

Modeling and Simulation Laboratory (IT-7006)

Course Code	IT-7006	Credits-2	L -0, T-0, P-2
Name of the Course	Modeling and Simulation Laboratory		
Lectures to be Delivered	26 hours of lab work (2hrs each per week)		
Semester End Examination	<i>Max. Marks: 50</i>	<i>Min. Pass Marks: 20</i>	Maximum Time:3hrs
Continuous Assessment	Lab work 30%, Lab Record 25%, Viva/ Hands on 25%, Attendance 20%)	<i>Max. Marks: 50</i>	<i>Min. Pass Marks: 25</i>

Instructions for paper setter/ Candidates

Laboratory examination will consist of three parts:

- (i) Performing a practical examination assigned by the examiner (25 marks)
- (ii) Viva-voce examination (25 marks)

Viva-voce examination will be related to the practicals performed / projects executed by the candidate related to the paper during the course of the semester.

(For all the given exercises student has to make GUI)

1. Write a programme for the random number generation and do its testing and validation for various discrete and random variables.
2. Do the modeling and simulation of queuing system (i.e. in computer system).
3. Do the modeling and simulation of the ATC (Air Traffic Control System).
4. Do the modeling and simulation of the Monte-Carlo method.
5. Study the GPSS and implement various programme in it.