Roll No ....

EC-7004 (1) (CBGS)
B.E. VII Semester
Examination, November 2018
Choice Based Grading System (CBGS)
Data Communication

Time : Three Hours

Maximum Marks : 70

Note: i) Attempt any five questions.

ii) All questions carry equal marks.

1. a) Compare and explain circuit switching, message switching and packet switching techniques.

   b) What are the various layers in TCP/IP protocol? Explain and also give functions of each layer.

      https://www.rgpvonline.com

2. a) Compare TCP/IP and OSI model. Outline important features of OSI model. Also discuss lack of OSI model's success.

   b) Why different types of topologies are used? Name and explain various topologies and compare their advantages and disadvantages. https://www.rgpvonline.com

3. a) What is the mechanism of stop and wait protocol? Explain. Why it is considered as very inefficient for a high speed internet?

   b) Explain the principle of operation of a CRC error detection method.

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4. a) Which simple procedure is used in ALOHA protocol? Explain it in detail.

   b) Describe important features of ALOHA, CSMA, CSMA/CD protocol and compare them.

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5. a) With the help of diagrams explain in detail Datagram and Virtual circuit.

   b) What are the cause of congestion at transport layer and explain possible remedies to be used at the Network Layer.

6. a) Mention one main and three auxiliary protocols at the network layer. Explain them in brief with their functions.

   b) Enlist and explain general services required from the transport layer. https://www.rgpvonline.com

7. a) Give important features and services of TCP protocol.

   b) List and explain main disadvantages of UDP protocol and give its typical applications.

8. a) What are the two broad categories in which data compression is divided? Explain and compare them.

   b) Describe Simple Network Management Protocol (SNMP) as a frame work for managing devices in an internet using the TCP/IP protocol suite.

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