Register Number: ……………………..

B.TECH., DEGREE EXAMINATIONS: NOV/DEC 2012

Seventh Semester

INFORMATION TECHNOLOGY

ITY115**:** High Speed Networks

Time: Three Hours   **Maximum Marks: 100**

Answer all the Questions:-

PART A (10 x 1 = 10 Marks)

1. The applications that require a fixed data rate that is available continuously throughout the life time is called as _____ service.

    a) VBR   b) CBR

    c) ABR   d) UBR

2. Ethernet uses _____ technique for carrier sensing.

    a) CD   b) CSMA

    c) CSMA\CD   d) CSMA\CA

3. Assuring that all flows are treated equally is called as _____.

    a) QoS   b) Reservation

    c) Fairness   d) Marking

4. The notation used for queuing model is_____.

    a) Quintal notation   b) Lamda notation

    c) Amdhal's notation   d) Kendall's notation

5. GCRA algorithm is a form of _____.

    a) Traffic shaping   b) Scheduling

    c) Congestion control   d) Traffic policing

6. Traffic that adjusts to change in delay is called as _____.

    a) Elastic   b) Inelastic

    c) CDVT   d) Best-effort

7. _____ is the service where no capacity is guaranteed.

    a) CBR   b) VBR

    c) GFR   d) UBR

8. Shorter packets are favored in _____.

    a) Processor Sharing   b) Fair queuing

    c) FIFO queuing   d) BRFQ

9. _____ is the reservation style that specifies distinct reservation for each sender.

   a) Share- Explicit   b) Wild card filter

   c) Fixed-Filter   d) FIFO

10. Which of the following is not a function of RTCP?

   a) QOS & congestion control   b) Session size estimation & scaling

   c) Routing   d) Session control

PART B (10 x 2 = 20 Marks)

11. Define jitter.
12. Differentiate VCC and VPC.
13. What does M/M/1 denote?
14. State the littlle's formula.
15. Differentiate implicit and explicit congestion control.
16. What is the significance of traffic descriptors?
17. State few performance parameters.
18. Name the categories of ISA services.
19. What are the two main messages used by RSVP protocol?
20. State the functions of RTCP protocol.

PART C (5 x 14 = 70 Marks)

21. a) (i) Discuss about logical connections in ATM and explain how call establishment (7) takes place in ATM?

     (ii) Explain the salient features of Fiber channel. (7)

(OR)

   b) (i) Explain ATM service category. (7)

     (ii) Explain the ATM architecture. (7)

22. a) (i) Explain the single server queuing model. (7)

     (ii) Explain M/M/1 queuing model . (7)

(OR)

   b) (i) Explain the congestion control in packet switched network. (7)

     (ii) Describe the format of RM cell. (7)

23. a) (i) Compare the performance of TCP over UBR. (7)

     (ii) Write short notes on ABR traffic attributes. (7)

(OR)

b) (i) Explain the concept of Peak cell rate algorithm. (7)

(ii) Explain Sustainable cell rate algorithm. (7)

24. a) Explain the principle of operation of each of the queuing disciplines.

(OR)

b) (i) Explain the integrated service architecture (ISA). (7)

(ii) Describe how random early detection (RED) provides congestion control and compare its performance with drop tail policy. (7)

25. a) Explain the operation and reservation styles of RSVP protocol along with its advantages.

(OR)

b) (i) Explain the MPLS protocol and its operation (7)

(ii) Explain the RTP protocol architecture with the help of a neat diagram (7)

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