MSC-CS-11

December - Examination 2015

MSC-CS (Final) Examination

Data Communication and Networks

Paper - MSC-CS-11

Time : 3 Hours]   **[Max. Marks :- 100**

Note: The question paper is divided into three sections A, B and C. Write answers as per given instructions.

Section - A   10 x 2 = 20
(Very Short Answer Questions)

Note: Answer all questions. As per the nature of the question delimit your answer in one word, one sentence or maximum upto 30 words. Each question carries 2 marks.

1)   (i)   Write short notes on CRC checker.

     (ii)   What is selective reject ARQ?

     (iii)   What is mean by data communication?

     (iv)   What are the three criteria necessary for an effective and efficient network?

     (v)   Why are protocols needed?

     (vi)   For n devices in a network, what is the number of cable links required for a mesh and ring topology?

(vii) What are header and trailers and how do they get added and removed?

(viii) What are the criteria used to evaluate transmission medium?

(ix) Give the relationship between propagation speed and propagation time.

(x) What are the responsibilities of data link layer?

Section - B   4 x 10 = 40
(Short Answer Questions)

Note: Answer any four questions. Each answer should not exceed 200 words. Each question carries 10 marks.

2) Compare LAN, WAN and MAN.

3) Discuss about the ISO OSI model.

4) Explain about the error detecting and error correcting codes.

5) Compare circuit, packet and message switching.

6) Write a brief note on token bus and token ring.

7) Explain the design issue of network layer.

8) Explain briefly the distance vector routing.

9) Explain about transport layer services.

Section - C   2 x 20 = 40

(Long Answer Questions)

Note: Answer any two questions. You have to delimit your each answer maximum upto 500 words. Each question carries 20 marks.

10) Explain in detail about communication security and authentication with neat example.

11) Describe in detail about HTTP and FTP with neat sketches.

12) Explain the architecture of ATM.

13) Write short note on:

    (i)   ARP

    (ii) RARP

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