

Roll No

IP/IEM/PR-801(B)/AU/ME-801(D)**B.E. VIII Semester**

Examination, June 2017

Simulation and Process Modelling

(Elective - III)

Time : Three Hours

Maximum Marks : 70

- Note:** i) Attempt any five questions.
ii) All questions carry equal marks.

1. Describe continuous and discrete event simulation.
2. Write short note on modelling and simulation methodology.
3. How mapping of uniform random variables is done into other variable distributions.
4. Differentiate between nonlinear and stochastic models.
5. With the help of neat diagrams explain M | M | 1 Queues.

6. Discuss applications of Queuing theory in manufacturing system.
7. Discuss the procedure for preparation of casual loop diagrams and flow diagrams.
8. Answer any four of the following:
 - a) What is significance of modelling and simulation?
 - b) Describe linear models.
 - c) Describe Poisson's formula.
 - d) Write the steps taken for equation writing.
 - e) What is Arena?
 - f) What is Pro-model?
