

COMPUTER NETWORKS COMPREHENSIVE EXAMINATION

- 1.A. How does FDDI ring repair itself?
- B. A 10 Mbps token ring has a token holding time of 10 msec. What is the longest frame that can be sent on this ring?
- C. Explain the binary exponential back off algorithm for Ethernet (IEEE 802.3).

- 2.A. Why are the advantages and costs of the sliding window protocol over the stop-and-wait protocol for a data link layer?
- B Why would one use (for what kind of applications) a low orbiting satellite instead of a geosynchronous satellite?
- C. Briefly, explain packet switching.

- 3.A. What are CDMA, PCS, ISDN, CRC and LLC?
- B. Explain the operation of NT1 in ISDN.
- C. Using HDLC, transmit two frames from B (with starting sequence number of 2) to A and two frames from A (with starting sequence number of 4) to B. Assume there is no more data to be transferred. Complete the required message sequences and show all of the required details.