Roll No. | | | | | | | | | | | | Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (CSE) (Sem–5)

COMPUTER NETWORKS

Subject Code : BTCS504-18

M.Code : 78323

Date of Examination : 05-06-2023

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) Define Bandwidth and Bandwidth Utilization for a communication channel.

b) What is the purpose of sliding window protocol?

c) What is wireless LAN. Which IEEE standard governs it?

d) How is multiple access of a channel achieved? List the challenges.

e) Define attenuation and latency of transmission channels.

f) What are the components of data link layer and their respective roles?

g) Discuss various types of framing techniques.

h) What do you mean by routing? Define link state routing strategy.

i) What factors lead to congestion in a network?

j) Which protocol is used for multimedia transmission? Give its frame structure.

SECTION-B

2. What issues of OSI model led towards TCP/IP model development?

3. Compare and contrast various multiplexing techniques.

4. What do you mean by Cryptography? Discuss its types.

5. What are the challenges of CSMA / CD? How it is purposed to improve?

6. Compare UDP and TCP protocol giving their frame structure.

SECTION-C

7. **Write Short notes on :**

   a) DDNS

   b) TELNET

   c) HTTP.

8. Using suitable example, discuss two error correction techniques in data transmission.

9 What are the advantages of IPV6 addressing? Give frame structure of IPV6 header. Explain which network layer protocol is responsible for address resolution?

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.