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SEAT No. _____

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SARDAR PATEL UNIVERSITY

T.Y.B.Sc.(INT) (SEM - VI) EXAMINATION MARCH/APRIL – 2019

US06CINT06 : Data Communication & Networking

Date: 04/04/2019, *Thurs day*

Time: 10:00 to 01:00 PM

Total Marks : 70

Q.1 Multiple choice questions:

[10]

- 1 Traditional LANs run at speeds of _____ to _____ Mbps.
A. 20 to 100 B. 10 to 1000 C. 100 to 1000 D. 10 to 100
- 2 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 above
- 3 If a computer on the network shares resources for others to use, it is called _____.
A. Server B. Client C. Mainframe D. Router
- 4 _____ Cable is used for voice and data communications.
A. Coaxial B. Fiber-optic C. Twisted-pair D. None of the above
- 5 Which of the following physical connection is the fastest?
A. Twisted pair B. Coaxial cable C. Fiber-optic cable D. Radio waves
- 6 A _____ is a set of rules that govern data communications.
A. Layers B. Network C. Protocol D. Communication
- 7 Dialog control and synchronization is responsibility of _____.
A. Transport layer B. Application layer C. Network layer D. Session layer
- 8 Which of the following topology requires maximum cabling?
A. Bus B. Star C. Ring D. Mesh
- 9 A _____ is actually a multiport repeater.
(A) Hub (B) Bridge (C) Router (D) VLAN
- 10 A _____ can be used to connect two different networks that use different models.
(A) router (B) switch (C) gateway (D) all of these

Q.2 Write a short note on any 10.

[20]

1. How can we classify computer networks?.
2. Difference between broadcasting and multi casting.
3. Explain SUBNET in brief.
4. What is modulation? List various modulation techniques
5. List various categories of Coaxial cable and state their use.
6. Define the terms : 1. Topology 2. Host
7. Write the full form: 1. SMTP 2. FTP

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(P.T.O.)

8. Define: Protocol Stack and Network architecture.
9. Explain routing in brief.
10. Difference between : Repeater – Amplifier
11. Write a short note on Modem.
12. What is the difference between bridge and repeater?

- Q.3 (A) Explain Local Area Network in detail. [5]
Q.3 (B) Define computer network. State the advantages and disadvantages of computer network. [5]

OR

- Q.3 (A) Explain Wide Area Network. [5]
Q.3 (B) Discuss the importance of computer networking. [5]

- Q.4 (A) Explain fiber optic in detail. [5]
Q.4 (B) Write the difference between circuit switching and packet switching. [5]

OR

- Q.4 (A) What do you mean by Multiplexing? Differentiate between TDM and FDM [5]
Q.4 (B) Explain Synchronous transmission in detail [5]

- Q.5 (A) Explain OSI reference model in detail. [10]

OR

- Q.5 (A) Explain network topology with their advantages & disadvantages [10]

- Q.6(A) Write a note on wireless network. [4]
Q.6(B) Write a detail note on Hub. [6]

OR

- Q.6(A) Write a note on geosynchronous satellite. [4]
Q.6(B) Explain switch, router & gateway in detail. [6]

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