Code No: R6-32-MCA

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
MCA-III Semester Regular Examinations, February 2010
COMPUTER COMMUNICATIONS

Time: 3hours   Max.Marks:60

Answer any Five questions
All questions carry equal marks
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1.   What is the use of a reference model? Compare and contrast the reference models OSI and TCP/IP.

2.a)   Write about the different Guided Transmission media elevating the prominence of the media.
  b)   Describe the sliding window protocols.

3.a)   Explain how the problem of multiple access channel can be solved using CSMA/CD protocol?
  b)   Discuss how data link switching using bridges is possible in the data link layer between multiple LANS.

4.a)   Explain the various design issues related to the network layer.
  b)   Write in short about the various congesting control algorithms.

5.a)   Discuss the essential elements of transport protocols.
  b)   What is UDP? Explain atleast two applications of UDP.

6.a)   Describe the mechanism of an electronic mail.
  b)   Explain the importance of multimedia and bring out the relevance of multimedia for a computer network with an example.

7.a)   What is cryptography? Differentiate between symmetric key and asymmetric key cryptography.
  b)   Enumerate the advantages of digital signatures.

8.a)   Explain how pretty Good Privacy (PGP) provides e-mail security.
  b)   Discuss the various social issues related to internet and security technology.

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