## JAYPEE UNIVERSITY OF INFORMATION TECHNOLOGY, WAKNAGHAT TEST -1 EXAMINATION- Sep 2017

## M.Tech I Semester

COURSE CODE: 14M31CE112

MAX. MARKS: 15

COURSE NAME: SIMULATION AND MODELING

COURSE CREDITS: 03

MAX. TIME: One Hr

**Note:** All questions are compulsory. Carrying of mobile phone during examinations will be treated as case of unfair means.

- Q1. Distinguish between "Simulation" and "Modeling". What are the goals that can be achieved through simulation and modeling. Under what scenarios, simulation can be used as an appropriate tool? Discuss.
- Q2. With the help of a flow diagram, discuss the steps involved in simulation study. Why a model has to be verified and validated before implementation? [2.5+2]
- Q3. Define the terms: i) Event ii) Environmental System iii) State of the system [1.5]
- Q4. Distinguish between:

[4]

- i) Deterministic Model and Stochastic Model
- ii) Discrete Event and Continuous Event

CE-15, MT