DECEMBER 2015 **P/ID 17527/PCE09**

Time : Three hours Maximum : 100 marks

PART A — (6 × 5 = 30 marks)

Answer any SIX questions.

1. When is Simulation an appropriate tool? Explain it.

2. Discuss the components of system with examples.

3. Explain the FORTRAN in simulation.

4. Explain the server utilization and system performance of a queuing system.

5. Describe the linear congruential method with examples.

6. Describe Gap test with example.

7. Write about the components involved in verification and validation process. Also explain the steps used in model building, verification and validation.

8. Explain the interval estimation.

PART B — (7 × 10 = 70 marks)

Answer any SEVEN questions.

9. Summarize the Areas of application.

10. Simulate a single channel queuing system.

11. Explain the characteristics of queuing systems.

12. Discuss on the steady behavior of infinite population Markovian models.

13. Explain the Kolmogorov Smirnov test with an example.

14. Describe the acceptance rejection technique with an example.

15. Illustrate the goodness-of fit tests for evaluating the suitability of a potential put model.

16. Discuss on the Neylor-Finger approach for validation process.

17. Explain the output analysis for terminating simulations.

18. Explain the replication method for steady state simulation.

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