Paper Code –TCS502   12   No. of Printed page:2

Paper ID and Roll No. to be filled in your Answer book
Roll. No.

B. Tech.
(SEM. VI) DEC- 2014
Computer Network

[Time: 3Hours]   Total Marks: 100

Note: Attempt all question

Q:-1   Attempt any 4 questions   5X4=20
(a) What are the responsibilities of session layer?
(b) What is the difference between service point address, logical address and physical address?
(c) How do the layers of TCP/IP protocol suite correlate to the layers of OSI?
(d) Discuss LRC and the type of errors it can and can't detect.
(e) What is the difference between point to point and multipoint line configuration.
(f) Explain the term networking and internetworking. Write application of Computer network.

Q:-2   Attempt any 4 questions   5X4=20
(a) Explain in detail the TCP/IP reference model.
(b) What do you mean by the term "Quality of Service (QoS)".
(c) What are the various design issues for the layers?

(d) What is the remainder obtained by dividing X^7+X^5+1 by the generator polynomial X^3+1?

(e) Sketch the Manchester encoding for the bits stream

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Q:-3 Attempt any 2 questions   10X2=20

(a)Give two examples application for which connection oriented service is appropriate and connectionless service is best.

(b) An ATM network uses a token bucket scheme for traffic shaping, a new token is put in to the bucket every 5μsec. what is the maximum sustainable netdata rate(i.e excluding header bit).

(c) A large FDDI ring has 100 stations & a token rotation time of 40 msec. the token holding time is 10 msec. What is the maximum achieveable efficiency of the ring?

Q:-4 Attempt any 2 questions   10X2=20
(a)What do you mean by traffic shaping. Explain only one of the technique by which traffic can be shaped.

(b)Explain Open loop congestion control and closed loop congestion control in detail.

(c)What is the difference between non persistent CSMA/CD & p persistent CSMA/CD.

Q:-5. Attempt any 2 questions   10X2=20

(a)Explain IPV6 with suitable diagram. Is that possible to transmit data from IPV6 to IPV4? Justify your answer.

(b)Consider building a CSMA/CD network running at 1 gbps over a 1 km cable with no repeaters. The signal speed in the cable is 200,000 km/sec. what is the minimum frame size.
(c)Write short notes on the following:
1. Frame Realy
2. ISDN
3. Slotted ALOHA

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