NEPAL COLLEGEOF INFORMATION TECHNOLOGY

UNIT TEST

Level: Bachelor Total Marks: 70

Program: B.E. Compute (VI) Pass Marks: 35

Course: Simulation and Modeling Time: 2 hrs

1. a) Explain the three step approach of validation process. 8

b) What is CSSLs? Explain CSMPIII program structure. 7

2) a) Explain Monte-Carlo method as numerical computation method and solve 7





b) Explain next event time advance mechanism. Why is this mostly used? 8

3 ) a) Explain the term system and its environment. Describe all its components with example. 8

1. Explain simulation of Autopilot system as a feedback system. 7

4) a) What is analog computer? Draw the analog computer diagram to simulate following equation



7

b) When line is busy or link is not available, call cannot be connected and the call gets lost. Explain the various states involving each condition. 8

5) Write Short notes on (any two): 10

1. System Simulation
2. Dynamic physical model
3. Deterministic Vs Stochastic model