Total No. of Questions : 10] [Total No. of Printed Pages : 2

Roll No. .C.S.2.1.S.0.8.1.0.4.6

CS–604(N)

B. E. (Sixth Semester) EXAMINATION, June, 2011

(Computer Science & Engg. Branch)

COMPUTER NETWORKING

[CS–604(N)]

Time : Three Hours

Maximum Marks : 100

Minimum Pass Marks : 35

Note : Attempt *one* question from each Unit. All questions carry equal marks.

Unit–I

1. (a) Write difference between OSI and TCP/IP model. 10

   (b) Define three layers of X-25. 10

Or

2. (a) Write a short note on TCP & UDP. 10

   (b) Compare ATM and Frame relay. 10

Unit–II

3. (a) Given an error free 64 kbps satellite channel which is used to send 512 byte data frames in one direction with very short acknowledgements coming back the other way. What will be the maximum throughput for window size of 1, 7, 15 and 127 ? 15

   (b) State various design issues for Data link layer. 5

P. T. O.

Or

4. (a) What is meant by bit stuffing ? Explain. 10

(b) Draw and explain about the frame structure and various frame types in HDLC. 10

Unit – III

5. (a) What is need of minimum frame size ? If it is 64 byte, then calculate loss of bandwidth for 100 mbps Ethernet network ? 14

(b) Define FDDI. 6

Or

6. (a) How can you compare I-persistent CSMA and P-persistent CSMA ? 10

(b) Explain the MAC frame format. 10

Unit – IV

7. (a) How many host per network in each IP address class can exist ? Show with example. 8

(b) Define the types of Routing algorithms. 12

Or

8. (a) How can you compare IPv 4 and IPv 6 ? 10

(b) What are unicast routing protocols ? 10

Unit – V

9. (a) How would you define congestion control and Q. S. ? 10

(b) What is the difference betwen IP addresses and port number ? 10

Or

10. Write short notes on the following : 5 each

(i) Virtual Terminal protocol

(ii) H·323 layering

(iii) SMTP (iv) DNS