

MSCCS-11/MSCCS-205/MCA-205

December - Examination 2019

MSCCS-Final/MCA-IIInd Year Examination**Data Communication and Networks****Paper - MSCCS-11/MSCCS-205/MCA-205****Time : 3 Hours]****[Max. Marks :- 80**

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

Section - A**8 × 2 = 16****(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. List the four general techniques to improves QoS (Quality of Services).
 - ii. List any two functions of the Application gateway.
 - iii. Give the basic difference between ARP and RARP.
 - iv. What do you mean by Tunneling? Give an example.
 - v. Why is HTTP called as 'Stateless Protocol'?
 - vi. What is the port address? Give an example.
 - vii. What is the use of the PING command in ICMP?
 - viii. Describe the role of DNS.

Section - B $4 \times 8 = 32$ **(Short Answer Questions)**

Note: Answer **any four** questions. Each answer should not exceed 200 words. Each question carries 8 marks.

2. Describe the working of remote procedure call with suitable examples.
3. Explain the relationship between the transport layer and the network layer.
4. Discuss the various classes of IP addressing with a suitable example.
5. Explain the use of hamming code and hamming distance with suitable examples.
6. What do you mean by Topology? Explain different types of topologies with examples.
7. Write a short note on HDLC.
8. Describe the comparison of Circuit Switching and Packet Switching.
9. Explain about Hub, Switches, and Bridges.

Section - C $2 \times 16 = 32$ **(Long Answer Questions)**

Note: Answer **any two** questions. You have to delimit your each answer maximum upto 500 words. Each question carries 16 marks.

10. What do you mean by congestion? Explain the different approaches to control the congestion in a network.
11. What is Routing? Explain the difference between distance vector and link-state routing with a suitable example.
12. What is Multiplexing? Explain various types of Multiplexing in detail.
13. Write a short note on the following:
 - a. RSA algorithm
 - b. Digital signature _____