

Code: 9A15701

B.Tech IV Year I Semester (R09) Regular & Supplementary Examinations December 2015

PERFORMANCE EVALUATION OF COMPUTER SYSTEMS

(Computer Science & Systems Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

1. (a) Explain probability axioms in detail.
(b) Distinguish among discrete random variables, independent random variables and continuous random variables.
2. (a) What is the concept of exception based on multiple random variables?
(b) Explain Bernoulli Processes.
3. Draw the state diagram of the discrete parameter birth – death process and compute the steady state probability vector V .
4. Explain PEPE architecture.
Write an algorithm that performs matrix multiplication with a time complexity of $O(n^2)$.
5. (a) Explain performance enhancement methods.
(b) Discuss the applications of the Illiac-IV.
6. (a) Difference between loosely coupled multiprocessors and tightly coupled multiprocessors.
(b) Write the performance tradeoffs in memory organizations.
7. Explain about multiprocessor scheduling strategies and explain any two strategies.
8. (a) Write short note on S-1 multiprocessor.
(b) How multitasking is done in Cray X-MP? Explain.
