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

Question Paper Code : 73365

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

Seventh/Eighth Semester

Electronics and Communication Engineering

CS 2060/CS 807/EC 1009/10144 ECE 33/10144 CSE 62 — HIGH SPEED NETWORKS

(Common to Computer Science and Engineering)

(Regulations 2008/2010)

(Also common to PTCS 2060 – High Speed Networks for B.E. (Part-Time) Seventh Semester – Electronics and Communication Engineering, CSE – Regulations 2009)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define the characteristics of high speed LAN.

2. Write about ATM service categories.

3. What is meant by Kendall's notation?

4. Mention the congestion control techniques used in packet switching networks.

5. State the mechanisms for supporting rate guarantees in GFR traffic.

6. What is meant by exponential RTO backoff?

7. What is the concept of queuing discipline?

8. What is BRFQ?

9. What is multiprotocol label switching?

10. Define QoS and give any of its two parameters.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Explain the operation to AAL 1 and AAL 3/4 with an example. (8)

(ii) Explain the working of an ATM error control algorithm. (8)

Or

(b) (i) Illustrate why CSMA/CD is not suitable for wireless LANs. (8)

(ii) Draw the 802.11 protocol stack and discuss the functions of PCF and DCF. (8)

12. (a) (i) Describe traffic management in the networks. (8)

(ii) Briefly explain the effects of congestion control. (8)

Or

(b) (i) Explain about the congestion control in Frame relay. (8)

(ii) Describe the essential of queuing models in network. (8)

13. (a) (i) Explain in detail about KARN's algorithm and window management. (10)

(ii) Explain about network management in detail with neat sketch. (6)

Or

(b) (i) Explain in detail about clock instability and jitter measurements. (10)

(ii) Explain about traffic management framework in detail. (6)

14. (a) (i) Briefly discuss the various queuing disciplines of integrated services. (10)

(ii) Discuss the advantages and downsides of Integrated Services architecture. (6)

Or

(b) (i) Explain Differentiated Services Architecture in detail. (10)

(ii) Explain the benefits of Random Early Detection algorithm. (6)

15. (a) (i) Explain the reservation styles of the RSVP in detail. (8)

(ii) Explain the features of MPLS. (8)

Or

(b) (i) Explain the RTP protocol architecture in detail. (8)

(ii) Explain the functions and message types of the RTP control protocol. (8)
