(b) Since the purpose of study is varying, there is no unique model for a system.

(c) Both of above are false.

(d) None of the above.

(a) Predominantly continuous

(b) Predominantly discrete

(c) Depend on the system

(d) None of the above.

Q. In Discrete system, changes are:-

(a) Predominantly continuous

(b) Predominantly discrete

(c) Depend on the system

(d) None of the above.

Q. System analysis, System design and system postulation are the examples of:-

(a) Types of system

(b) Types of system study

(c) Types of entities

(d) Type of environment.

Q. Where the outcome of the activity can describe completely in terms of its input, the activity is said to be:-

(a) Deterministic

(b) Stochastic

(c) Endogenous

(d) Exogenous

Q. A system which does have exogenous activity is said to be:-

(a) Open system

7. Multiple-choice

A scientist wants to see what would happen if a truck's tires slipped on ice.

Q. What would the scientist use to test how the truck's tires would function in this example?

answer choices

- a system
- a simulation
- a conceptual model
- a mathematical model

2. Multiple-choice

Q. Which comes first, the model or the simulation?

answer choices

- The two are unrelated and can be created in any order.
- They are created at the same time because they are pretty much the same thing.
- The model is created first because a simulation needs models to run.

Q. In order to verify a simulation model

A. compare results from several simulation languages.

B. be sure that the procedures for calculations are logically correct.

C. confirm that the model accurately represents the real system.

D. run the model long enough to overcome initial start-up results.

Answer» **B.** be sure that the procedures for calculations are logically correct.

Ans :a

Q6.What encapsulates both data and data manipulation functions ?

a) **Object**

b) Class

c) Super Class

d) Sub Class

ans. a)

Q7.How do clients access COM objects?

a)Through public data members because the object is usually implemented in C++

b)Through the servers' implementation of Invoke

c)**Through the object's interfaces**

Ans.c)

Q8 RMI is stands for:

a) Remote methodology invocation
b) Research method invocation
c) Remote method invocation
d) Resource method invocation

Ans.c)

Q9 CORBA is stands for:

a) Common oriented request broker architecture
b) Common object request break architecture
c) Common object request broker architecture
d) Common object request broker access

Ans.c)

Q10. The standard which allows the access to DBMS by the Java client programs is classified as

a) JCBD standard
b) JDBC standard
c) BDJC standard
d) CJBD standard

Ans.b)

☑ 8. Multiple-choice

Q. What is the advantage of creating a model of a dinosaur?

answer choices

- they are too large to easily study
- they are too complicated to study
- Real dinosaurs cannot be studied because they are extinct
- The model is safer to work with.

Q. In a Corporate model, what is/are main segment/segments?

(a) Environment

(b) Plant/ Physical plant

(c) Management

(d) All of the above

Q. Which of the following is true about subsystem:-

(a) Any subsystem might, itself, be considered a system consisting of subsystem at a still lower level of detail, and so on.

(b) Each subsystem has its own inputs and outputs and, standing by itself.

(c) Both of above.

(d) None of above

Q. Principle/principles used in modeling:-

(a) Block-building

(b) Relevance

(c) Aggregation

(d) All of the above

Q. In Communication system, what is "Transmitting":-

(a) Entity

(b) Activity

(c) Environment

(d) None of the above.

Q. Oscillator Model is an example of:-

(a) Static Physical Model

1. All simulations involve:

   a. The passage of time
   b. A model on a computer
   c. An imitation of a system
   d. A visual display

Ans : C

2. The simulations described in the book are used for:

   a. Understanding a system
   b. Understanding and improving a system
   c. Improving a system
   d. None of the above

Ans : b

3. Which of the following systems can be simulated?

   a. Transportation systems
   b. Manufacturing systems
   c. Health systems
   d. All of the above

Ans : d

4. What software is likely to be needed for a simulation study?

   a. Spread sheet software
   b. Simulation package
   c. Statistical software
   d. All of the above

Ans : b

5. A simulation uses the logical relationships and mathematical expressions of the
   a. Real system
   b. Computer model
   c. Performance measures
   d. Inferences

Set-1

Q. _____ is considered to be a numerical computation technique used in conjunction with dynamic mathematical models.

(a) Analysis

(b) System simulation

(c) Dynamic computation

(d) None of the above.

Q. Which system/model applies computational procedures to solve equations:-

(a) Dynamic Model

(b) Static Model

(c) Analytical Model

(d) Numerical Model

Q. Which system/model applies deductive reasoning of mathematical theory to solve a model:-

(a) Dynamic Model

(b) Static Model

(c) Analytical Model

(d) Numerical Model

Q. Which model follows the changes over time that results from the system activities:-

(a) Dynamic Model

(b) Static Model

(c) Analytical Model

(d) Numerical Model

3. Multiple-choice

Q. What is a simulation and why are they used?

answer choices

- A simulation is a giant model in motion for a test.
- A simulation uses one or more models to imitate how those models might function in a real life situation.
- A simulation tests a hypothesis with 100% accuracy.

Q. Factory is an example of:-

(a) System
(b) Attribute
(c) Activity
(d) Environment

Q. System is defined as:-

(a) aggregation or assemblage of objects
(b) Combination of objects
(c) Definition of Object.
(d) None of the above

Set-2

Q. Block building principle of the system modeling says that:-

(a) The description of the system should be organized in a series of blocks.
(b) The description of the system should not be organized in a series of blocks.
(c) There should be no clear distinction between the subsystems of the system.
(d) None of the above.

16. Multiple-choice

Q. Scientists use _____ to understand how systems work.

answer choices

- models
- figures
- process
- energy

Q. Which model can only show the values that system attributes take when the system is in balance:-

(a) Dynamic Model

(b) Static Model

(c) Analytical Model

(d) Numerical Model

Q. Mathematical models are based on:

(a) Analogy between such systems as mechanical and electrical

(b) Use symbolic notation and mathematical equations to represent a system

(c) All of the above

(d) None of the above

Q. Physical models are based on:-

(a) Analogy between such systems as mechanical and electrical

(b) Use symbolic notation and mathematical equations to represent a system

(c) All of the above

(d) None of the above

Q. In system modeling, the task of deriving a model of a system may be divided broadly into two subtasks:-

(a) Establishing the model structure.

(b) Supplying the data.

(c) Both of above

(d) None of the above.

Q. Which one of the following is false about model:-

(a) Model is the body of information about a system gathered for the purpose of studying the system.

(b) Dynamic Physical Model

(c) Static Mathematical Model

(d) Dynamic Mathematical Model

Q. Traffic, Bank, and Supermarket are the examples of:-

(a) Attribute

(b) System

(c) Activity

(d) Environment

Q. System postulation is a:-

(a) To produce a system that meets some specifications.

(b) To understand how an existing system or a proposed system operates.

(c) To produce a system in which behavior is known but the process is not known.

(d) None of the above.

Q. DNA molecule Model or ionic model is an example of:-

(a) Static Physical Model

(b) Dynamic Physical Model

(c) Static Mathematical Model

(d) Dynamic Mathematical Model

Ans :a

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d) CJBD standard

Ans.b)

☑ 15. Multiple-choice

Q. Why do we use simulations?

answer choices

- To create virtual reality games.
- So people can learn something.
- To test an idea in a controlled environment.
- All of the above.

5. Multiple-choice

Q. Why do scientists use models?

answer choices

- To test many possible ideas to find solutions to difficult questions.
- So that the object they are looking at can become real.
- So they can have a smaller object to look at.

☑ 11. Multiple-choice

Q. Scientists use a ___ to represent something that has too many parts, is too big, or is too small to investigate in real life.

answer choices

- cars, dolls, people
- model
- scale
- telescope

Q. Depositing in Bank system is:-

(a) Entity

(b) Attribute

(c) Activity

(d) Environment

Q. Suspension model of an automobile wheel is an example of:-

(a) Static Physical Model

(b) Dynamic Physical Model

(c) Static Mathematical Model

(d) Dynamic Mathematical Model

Q. System design is a:-

(a) To produce a system that meets some specifications.

(b) To understand how an existing system or a proposed system operates.

(c) To produce a system in which behavior is known but the process is not known.

(d) None of the above.

Q. System analysis is a:-

(a) To produce a system that meets some specifications.

(b) To understand how an existing system or a proposed system operates.

(c) To produce a system in which behavior is known but the process is not known.

(d) None of the above.

Q. Where the effects of the activity vary randomly over various possible outcomes, the activity is said to be:-

(a) Deterministic

(b) Stochastic

☑ 14. Multiple-choice

Q. Which comes first, the model or the simulation?

answer choices

- The two are unrelated and can be created in any order.
- They are created at the same time because they are pretty much the same thing.
- The model is created first because a simulation needs models to run.

Q. Which of the following separate system and system environment:-

(a) Acitvities

(b) Boundary

(c) Entity

(d) All of the above

(b) Closed System

(c) Both of above

(d) None of the above

Q. A system with no exogenous activity is said to be:-

(a) Open system

(b) Closed System

(c) Both of above

(d) None of the above.

Q. Aggregation is a:-

(a) Combining infinite objects to form system.

(b) is the extent to which the number of individual entities can be grouped together into larger entities.

(c) Both of above.

(d) None of the above

Q. In a Bank system, what is customer:-

(a) Entity

(b) Activity

(c) Environment

(d) None of the above.

Q. A simple market model is an example of:-

(a) Static Physical Model

(b) Dynamic Physical Model

(c) Static Mathematical Model

(d) Dynamic Mathematical Model

☑ 6. Multiple-choice

Q. The questions on a multiple choice test each have 6 answer choices. Which model can be used to simulate randomly selecting the correct answer on a 20 question multiple choice test?

answer choices

- rolling a six-sided number cube 6 times
- rolling a six-sided number cube 20 times
- spinning a spinner with 4 equal sized sections 4 times
- choosing 1 marble in a bag of 20 different colored marbles

Q. Which of the following statements is INCORRECT regarding the advantages of simulation?

A. Simulation is relatively easy to explain and understand.

B. Simulation guarantees an optimal solution.

C. Simulation models are flexible.

D. A simulation model provides a convenient experimental laboratory for the real system.

Answer» **B.** Simulation guarantees an optimal solution.

Que.	**Simulation is used to determine**
a.	Bit error rate
b.	Symbol error rate
c.	Bit error
d.	Symbol error
	Answer: Bit error rate

10. Multiple-choice

Q. A tennis ball could be used to represent the sun because it's round and yellow. Which of the following could also be used to model the sun?

answer choices

- a light bulb
- an empty cup
- an eraser
- a Kleenex box

☑ 9. Multiple-choice

Q. Models can be helpful in scientific investigations because

answer choices

- it may not be possible to work with the real thing.
- they can be smaller and more manageable than the real thing.
- they can be safer to work with than the real thing.
- all of the above

☑ 4. Multiple-choice

Q. Which of the following is a limitation of using a model to study something?

answer choices

- A model cannot represent a thing exactly.
- A model cannot help study things that are dangerous.
- A model cannot reproduce things that are too far away.
- a model cannot show things that are too small or too large.

13. Multiple-choice

Q. All of the statements below are correct except one. Mark the one that is incorrect.

answer choices

- Models must be exactly like what is being modeled.
- Models communicate information.
- Models can be constructed.
- Models can be drawings with labels.

Model Question

M.Sc.IT -Part I

Paper I

Computer Simulations and Modelling and Programme with Component

MCQ

1. All simulations involve:

   a. The passage of time
   b. A model on a computer
   c. An imitation of a system
   d. A visual display

Ans : C

2. The simulations described in the book are used for:

   a. Understanding a system
   b. Understanding and improving a system
   c. Improving a system
   d. None of the above

Ans : b

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   d. All of the above

Ans : d

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   d. All of the above

Ans : b

5. A simulation uses the logical relationships and mathematical expressions of the
   a. Real system
   b. Computer model
   c. Performance measures
   d. Inferences

Q. Advance, Link, Mark and Queue blocks are used in which language:-

(a) Simscript

(b) GPSS

(c) Both of above

(d) None of the above

Q. Which of the following is not a simulation language:-

(a) GPSS

(b) Simscript

(c) Simula

(d) all of the above

Q. Which of the following is simulation language:-

(a) Java

(b) GPSS

(c) Javascript

(d) None of the above.

Q. Speed and Distance in Traffic system are:-

(a) Entities

(b) Attributes

(c) Activities

(d) Environment

Q. Messages in Communication system is:

(a) Entity

(b) Attribute

(c) Activity

(d) Environment

1. Multiple-choice

Q. Scientists often use visual or mathematical representations to investigate items that are very large, very small, or otherwise difficult to study. What are these visual or mathematical representations called?

answer choices

- experiments
- hypotheses
- models
- observations