



Model Paper –I
Examination 2016
BCA III
Paper:-Simulation and Modeling

Time: 3 Hrs

MM:50

/) The Question paper contains 40 multiple choice questions with four choices and student will have to pick the correct one (each carrying ½ mark).

1. An object of interest in a system is known as
a. Activity b. System c. Entity d. Attributes
2. Change in the state of the system is known as
a. Distance travelled by System b. Progress of System
c. Movement of system d. All of These
3. Which of the following is a system
a. Bank b. Depositing
c. Customer d. Balance
4. Examination held in university is an example of
a. Event b. Entities c. Attributes d. Activities
5. System is a set of
a. Models b. problems c. Interfacing Objects d. Independent
Objects
6. Environment is a part of model
a. False b. True c. Both d. None
7. Which of the following is an activity
a. Bank b. Depositing
c. Customer d. Balance

8. Which of the following is not type of system:
 a. Discrete b. Incremental c. Static d. Dynamic
9. A model of a building at an action site is an example of
 a. Physical Model b. Discrete Simulation
 c. Static Physical Model d. Simulation
10. First step of modeling processs is
 a. Defining goals b. Problem Formulation
 c. Validate Model d. Analyze Model
11. Model is
 a. Diagrammatic Representation b. Problem of interest
 c. Experiment d. Representation of system
12. Real system is first converted to
 a. Conceptual Model b. Operational Model
 c. Physical Model d. Mathematical Model
13. Which is the step of modeling Process
 a. Defining Goals b. Characterizing System
 c. Make Changes d. All of Above
14. Regular classes held in school is an example of
 a. Event b. Entities c. Attributes d. Activities
15. System have a structure tha is defined by its parts and processes
 a. True b. False
16. In a communication system, which one is activity
 a. Message b. Message Length
 c. Transmitting d. Arrival at destination
17. In inventory system , what will be the entity
 a. Warehouse b. Capacity c. Demand d. Withdrawing
18. Service time of customer in restaurant is an example of
 a. Stochastic System b. Deterministic System
 c. Continuous System d. Discrete System

19. Purpose of simulation model is to understand a system or model
 a. True b. False
20. which one is not the step of simulation process
 a. Detailed design b. Problem Formulation
 c. Experimental Design d. Implementation
21. A queuing model is an example of
 a. Discrete Simulation b. Continuous Simulation c. Both d. N.O.T.
22. Continuous Simulation Problem can be solved with the help of
 a. Geometry b. Trigonometry c. Differential Equation d. Algebra
23. Continuous System can be defined as
 a. A system working forever b. Endogenous Activities only
 c- A good system d. A system in which changes are predominately smooth
24. Simulation can be used in financial planning
 a. True b. False
25. Advantage of Simulation Technique is
 a. Free from complicated mathematics b. Freely available software
 c. Both d. N.O.T.
26. Which is not the principal of modeling?
 a. Redundancy b. Block building c. Relevance d. Accuracy
27. Which is the part of system studies:
 a. System Analysis b. System Testing c. System development d. N.O.T.
28. A customer faints while shopping this will be taken as
 a. Activity b. Event c. Entity d. Depends on customer
29. Human Body:
 a. Open System b. Closed System c. Not a system d. N.O.T.
30. Simulation can be used for time sharing system
 a. True b. False
31. Corporate Model does not contain
 a. Environment Segment b. Production Segment
 c. Management Segment d. Research & design Segment

32. Random numbers are used in:
- | | |
|-----------------------|------------------------|
| a. Gambling | b. Forecasting |
| c. Simulation Process | d. Analytical Solution |
33. Building the right product means:
- | | | | |
|-----------------|-----------------|---------------|-----------|
| a. System Study | b. Verification | c. Validation | d. N.O.T. |
|-----------------|-----------------|---------------|-----------|
34. Which is not the part of validation process
- | | |
|-----------------------|------------------------|
| a. Subjective Testing | b. Perspective Testing |
| c. Objective Testing | d. Statistical Testing |
35. Validation of model is part of
- | | |
|------------------------|------------------------|
| a. System Analysis | b. Experimental Design |
| c. Study of simulation | d. Model Building |
36. Pseudo
- | | |
|--------------------|-----------------------------------|
| a. can be compiled | b. cannot be compiled & execution |
| c. Can be executed | d. N.O.T. |
37. Simscript is based on which language
- | | | | |
|------------|------|-----------|-----------|
| a. Fortran | b. C | c. Pascal | d. N.O.T. |
|------------|------|-----------|-----------|
38. Simscript is
- | | |
|---------------------------------|-----------------------------------|
| a. Discrete Simulation Language | b. Continuous Simulation Language |
| c. Scripting Language | d. N.O.T. |
39. Days & Nights are example of
- | | |
|----------------------------|--------------------------------|
| a. Activities on the earth | b. Events on the earth |
| c. Entities on the earth | d. exogenous activity on earth |
40. Size of Platform is :
- | | | | |
|--------------|-------------|----------|-----------|
| a. attribute | b. Activity | c. Event | d. N.O.T. |
|--------------|-------------|----------|-----------|

/// Attempt any four questions out of six all question carry 7 ½ marks.

1. Define model. What do you understand by system modeling?
2. Define System. Explain various characteristics of system.
3. Explain discrete simulation language in brief.
4. Explain the simulation of time sharing system.
5. Describe verification and validation process of modeling.
6. Explain how AI techniques are used in the area of simulation & modeling.