

FACULTY OF ENGINEERINGB.E. 4/4 (Mech. / Prod.) II-Semester (**Main**) Examination, April / May 2013Subject : **Manufacturing Systems and Simulations**
(**Elective-II**)

Time : 3 Hours

Max. Marks: 75

Note: Answer **all** questions of Part - A and answer any **five** questions from Part-B.**PART – A** (25 Marks)

Describe the following :

1. Classifications of manufacturing systems.
2. Managerial information flow in manufacturing systems.
3. Computerized production scheduling.
4. Flexible manufacturing systems.
5. Distinguish between continuous and discrete systems.
6. What are different types of simulations?
7. Compare Analog and Hybrid computers.
8. Mention the various characteristics of queuing systems.
9. List different types of simulations software.
10. What is meant by event scanning?

PART – B (5x10=50 Marks)

- 11.(a) Discuss various types of decision making procedures.
(b) With the help of a neat diagrams explain the various steps in a simulation study.
- 12.(a) Explain the principles of computer integrated manufacturing.
(b) Discuss about computer based production management systems.
- 13.(a) Compare and contrast between various types of system simulation.
(b) Explain Cob Web model of simulation.
- 14.(a) Briefly explain about various types of continuous system simulation languages.
(b) Explain characteristics and classification of queuing models.
- 15.(a) Discuss the features of SIMSCRIPT simulation language.
(b) What are the various simulation algorithms used in GPPS? Explain them briefly.
- 16.(a) What are various transformational and procedural aspects of manufacturing?
Explain them.
(b) Discuss various automatic inspection and testing methods.
17. Write short notes on any **two** of the following :
 - (a) Distributed log model
 - (b) Classification of queuing models
 - (c) Features of GPSS
