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Reg. No. :

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Question Paper Code: 59407

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

Elective

Electronics and Communication Engineering

15UEC907– HIGH SPEED NETWORKS

(Regulation 2015)

Duration: Three hours

Maximum: 100 Marks

Answer ALL Questions

PART A - (5 x 1 = 5 Marks)

1. Logical connections in ATM are referred to as CO1- R
 - (a) Virtual connectivity channel
 - (b) Visual channel connections
 - (c) Virtual cable connections
 - (d) Virtual channel connections
2. Arrival process and the service process is defined by Markov process CO2- R
and it has a
 - (a) Normal probability density function
 - (b) Exponential probability density function
 - (c) Logarithmic probability density function
 - (d) Decibel probability density function
3. TCP flow control CO3- R
 - (a) Uses a form of sliding window
 - (b) Uses a form of backward window
 - (c) Uses a form of forward window
 - (d) Uses a form of random window
4. GPS means in the subject of High speed networks CO4- R
 - (a) Global positioning system
 - (b) Generalized processor sharing
 - (c) Generalized probability sharing
 - (d) Global processor sharing

5. RSVP CO5- R
- (a) is network layer protocol that enables to provide a differentiated levels of service
- (b) is a presentation layer protocol that enables to provide a differentiated levels of service
- (c) is a physical layer protocol that enables to provide a differentiated levels of service
- (d) is a transport layer protocol that enables to provide a differentiated levels of service

PART – B (5 x 3= 15 Marks)

6. Discuss about ATM Protocol Architecture CO1- U
7. Summarize the reasons for network congestion CO2- U
8. Explain the TCP flow control functions CO3- U
9. Describe the three categories of ISA services CO4- U
10. Discuss RTCP packet types CO5- U

PART – C (5 x 16= 80 Marks)

11. (a) (i) Explain the Frame relay protocol stack with a X.25. Also brief on LAPF. CO1- U (8)
- (ii) Explain the ATM cell header format. CO1- U (8)
- Or
- (b) (i) Describe what is wireless LANS. Give its main applications. CO1- U (8)
- (ii) Discuss the most important requirements for wireless LANs. CO1- U (8)
12. (a) Summarize the various queue parameters in a network? Also explain multi server queue system CO2- U (16)
- Or
- (b) Discuss the objectives and techniques for frame relay congestion control. Also describe traffic rate management in a frame relaying network. CO2 -U (16)
13. (a) (i) Explain the features of KARN s Algorithm. what are the rules used? CO3- U (8)
- (ii) Explain the ATM traffic control functions. CO3- U (8)

Or

- (b) (i) Explain slow start technique in TCP window management. Also mention the limitations of it. CO3- U (8)
- (ii) Discuss about TCP over UBR. CO3- U (8)
14. (a) (i) Summarize the various components of ISA architecture .Explain the functions of each. CO4- U (8)
- (ii) What do you mean Random early detection (RED).Also brief on RED design goals. CO4- U (8)
- Or
- (b) (i) Compare and contrast FIFO and weighted Fair queuing . CO4- U (8)
- (ii) Explain the various Differentiated services traffic conditioner. CO4- U (8)
15. (a) What is RSVP? what are its characteristics ? Also explain its protocol mechanism. CO5- U (16)
- Or
- (b) Explain the MPLS features and operation? Also mention the importance of Label stacking CO5- U (16)

