

Total No. of Questions : 8]

[Total No. of Printed Pages : 2

Roll No

IT-5003-CBGS

B.E. V Semester

Examination, June 2020

Choice Based Grading System (CBGS)

Computer Network

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Give explanation of different type of topologies in terms of its advantages and disadvantages.
b) Draw the TCP/IP reference model with stack diagram and discuss the function of each layer in detail.
2. a) With the help of any example compare Circuit Switching, message switching and Packet Switching?
b) What do you mean by error detection? Write down the name of methods. An 8-bit with binary value 10101111 is to be encoded using an even-parity Hamming code. What is the binary value after encoding?
3. a) What do you mean by CSMA method of MAC? Define persistent and non persistent CSMA.
b) What is Pure ALOHA and slotted ALOHA? How the efficiency of slotted ALOHA is twice that of pure ALOHA? Derive it.

IT-5003-CBGS

PTO

[2]

4.
 - a) Explain Stop and wait protocol and Go back N ARQ.
 - b) Explain various classes of IP addresses in terms of their network-ID bits, host-ID bits, no. of possible host, no. of possible network and range for each class.

5.
 - a) Describe the use of IPConfig and Ping and write its commands.
 - b) Compare the working of TCP and UDP.

6.
 - a) What do you mean by internet working devices? Write the name of different kind internet working devices and explain any two in brief.
 - b) What is the difference between unicast and multicast routing protocols? Give suitable examples for them.

7. Explain the following routing algorithms in detail:
 - a) Least cost
 - b) Dijkstra's
 - c) Bellman ford

8. Write short notes on any two of the followings:
 - a) Wireless LAN
 - b) Congestion control
 - c) FDDI wireless LAN
 - d) Arpanet
