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Total No. of Pages : 01

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## Ph.D Examination MODELING AND SIMULATION (CIVIL) Subject Code : PHDOE-17002 M.Code : 78007

Time : 3 Hrs. INSTRUCTIONS TO CANDIDATES : Max. Marks: 100

- 1. Attempt any FIVE questions out of EIGHT questions.
- 2. Each question carries TWENTY marks.
- Q1. a) Differentiate between Physical and Mathematical model.
  - b) Discuss the mid square random number generator.
- Q2. a) What are the advantages and disadvantages of validation in simulation?

b) Differentiate between static and dynamic model.

Q3. a) Explain the simulation of queuing system.

b) Write a note on statistical output analysis.

- Q4. Develop a dynamic model of study the market for CTV in a planned city. Make assumptions.
- Q5. Write an algorithm for simulation token passing protocol in any of the simulation languages.
- a) What are different phases in simulation study? O6.
  - b) Differentiate between discrete and continuous distribution.
- Explain model validation and verification in detail. 07.
- What is network simulator? How simulation is playing an important role in networking?

Q8.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.