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

Question Paper Code: 41483

B.E. / B.Tech. DEGREE EXAMINATION, MAY 2017

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. In ATM, the information flow on each logical connection is organized into fixed size packets called

   (a) Frames (b) Cells (c) Packets (d) Planes

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. Which is not the function of RTCP?

(a) QoS and Congestion control (b) Identification
(c) Session control (d) All the above

PART - B (5 x 2 = 10 Marks)

11. Differentiate frame relay from X.25 packet switching services..

12. Define BECN.

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) Describe in detail about the ATM adaptation layers. (16)

Or

(b) Explain about the IEEE 802.11 architecture in detail. (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) 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 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) Describe in detail about MPLS and its operation. (16)

Or

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

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