

MSCCS-11/MSCCS-205/MCA-205

December - Examination 2018

MSCCS-Final/MCA-IIInd Year Examination**Data Communication and Networks****Paper - MSCCS-11/MSCCS-205/MCA-205****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 × 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) Define Extranet.
- (ii) List any two applications of Network.
- (iii) What is the use of ARP and RARP?
- (iv) What is Round Trip Time?
- (v) Give two differences between Symmetric and Asymmetric Key.
- (vi) What is Ping Program?
- (vii) What do you mean by Network Topology?

- (viii) What is Wavelength?
- (ix) Give two examples of IP address.
- (x) What is the full form of FDDI.

Section - B**4 × 10 = 40**

(Short Answer Questions)

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

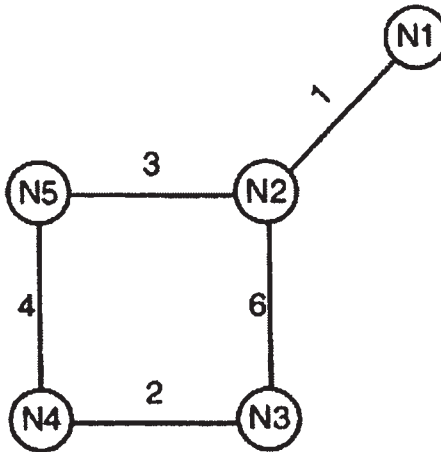
- 2) Distinguish between Asynchronous and Synchronous Transmission.
- 3) What is Transmission media? Discuss guided and unguided Transmission Media.
- 4) Explain about Hub, Switches and Bridges.
- 5) Write short note on Digital Signature.
- 6) What are the causes and costs of Congestion? How Congestion is controlled in Transport Layer? Explain.
- 7) Discuss the relation between Transport Layer and Network Layer.
- 8) Explain the working of RPC (Remote Procedure Call) in details.
- 9) What is Data Communications Network? Explain its components.

Section - C**2 × 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) Distinguish between Link State Routing and Distance Vector Algorithm. Explain both the algorithms using the following Network Topology:



- 11) List the services of Data Link Layer. Explain Sliding Window Protocol with suitable example.
- 12) What is the importance of layered architecture? Explain OSI reference model in detail.
- 13) What is Multiplexing? Explain various types of Multiplexing in detail.