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Question Paper Code: 49043

B.E. / B.Tech. DEGREE EXAMINATION, NOV 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. What is the number of separate protocol layers at the serial interface gateway specified
(a) 4 (b) 2
(c) 6 (d) 3
2. In ATM, the information flow on each logical connection is organized into fixed size packets called
(a) Frames (b) Cells (c) Packets (d) Planes
3. _____ 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
4. A network queues is analytical using
(a) Bayes theorem (b) Jacksons theorem
(c) Nyquist theorem (d) Queuing theorem

5. 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
6. In Congestion, traffic descriptors are qualitative values that represent a
- (a) Data Protocol (b) Data Flow
(c) Data Congestion (d) Data Traffic
7. A router that supports DS policies is called as
- (a) DS node (b) DS interior node
(c) DS boundary node (d) DS external node
8. 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
9. Which is not the function of RTCP?
- (a) QoS and Congestion control (b) Identification
(c) Session control (d) All the above
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 algorithm.
15. Define RSVP.

PART - C (5 x 16 = 80 Marks)

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

Or

(b) Discuss in detail about 802.11 architecture. (16)

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

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

Or

(b) Write notes on congestion control used in

(i) Packet Switching Networks. (8)

(ii) Frame Relay Networks. (8)

18. (a) Describe about GFR traffic management. (16)

Or

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

19. (a) Show how random early detection is used to control congestion in networks. (16)

Or

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

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

Or

(b) Give a detailed account of MPLS and its operations. (16)

