

Code: 9E05403d

MBA IV Semester Supplementary Examinations May 2018

DATA COMMUNICATION & NETWORK ANALYSIS

(For students admitted in 2013 as a last chance)

Time: 3 hours

Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks

- 1 (a) State the reasons for using layered protocols in network design.
(b) Explain OSI architecture in detail.
- 2 (a) Compare and contrast circuit switching and packet switching networks.
(b) Explain various types of transmission media, highlighting their merits and demerits.
- 3 (a) Explain any five responsibilities of data link layer in internet model.
(b) Explain stop and wait protocol using suitable diagram.
- 4 Explain any two network layer protocols in detail.
- 5 Explain transmission control protocol in detail.
- 6 (a) Differentiate symmetric and public key cryptography.
(b) Explain symmetric-key cryptography in detail.
- 7 (a) Explain domain name space in detail.
(b) Explain name-address resolution in detail.
- 8 Explain ISDN services in detail.

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

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SECTION – A

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

- 1 Explain OSI protocol stack briefly.
OR
- 2 Explain Time Division Multiplexing in detail.
OR
- 3 Explain any two network layer protocols in detail.
OR
- 4 Explain two popular approaches to packet switching.
OR
- 5 Explain Classful addressing in detail.
OR
- 6 Explain how flow control achieved in transport layer.
OR
- 7 Explain File transfer protocol in detail.
OR
- 8 Explain symmetric key cryptography in detail.
OR
- 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.
