



Code: 14E05406

MBA IV Semester Regular & Supplementary Examinations May 2018

DATA COMMUNICATION & NETWORK ANALYSIS

(For students admitted in 2014, 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 Explain OSI protocol stack briefly.
- OR
- 2 Explain Time Division Multiplexing in detail.
- 3 Explain any two network layer protocols in detail.
- OR
- 4 Explain two popular approaches to packet switching.
- 5 Explain Classful addressing in detail.
- OR
- 6 Explain how flow control achieved in transport layer.
- 7 Explain File transfer protocol in detail.
- OR
- 8 Explain symmetric key cryptography in detail.
- 9 Explain how quality of service is provided by ISDN.
- OR
- 10 Explain any two protocols associated with application layer.

SECTION – B

(Compulsory Question)

01 X 10 = 10 Marks

11 **Case study:**

It is necessary to formulate the Hamming code for four data bits D3, D5, D6 and D7 together with three parity bits P1, P2 and P4.

Questions:

- (a) Evaluate the 7-bit composite code word for the data word 0110.
- (b) Evaluate the three check bits C1, C2 and C4 assuming no error.
- (c) Assume an error in bit D5 during storage into memory. Show how the error in the bit is detected and corrected.

