

Roll No.

Total No. of Pages : 01

Total No. of Questions : 08

**M.Tech.(CAD/CAM) (Sem.-2)**  
**SYSTEM DESIGN & ANALYSIS**  
Subject Code : ME-503  
Paper ID : [E0878]

Time : 3 Hrs.

Max. Marks : 100

**INSTRUCTION TO CANDIDATES :**

1. Attempt any FIVE questions out of EIGHT questions.
2. Each question carries TWENTY marks.

- Q1 Discuss the problem definition with system concept and approach.
- Q2 Discuss the linear graph approach and time models for system modeling.
- Q3 What is simulation of a system and discuss basic philosophy of simulation?
- Q4 Explain what do you mean by dynamic behaviour of organization using suitable example.
- Q5 What is game theory? Discuss the application of game theory to system design.
- Q6 Discuss the dynamic analysis of the model from capital investment.
- Q7 Discuss gradient method and dynamic programming method for system optimization.
- Q8 Discuss what is system using suitable example and explain its system inputs and outputs.