

APJ ABDULKALAM TECHNOLOGICAL UNIVERSITY
08 PALAKKAD CLUSTER

Q. P. Code : CES0819252C-I

(Pages: 2)

Name

Reg. No:

SECOND SEMESTER M.TECH. DEGREE EXAMINATION APRIL 2019

Branch: Electronics and Communication Engineering

08EC 6552 (C) / 08EC 6252 (C) COMMUNICATION NETWORKS

(Common to Communication Engineering And Signal Processing & Electronics And
Communication Engineering)

Time:3 hours

Max.marks: 60

Answer all six questions.

Modules 1 to 6: Part 'a' of each question is compulsory and answer either part 'b' or part 'c' of each question.

Q.no.	Module 1	Marks
1.a	What is routing? Explain few considerations of an effective router	3
Answer b or c		
b	List the 7 layers in OSI model and their functions. Why such a hierarchical approach to networking is utilized.	6
c	Write notes on TCP and UDP in transport layer protocol with suitable frame format?	6

Q.no.	Module 2	Marks
2.a	Compare different types of channel multiple access methods	3
Answer b or c		
b	What does the term error control in the data link layer? Explain different ARQ strategies for a damaged frame	6
c	Explain the following terms (i) Queuing Discipline (ii) Random Early Detection	6

Q.no. **Module 3** **Marks**

3.a What are the issues in network of Quality of service(QoS) and Explain? **3**

Answer b or c

b Explain detail about the various resource reservation protocols (RRP)? **6**

c Write short notes on Multi protocol label switching and Real time transport protocol **6**

Q.no. **Module 4** **Marks**

4.a Derive the Equation of Littles Theorem. **3**

Answer b or c

b Derive P-K formula of M/G/1 system **6**

c Explain in detail about characteristics of infinite capacity, Multiple server poisson queue model-II [(M/M/s):(α / FIFO) model] **6**

Q.no. **Module 5** **Marks**

5.a What are the QoS requirements of elastic traffic? **4**

Answer b or c

b Discuss the network performance and source characterization in multiplexing networks? **8**

c What are the various components involved in voice transport over a packet network. Describe it with necessary diagrams. Calculate the total delay in network **8**

Q.no. **Module 6** **Marks**

6.a What are the various performance measures to be considered in a network subsystem? **4**

Answer b or c

b Discuss detail about circuit switched PSTN networks with suitable diagrams. **8**

c Explain various stochastic traffic models for the superposition of several streams. **8**