

Code: CS6T1, EM6T3

III B.Tech - II Semester – Regular Examinations - May 2015

COMPUTER NETWORKS
(Common for CSE, ECM)

Duration: 3 hours

Marks: 5x14=70

Answer any FIVE questions. All questions carry equal marks

- 1 a) What is the difference between a protocol and a service interface? Explain in terms of ISO reference model. 7 M
- b) Discuss about the concepts of circuit switched network and packet switched network. 7 M
- 2 a) Explain standard application layer protocols in detail. 7 M
- b) Write short notes on the following: 7 M
 - i) Http proxy servers
 - ii) Remote logging
- 3 a) Compare and contrast the two TCP/IP transport protocols: TCP and UDP, in terms of demultiplexing, reliability, and flow control. How does TCP identify a connection? Is the information for this identification is readily available to the TCP software in the received TCP segment? Explain with the help of diagram to show the connection established in TCP. 10 M

- b) Write short notes on three way handshaking. 4 M
- 4 a) Write short notes on the following: 9 M
- i) Congestion control
 - ii) IPv6
- b) What are the differences between unicast and multicast routing protocols? 5 M
- 5 a) Give review of Fletcher's checksum algorithm. What are the weaknesses of simple checksums. 7 M
- b) Discuss about synchronous data link layer protocol developed by the International Organization for Standardization (ISO). 7 M
- 6 a) Differentiate between Digital & Analog transmission. 8 M
- b) What are the different Wired Transmission Media. 6 M
- 7 a) Discuss about security concept associated with application layer, transport layer and network layer. 9 M
- b) What are the differences between lossy and lossless compression? 5 M

8 a) Discuss about ports and addresses in socket programming.

4 M

b) Discuss in detail about steps involved in using sockets with TCP programming.

10 M