

Code No. B6101

JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY, HYDERABAD
M .Tech. II Semester Supplementary Examinations, March – 2009
COMMUNICATION NETWORKS
(Communications Systems)

Time: 3 hours

Max. Marks.60

Answer any Five questions
All questions carry equal marks

- 1.a) Discuss the performance of Circuit Switched Networks.
b) Explain the frame format and layers of SONET.
- 2.a) Describe IEEE 802.5 (Token Ring) standard.
b) Compare X.25 and frame relay standards.
- 3.a) Explain digital transmission hierarchies.
b) Compare stop and wait and sliding window ARQ schemes.
- 4.a) What are the design issues of data link layer.
b) Verify the correctness of the message.
101011000110 arrives using the polynomial $x^6 + x^4 + x + 1$.
- 5.a) Explain carrier sense multiple access protocols and compare its performance.
b) What are quality of service objectives? Explain.
- 6.a) What is congestion? What are its causes? Explain open loop congestion control mechanisms.
b) Distinguish between flow control and congestion control.
- 7.a) What is the importance of routing algorithms. Distinguish between adaptive and non-adaptive routing algorithms.
b) Describe RIP routing protocol.
8. Discuss various Network Topologies with their merits and demerits.
