Total No. of Questions: 8] [Total No. of Printed Pages: 2

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## **IT-5003-CBGS**

## **B.E.** V Semester

Examination, December 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) Explain LAN and WAN in brief with suitable example and diagram.
  - b) Draw TCP/IP header and explain each part of header.
- 2. a) Give the comparison between TCP/IP and ISO-OSI reference model.
  - b) Describe the working of stop and wait protocol with suitable sketch.
- 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.
- 4. a) Explain ALOHA and slotted ALOHA protocol with suitable example.
  - b) What is CSMA? Compare the persistent and Non-persistent CSMA protocol.

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- 5. a) "TCP is connection oriented, reliable protocol" Justify the statement.
  - b) Differentiate bridges, routers and gateways.
- 6. Explain Bellman-food rooting algorithm with example.
- 7. a) Explain following with respect to IP address. Give proper example of each.
  - i) Structure of IPv4 address
  - ii) Subnet mask
  - iii) Default gateway
  - b) Draw and explain TCP packet header.
- 8. Write short notes on any two:
  - a) Network connecting device
  - b) Classless addressing
  - c) FDDI
  - d) Point to point protocol

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