



Code: 14E05406

MBA IV Semester Supplementary Examinations May 2019

DATA COMMUNICATION & NETWORK ANALYSIS

(For students admitted in 2014 (LC), 2015 & 2016 only)

Time: 3 hours

Max. Marks: 60

All questions carry equal marks

SECTION – A

(Answer the following: 05 X 10 = 50 Marks)

- 1 Define multiplexing. Describe briefly about the frequency division multiplexing.
OR
- 2 Draw and explain the functionality of each layer in OSI reference model.
- 3 Describe the design issues of data link layer.
OR
- 4 Explain in detail about the unrestricted stop and wait protocol.
- 5 Describe the procedure for connection establishment in transport layer.
OR
- 6 Explain briefly about the addressing in transport layer.
- 7 Explain various data encryption methods available.
OR
- 8 What is digital signature? Discuss the need of digital signature in network security.
- 9 Explain various protocols used in application layer in detail.
OR
- 10 Give a brief note on ISDN services and networking devices.

SECTION – B

(Compulsory Question, 01 X 10 = 10 Marks)

- 11 **Case study:**
Which of the following CRC generators guarantee the detection of a single bit error?
Questions:
 - (a) $x^3 + x + 1$.
 - (b) 1.
 - (c) $x^2 + 1$.

