Reg. No. : | | | | | | | | | | |

Question Paper Code: 49408

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2019

Elective

Electronics and Communication Engineering

14UEC908 - HIGH SPEED NETWORKS

(Regulation 2014)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions

PART A - (10 x 1 = 10 Marks)

1. _____is a virtual-circuit wide-area network that was designed in response to demands for a new type of WAN in the late 1980s and early 1990s.

   (a) X.25 (b) Frame Relay (c) ATM (d) None of the above

2. Which is not the service of IEEE 802.11?

   (a) Association (b) Reassociation (c) Disassociation (d) None of these

3. _____ process counts the number of arrivals, each of which has a exponentially distributed time between arrival.

   (a) Kendalls notation (b) Markov arrival
   (c) Poisson (d) Little's law

4. _____ can be applied in a logical connection used for connection oriented network to reduce traffic.

   (a) Back pressure (b) Policing
   (c) Chock packet (d) Implicit congestion signaling

5. In Congestion, traffic descriptors are qualitative values that represent a

   (a) Data Protocol (b) Data Flow (c) Data Congestion (d) Data Traffic

6. In ABR mechanism, _____ has feedback to the source concerning congestion.

(a) Closed loop control (b) Open loop control
(c) Both (a) and (b) (d) None of these

7. In Integrated Services, when a source makes a reservation, it needs to define a

(a) Flow Control (b) Flow STCP
(c) Flow Solution (d) Flow Specification

8. A router that supports DS policies is called as

(a) DS node (b) DS interior node
(c) DS boundary node (d) DS external node

9. _____ specifies a distinct reservation for each sender and provides an explicit list of senders.

(a) Wild-card-filter style (b) Fixed-filter style
(c) Shared-explicit style (d) Shared-implicit style

10. The parameters of QoS are

(a) Jitter, bandwidth (b) Delay
(c) Both (a) and (b) (d) None of the above

PART - B (5 x 2 = 10 Marks)

11. Differentiate frame relay from X.25 packet switching services..
12. What are the single server queues.
13. Define sustainable cell rate. What is the use of SCR?
14. List the design goals of RED.
15. What are the functions performed by RTCP?

PART - C (5 x 16 = 80 Marks)

16. (a) Explain ATM protocol architecture with neat diagram (16)

Or

(b) Explain about the IEEE 802.11 architecture in detail. (16)

17. (a) Illustrate and explain the Four regions of Single Server Queuing model with neat sketches. (16)

Or

(b) (i) Describe the effects of congestion. Explain the various congestion control techniques. (8)

(ii) Explain the various frame relay congestion control techniques. (8)

18. (a) Explain TCP congestion control in detail.. (16)

Or

(b) Explain ABR Traffic management in detail (16)

19. (a) (i) List out the components of ISA? Explain. (8)

(ii) Illustrate with example and explain Fair Queuing (FQ) and Bit Round Fair Queuing (BRFQ). (8)

Or

(b) Explain differentiated services in detail. (16)

20. (a) Write notes on (16)

(i) RTP

(ii) RTCP.

Or

(b) Explain the Resource Reservation Protocol (RSVP) operation by giving its goals and characteristics. (16)

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