## 2005-PUNJAB UNIVERSITY B.TECH DEGREE EXAMINATION COMPUTER NETWORK (ELECTRONICS AND COMMUNICATION ENGINEERING)

TIME-3HOUR MARKS-100

## PART A[10\*2=20 MARKS]

- 1(a) Discuss the digital and analog types of communication.
- (b) Differentiate between Synchronous and Asynchronous types of Communications.
- (c) Discuss the mechanism of microwave transmission.
- (d) List the features of Coaxial Cables.
- (e) Discuss the concept of messange Switching.
- (f) What are the merits of Ring Topology ?
- (g) What are the different types of services provided by data link Layer to network layer?
- (h) Discuss the significance of IEEE standards.
- (i) What is meant by TDM technique?
- (j) Discuss the role of IP protocol.

## PART B[10\*8=80 MARKS]

- 2. Discuss the characteristics of different types of communication channels available for transmission.
- 3. Discuss the working of CSMA/CD protocol in detail.
- 4. Describe the procedure of framing and error control by Data Link Layer.
- 5. Explain the working of Network and transport layer of OSI reference model.
- 6. Discuss the term internet working. What are the different components to create an internet?
- 7. Compare the working of different layers of OSI model with TCP/IP reference model.
- 8. Describe the message formats, message headers and e-mail gateways associated with e-mail transmission.
- 9. Comapre the different network topologies in detail.