

Code :9F00302

MCA III Semester Regular Examinations, January 2011
COMPUTER NETWORKS
(For students admitted in 2009-2010 only)

Time: 3 hours

Max Marks: 60

Answer any FIVE questions
All questions carry equal marks

1. (a) List two ways in which the ISO reference model and the TCP/IP reference model are the same. Now list two ways in which they differ.
(b) Differentiate between the following:
 - i. Category 3 twisted pairs & category 5 twisted pairs.
 - ii. Single mode fiber and multi mode fiber.
2. Mention and discuss the functioning of data link layer protocols in detail.
3. (a) Compare and contrast transparent and source routing bridges.
(b) Explain in detail binary count down collision free protocol.
4. (a) Explain hierarchical routing with suitable example.
(b) Discuss various congestion prevention policies.
5. (a) Describe the basic principles employed in Border Gateway protocol.
(b) What are the IPv4 address classes and list the limitations of IPv4.
6. (a) Explain briefly the steps involved in TCP connection establishment.
(b) Explain the important Berkeley socket system calls used in Network Programming.
7. (a) Explain KERBEROS authentication protocol.
(b) What is a firewall ? What are its limitations.
8. (a) Explain name resolution in DNS.
(b) Give a brief account on SNMP.
