



2. Answer the following questions.

- (a) Which are the major software industries where simulation is used? Name any two simulation software. (5)
- (b) Monte Carlo simulation is a special case of stochastic simulation. Comment. (5)
- (c) What is the importance of system design and analysis in the Simulation of a system? (5)

3. Answer the following questions.

- (a) Explain about the cobweb model. (8)
- (b) What is SIMSCRIPT? What is its importance?(5)
- (c) Define entity activity and attribute. (2)

4. Answer the following questions.

- (a) Explain the characteristics of CDF. (5)
- (b) Explain about exponential model. (5)
- (c) Explain about the real time simulation. (5)

5. Answer the following questions.

- (a) Explain analog computer simulation in details. (10)
- (b) How simulation helps in time-to-market industry. (5)

6. Answer the following questions.

- (a) Explain about Statistical output analysis. (5)
- (b) Explain the term system design and system postulation. (5)
- (c) Explain about the congestion in system. (5)

7. Answer the following questions.

- (a) What is system and environment? Explain the components of system with example. (10)
- (b) Describe the types of system model. (5)

8. Answer the following questions.

- (a) Explain the following component of simulation system with an example of bank system. (10)
  - (i) System      (ii) Entity
  - (iii) Attribute      (iv) Activity
  - (v) Event
- (b) Explain about the closed model. (5)

9. Answer the following questions.

- (a) Explain the various steps of simulation study with example. (8)
- (b) The following table of data pertaining to how shoppers buy goods

| No of Item Bought | No of Customers |
|-------------------|-----------------|
| 1                 | 50              |
| 2                 | 10              |
| 3                 | 25              |
| 4                 | 65              |
| 5                 | 85              |

Find the graph of CDF and PDF. (7)