

Register Number:

M.E DEGREE EXAMINATIONS: NOV/DEC 2012

Third Semester

COMPUTER SCIENCE & ENGINEERING

CSE555 : Performance Evaluation of Computer Networks

Time: Three Hours

Maximum Marks: 100

Answer all the Questions:-

PART A (10 x 2 = 20 Marks)

1. State the need for performance evaluation for computing systems?
2. State the modeling tools
3. What is a Random Variable?
4. What is a Birth-Death Process?
5. State Little Queuing Theory
6. State the applications of simulation.
7. What is a colored Petri Net?
8. State and draw the Petri Net modeling components.
9. What do you mean by Workloads while analyzing operating system components?
10. Write a short note on HXDP model.

PART B (5 x 16 = 80 Marks)

11. a) Discuss about role of performance evaluation in computer engineering and explain how use of models is useful in performance evaluation.

(OR)

- b) Explain the fundamental concepts and performance measures in detail.

12. a) (i) Write a short note on scheduling algorithms (8)
(ii) Discuss about Expectation relevant to probability (8)

(OR)

- b) Discuss about Poisson and Markov Process in detail

13. a) Discuss about the M/M/1 and M/M/C queuing systems

(OR)

- b) (i) Explain the simulation process (8)
- (ii) Write a note on systems and modeling (8)

14. a) What is a classical Petri Net? Explain it with a suitable example.

(OR)

- b) (i) Discuss about the tool selection while evaluating system performance. (8)
- (ii) Write about the performance metrics used in evaluating system performance. (8)

15. a) Discuss about various operating system architectures while analyzing operating system components

(OR)

- b) (i) Explain about Oracle database system architecture. (8)
- (ii) Discuss about Transmission error detection and events with respect to simulation modeling of local area networks (8)
