Code: 9F00302

MCA III Semester Supplementary Examinations July 2015

COMPUTER NETWORKS

(For students admitted in 2009, 2010, 2011, 2012 and 2013 only)

Time: 3 hours   Max Marks: 60

Answer any FIVE questions

All questions carry equal marks
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1 (a) Distinguish between TCP/IP model and OSI model.
   (b) Explain B-ISDN ATM reference model.

2 (a) Discuss framing techniques in brief.
   (b) What do you mean by sliding window protocol? Distinguish between Go-back-N protocol and selective repeat protocol.

3 (a) What is ALOHA? Calculate throughput of pure ALOHA and slotted ALOHA.
   (b) Draw Ethernet frame format and explain each field.

4 (a) Explain shortest path routing.
   (b) What do you mean by congestion? State general principles of congestion control.

5 (a) Distinguish between transparent and non-transparent fragmentation.
   (b) What is multicasting? Briefly discuss multicasting techniques and protocols.

6 (a) What are the functions of transport layer? State transport service primitives.
   (b) Discuss TCP transmission policy.

7 (a) Describe RSA algorithm with a suitable example.
   (b) What is digital signature? Explain digital signature using message digests.

8   Write short notes on the following:
   (a) MIME.
   (b) HTTP.
   (c) SNMP.

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