Code: 9A05506

**R09** 

## B.Tech IV Year I Semester (R09) Supplementary Examinations June 2016

## **COMPUTER NETWORKS**

(Common to ECE & EIE)

Time: 3 hours Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

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- 1 (a) Discuss ISO/OSI reference model in detail.
  - (b) Briefly explain the components of a fiber optic cable with a neat sketch.
- 2 (a) Given data frame 1101011101 and generator polynomial is 110. Derive the transmitted frame.
  - (b) How to generate the hamming code to correct the burst error for any ASCII code using check bits.
- 3 (a) Briefly explain how the data link layer switching is done.
  - (b) With a neat sketch, explain the operation of simple two port bridge.
- 4 (a) Explain distance vector routing algorithm with example.
  - (b) Compare adaptive and non-adaptive routing algorithms.
- 5 (a) Explain the role of NAT in the IP Addressing.
  - (b) Describe in detail about the Internet Control message Protocol.
- 6 (a) Draw and explain the position of RTP in the protocol stack.
  - (b) Give brief description about the UDP protocol.
- 7 (a) What is MOSPF? Explain its role in multicast back bone.
  - (b) Explain some of the applications of multimedia.
- 8 (a) Give brief description about the Advanced Encryption Standard.
  - (b) How can we convert the message to cipher by using the counter encryption mode?

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