- 1 "Interconnected collection of autonomous computers" is known as \_\_\_\_.
  - 2 Point to Point network consists of many connection between individual parts of machines. (True/False)
  - 3 For long distance data transmission, \_\_\_\_\_ is the preferable mode of communication.
  - 4 In a fiber-optic cable, the signal is propagated along the inner core by Modulation.(True/False)
  - 5 The signal from a satellite is normally aimed at a specific area called\_.
  - 6 Mail and directory service is responsibility of Presentation layer. (True/False)
  - 7 \_\_\_\_\_ topology requires maximum cabling.
  - 8 The Repeater can be used to solve problem of attenuation.(True/False)

- Q-3 Give Answers for the following:(Any ten) [20]
1. List uses of computer networks.
  2. What do you mean by Topology and server?
  3. What is DQDB?
  4. What is modulation? List various modulation techniques.
  5. Explain application of twisted pair in brief.
  6. List various transmission modes.
  7. Define Satellite. List categories of satellite.
  8. Explain footprint.
  9. List main responsibilities of data Link Layer and Network Layer.
  10. Write note on Broadcast network.
  11. What is the difference between router and switch?
  12. What are the advantages of bus topology over mesh topology?

- Q - 4 Give Answer for the following Questions. (Any Four) [32]
1. Explain LAN and WAN.
  2. What are the advantages of computer networks? Explain in detail.
  3. Explain Synchronous transmission in detail.
  4. Explain coaxial cable in detail with its performance and applications.
  5. List all layers of OSI model. Explain any two layers.
  6. Write a note on wireless network and geosynchronous satellite.
  7. List all topologies. Explain Star and Mesh topologies in detail.
  8. Explain working of repeater and bridge in detail.