

MCA-19

December - Examination 2017

MCA IIIrd year Examination**Data Communication and Computer Networks****Paper - MCA-19****Time : 3 Hours]****[Max. Marks :- 80**

Note: The question paper is divided into three sections A, B and C. Write answers as per the 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 up to 30 words. Each question carries 2 marks.

- 1) (i) What do you understand by Network Topology?
- (ii) What is Analog transmission?
- (iii) What is Broadcasting?
- (iv) What is meaning of protocol?
- (v) What is DNS?
- (vi) What is meaning of SMTP?
- (vii) Write any two benefits of Computer Networking?
- (viii) What is UDP?

Section - B**4 × 8 = 32**

(Short Answer Questions)

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

- 2) Discuss the types of networks.
- 3) Discuss various Modes of Communication?
- 4) Discuss Virtual LANs.
- 5) Explain role of internet (TCP/IP) reference model.
- 6) Discuss multiplexing and various types of it.
- 7) Describe functioning of PPP stack.
- 8) Describe routing and its use in computer networking.
- 9) Explain working of Transmission Control Protocol?

Section - C**2 × 16 = 32**

(Long Answer Questions)

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

- 10) Explain mode of communication with their suitable examples.
- 11) Explain the working of various protocols used in network layer protocols and also show their frame formats.
- 12) Write a short note on :
 - (i) Various type of Ethernet.
 - (ii) Connection oriented and connection less services.
- 13) Explain various coding methods with suitable examples in digital transmission.