Code: 9A05506

R09

B.Tech III Year I Semester (R09) Regular & Supplementary Examinations December 2014

COMPUTER NETWORKS

(Common to IT and CSE)

Time: 3 hours Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

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1 (a) Explain about metropolitan area network (MANs).
(b) Briefly explain the two technologies used in the time-division switches.

2 (a) Explain one-bit sliding window protocol. Give advantages and disadvantages of it.
(b) Given 1101011011 data frame and generator polynomial $G(x) = x^4 + x + 1$, derive the transmitter frame.

3 (a) Explain about IEEE 802.5 standard.
(b) Write short notes on wireless LANs.

4 (a) With an example explain hierarchical routing algorithm.
(b) Briefly discuss about congestion control in virtual circuit subnets.

5 (a) Give the structure of concatenated virtual circuits for internetworking.
(b) Discuss in detail about the internetwork routing.

6 (a) Draw and explain the pseudo header of the TCP checksum.
(b) Explain the byte segments of TCP connection.

7 (a) Define caching. Explain its role in getting the information through web.
(b) List and explain the various message headers used in HTTP protocol.

8 (a) What are the disadvantages of cipher feedback mode? How they can overcome by using the stream cipher?
(b) Explain the technique used in the public key cryptographic algorithms.

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