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

Question Paper Code: 49408

B.E. / B.Tech. DEGREE EXAMINATION, APRIL 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. What is the number of separate protocol layers at the serial interface gateway specified

   (a) 4 (b) 2

   (c) 6 (d) 3

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. Which is the retransmission strategy in the implementation of TCP?

   (a) First-only (b) Batch (c) Individual (d) All the above

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. _____ is the process of setting the DS code point in a packet.

(a) Behaviour Aggregate (b) Classifier
(c) Marking (d) Dropping

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. _____ 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

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. Define RSVP.

PART - C (5 x 16 = 80 Marks)

16. (a) Illustrate why CSMA/CD is not suitable for wireless LANs. (16)

Or

(b) Explain ATM protocol architecture with a neat block diagram (16)

17. (a) (i) Give the fundamental task of queuing analysis? What are the different ways of developing a queuing model? Explain how analysis is done for various models. (8)

(ii) Explain about single server queue. (8)

Or

(b)(i) Explain the four regions of single server queue with neat sketches (8)

(ii) Explain the single server queuing model and its applications. (8)

18. (a) Explain the retransmission timer management techniques used in TCP and also explain the window management techniques used in TCP for congestion control. (16)

Or

(b) Describe about GFR traffic management. (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) Show how random early detection is used to control congestion in networks. (16)

20. (a) Discuss about protocols used for QOS support with neat diagram. (16)

Or

(b) Explain in detail about RTCP architecture and RIP protocol details (16)

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