List of Topics Covered in Final Exam – Simulation Systems

1. Uniform random number generators and their combined forms.
2. Transformation method and its limitations.
3. Rejection method for continuous and discrete probability distributions.
4. Fundamentals of Markov models (stationary distribution, ergodocity, mixing time, simulation of steps, etc.)
5. Metropolis, Gibbs, importance and umbrella sampling method
6. Fundamentals of hidden Markov models (mathematical definition, simulation, etc.)

Note: You will not be asked for Matlab code in the exam.