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Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE) (Sem.–5)

COMPUTER NETWORKS

Subject Code : BTCS-504-18

M.Code : 78323

Date of Examination : 29-11-2024

Time : 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

1. Write briefly :

- a) What is IPv4?
- b) What is the role of firewalls in computer networks?
- c) What is the use of FTP protocol?
- d) What is flow control?
- e) List major transmission media used for data communication.
- f) What is source routing?
- g) What is the role of piggybacking at data link layer?
- h) List the components of a URL.
- i) What is Frequency division multiplexing?
- j) What is checksum?

SECTION-B

2. Compare and contrast distance vector routing with link state routing.
3. Explain the working of CSMA/CD protocol.
4. Differentiate between Go-Back-N and Selective Repeat ARQ protocols.
5. Discuss the significance and functionality of leaky bucket and token bucket algorithms at transport layer.
6. List and explain the features of each layer in TCP/IP reference model.

SECTION-C

7. Explain the three-way handshake based connection establishment process of TCP protocol in detail.
8. What is HTTP and how does it enable the exchange of resources on the web? Provide an example illustrating an HTTP client-server interaction.
9. **Write short notes on:**
 - a) TELNET
 - b) DHCP

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.