Code: 9F00302

MCA III Semester Regular & Supplementary Examinations November/December 2017
COMPUTER NETWORKS
(For 2012, 2013, 2014, 2015 & 2016 admitted batches only)

Time: 3 hours   Max. Marks: 60

Answer any FIVE questions
All questions carry equal marks
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1   Explain the ISO-OSI reference model with a neat schematic.

2   (a) Explain sliding window protocol in data link layer.
    (b) Explain how a slow receiver is protected from a fast sender in data link layer.

3   (a) Explain the functioning of pure ALOHA.
    (b) Prove that the probability of successful packet delivery in pure ALOHA is 18%.

4   (a) Explain link state routing protocol in detail.
    (b) Explain congestion prevention policies in network layer.

5   Explain the network layer functionalities in ATM networks.

6   (a) Explain connection establishment and release in TCP connections.
    (b) Explain TCP header format and the functionalities of each field.

7   (a) Explain the DES algorithm with a neat schematic.
    (b) How the integrity of a message ensured? What are the procedures incorporated?

8   (a) What are the functionalities of application layer?
    (b) Explain domain hierarchy in detail.

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