

Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Tech. (ECE) (PIT) (Sem.-6)
COMPUTER NETWORKS
Subject Code : UC-BTCS-602-18
M.Code. : 80051
Date of Examination : 14-07-22

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 the difference between protocols and interface in OSI model?
- b. Differentiate between LAN, MAN and WAN.
- c. Differentiate between wired and wireless transmission.
- d. What are the advantages of twists in Twisted pair wire?
- e. Explain the IP address along with IP range in each class of classful addressing.
- f. Define noise and attenuation term in network transmission.
- g. What is the difference between IP address and MAC address?
- h. Discuss the design issue of Data Link Layer.
- i. Define ALOHA protocol.
- j. What is congestion in a network? Name two methods to handle it.

SECTION-B

- 2) Discuss the working, advantages and disadvantages of different network topologies.
- 3) Explain frequency division multiplexing and time division multiplexing using suitable diagram.
- 4) What is sliding window protocol? Differentiate between Go back-N and Selective repeat.
- 5) What do you mean by error detection and correction? Explain one bit error detection and correction technique.
- 6) Explain the different parts of email and any 2 protocols used in it.

SECTION-C

- 7) Write a detail note on TCP/IP reference model. How it is different from OSI model?
- 8) What are the different categories of Routing protocol? Explain distance vector routing using suitable example.
- 9) Explain Transport layer roles and responsibilities. Compare TCP and UDP protocols along with their header frames.

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.