

SUBJECT CODE NO:- P-8064
FACULTY OF ENGINEERING AND TECHNOLOGY
M.E.(CSE/SE) Examination MAY/JUNE-2016
Computer Network Protocol Design EL- 1 (Soft)
(Revised)

[Time:Three Hours]

[Max Marks:80]

“Please check whether you have got the right question paper.”

N.B

- i) Attempt any two questions from each section
- ii) Please be specific while writing answers

Section A

- Q.1 a) What is deterministic & nondeterministic process? Also explain ensemble average & time average. 10
- b) What is physical significance of autocorrelation function and cross correlation function Explain with suitable example? 10
- Q.2 a) What are Eigen values and Eigen vectors? How it is used in packet transmission model 10
- b) Explain reducible Markov chain also explain closed & transient states. 10
- Q.3 a) What are queue performance parameters? Explain M/M/1 queue model performance. 10
- b) Model M/M/1/B queue 10

Section B

- Q.4 a) Model Leaky bucket performance (M/M/1/B) 10
- b) Model the Token bucket algorithm. 10
- Q.5 a) Short note on 10
- i) Realistic models for poisson Traffic
 - ii) Interarrival Time for Bernoulli traffic
- b) What is modulated Poisson processes & Markov modulated Poisson process 10
- Q.6 a) What are Scheduler design issues? Explain rate based versus credit based scheduling. 10
- b) Explain Round Robin Scheduler (RR) & weighted Round robin scheduler(WRR) 10