

Punjab Technical University
Master of Computer Application Examination

MCA 3rd Semester DATA COMMUNICATION AND COMPUTER NETWORK 2006

Time: Three Hours Max Marks:75

Note: Part A consists of Fifteen (15) questions and is compulsory. Attempt any nine (9) questions from part B.

PART - A

1. How is WDM similar to FDM? How are they different?
2. Describe the difference between an analog switched service and analog leases service?
3. Define the two types of TDM?
4. Define the three types of digital services available to telephone customers?
5. How is VRC related to LRC?
6. What do you understand by network hardware and network software?
7. Describe the different design issues in data link layer?
8. What do you understand by term routing?
9. Describe about the packet switching?
10. How does a modem work?
11. Define the term congestion?
12. Describe about flooding?
13. What do you understand by flow control?
14. What are the elements of transport protocol?
15. List the steps involved in creating checksum?

Part - B

1. Describe the difference between TCP/IP and OSI reference model?
2. Describe the difference between a protocol using Go Back N and a selective repeat?
3. What do you understand by HDLC?
4. Describe about leaky bucket algorithm?
5. Explain about simplex stop and wait protocol?
6. Explain about circuit switching with example?
7. What do you understand by TCP connection management?
8. Explain about the different error detection method?
9. Describe the difference between analog and digital?
10. Calculate the redundancy bit by hamming code 1001101?
11. Explain the difference between synchronous and asynchronous transmission?
12. What do you under by IP address?