Register Number.....

M.E. DEGREE EXAMINATIONS: OCTOBER/NOVEMBER -2008

Third Semester

COMPUTER SCIENCE & ENGINEERING

P07CSE21: High Speed Networks

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

Answer ALL Questions:-

PART A (20 x 1=20 Marks)

1. FDDI uses a group encoding scheme called
   a.4B/5B-NRZI Encoding b.Manchester Encoding
   c.RZ Encoding d.CMI Encoding

2. ATM Cells are always---------long
   a.42 bytes b.48 bytes c.53 bytes d.53 bytes

3. Frame relay uses
   a.Permanent Connections b.Dedicated connections
   c.Virtual links d.Circuit switching

4. Binary synchronous communication protocol uses --------mode for data transmission
   a.Simplex b.Half Duplex c.Full Duplex d.Half Simplex

5. The real solution to the congestion problem is
   a.increase the data rate b.decrease the data rate
   c.no change in the data rate d.double the data rate

6. UDP mainly differ from TCP by its ----------
   a.UDP Header b.Connection c.distance of traversal d. handling congestion

7. SEAL stands for
   a.Single Efficient ATM layer b.Simple Efficient Adaptation Layer
   c.Switched Efficient ATM layer d.Simple Enhanced ATM Layer

8. AAL5 offers which of the following service
   a.Unicast b.multicast c.broadcast d.reliable and un reliable

9. What is best suited for controlling congestion in multicast
   a.Jitter control b.RSVP c.RTP d.HTTP

10. Routing algorithm used to find out
    a.shortest path b.near by node c.best path to destination d. next hop

11. Which of the following is resource that should be reserved for data flow
    a.band width b.memory c.CPU d.channel

12. What do you mean by smoothing the traffic on the server side
    a.tunneling b. traffic shaping c.traffic policing d.traffic management

13. BRFQ stands for
    a.Byte Round Fair Queuing b.Bit Round Fair Queuing
    c.Bytes Round Fair Queuing d.Bits Round Fair Queuing

14. Which of the following is not a QOS
    a.buffering b.traffic shaping c. resource reservation d. data transfer

15. What do you mean by ABR
a.Allocated Bit Rate b.Available Bit Rate
c.Allocated Byte Rate d.Available Byte Rate

16. What is the other name for MPLS
a.tag switching b.protocol switching c.packet switching d.circuit switching

17. Byte stuffing is which layer functionality
a.Physical b.Datalink c.Network d.Transport

18. AAL layer is split into how many sub layer
a.two b. three c.four d.one

19. IEEE standard for Wireless LAN is
a.802.3 b.802.5 c.802.7 d.802.11

20. Which unit is responsible in wireless ad-hoc network
a.center node b.access path c.access point d.access mechanism

PART B (5 x16 = 80 Marks)

21 a (i) Explain the functionalities of ATM adaptation layer (8)
(ii) Explain two problems associated with WLAN (8)

OR

b (i) Explain the ATM protocol architecture in detail (8)
(ii) Briefly write about the details of gigabit Ethernet (8)

22 a) What are the various performance factors in Queuing analysis? Explain with single server queuing model (16)

OR

b) Discuss the congestion control mechanism present in packet switched network (16)

23 a (i) Draw and explain the structure of TCP protocol suite (8)
(ii) Compare the performance of TCP over ATM (8)

OR

b) Explain in detail about various attributes associated with ATM congestion control (16)

24 a) How the processes will be scheduled under Weighted Fair queuing (WFQ) technique? Explain with example (16)

OR

b) What do you mean by random early detection? Explain with an example (16)

25 a (i) What is the use of RSVP protocol? Explain its salient features. (8)
(ii) Briefly explain the various operations involved in multi protocol label switching network (8)

OR

b) Write short notes on following (16)
Real Time Protocol (RTP) and Real Time Control Protocol (RTCP)

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