



CBCS SCHEME

16/17SCN422

--	--	--	--	--	--	--	--	--	--

Fourth Semester M.Tech. Degree Examination, June/July 2019 Analysis of Computer Networks

Time: 3 hrs.

Max. Marks: 80

Note: Answer any FIVE full questions, choosing ONE full question from each module.

Module-1

- 1 Illustrate efficient transport of packet voice calls. (16 Marks)

OR

- 2 Explain the importance of quantitative modeling in the engineering of telecommunication networks. (16 Marks)

Module-2

- 3 a. Explain the terms: i) Network delay ii) Delay Jitter iii) Play out delay (08 Marks)
b. Summarize QoS objective in the packet network. (08 Marks)

OR

- 4 a. Describe congestion control, feedback and bandwidth sharing. (08 Marks)
b. Determine the QoS requirements of elastic and stream traffic. (08 Marks)

Module-3

- 5 Explain the following in deterministic traffic models and network calculus. (08 Marks)
a. Service curves for network elements (08 Marks)
b. Envelope and regulators

OR

- 6 Illustrate Weighted Fair Queueing (WFQ) scheduling technique in stream session. (16 Marks)

Module-4

- 7 Explain:
a. Little's theorem and its application (08 Marks)
b. Brumelle's theorem and its application (08 Marks)

OR

- 8 a. Determine the effective bandwidth approach for admission control. (08 Marks)
b. Identify the reasons, why the stochastic analysis of multihop network becomes difficult. (08 Marks)

Module-5

- 9 Demonstrate Rate Based Control in adaptive bandwidth sharing for elastic traffic. (16 Marks)

OR

- 10 a. Explain all the packet transmission mechanism in TCP's internet adaptive window protocol. (12 Marks)
b. Write short notes on TCP and fairness. (04 Marks)

* * * * *

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg, 42+8 = 50, will be treated as malpractice.