This set of Software Design Multiple Choice Questions & Answers (MCQs) focuses on "UML Class and Object Diagrams"

1. What does a simple name in UML Class and objects consists of ?

a) Letters

b) Digits

c) Punctuation Characters

d) All of the mentioned

View Answer

Answer: d

Explanation: A simple name consists of letters, digits and punctuation characters.

2. What Does a Composite name consists of in a UML Class and object diagram ?

a) Delimiter

b) Simple names

c) Digits

d) All of the mentioned

View Answer

Answer: d

Explanation: Composite name consists of sequence of simple names and simple names already consists of digits.

3. A Class consists of which of these abstractions?

a) Set of the objects

b) Operations

c) Attributes

d) All of the mentioned

e) b, c

View Answer

Answer: d

Explanation: A class is a abstraction of objects, operations and attributes.

4. A class is divided into which of these compartments ?

a) Name Compartment

b) Attribute Compartment

c) Operation Compartment

d) All of the mentioned

Answer: d

Explanation: Class is divided into 3 main compartments mentioned)

5. An attribute is a data item held by which of the following ?

a) Class

b) Object

c) All of the mentioned

d) None of the mentioned

Answer: c

Explanation: Attribute is a data item held by class or object.

6. What should be mentioned as attributes for conceptual modelling ?

a) Initial Values

b) Names

c) All of the mentioned

d) None of the mentioned

Answer: c

Explanation: Initial values along with thier names are used as attributes.

7. An operation can be described as?

a) Object behavior

b) Class behavior

c) Functions

d) a,b

e. None of the mentioned

Answer: d

Explanation: An operation is class and object behavior.

8. Which of these are part of class operation specification format ?

a) name

b) parameter list

c) return-type list

d) All of the mentioned

View Answer

Answer: d

Explanation: It consists of all these 3 mentioned format.

9. What among these is true ?

a) Associations may also correspond to relation between instances of three or more classes

b) Association lines may be unlabeled or they may show association name

c) All of the mentioned

d) None of the mentioned

View Answer

Answer : c

Explanation : All the statements mentioned are true with respect to Notations.

10. What is multiplicity for an association?

a) The multiplicity at the target class end of an association is the number of instances that can be associated with a single instance of source class

b) The multiplicity at the target class end of an association is the number of instances that can be associated with a number instance of source class

c) All of the mentioned

d) None of the mentioned

View Answer

Answer : a

Explanation : Multiplicity is number of instances associated with single instance to source class.

11. Which among these are the rules to be considered to form Class diagrams?

a) Class symbols must have at least a name compartment

b) Compartment can be in random order

c) Attributes and operations can be listed at any suitable place

d) None of the mentioned

View Answer

Answer : a

Explanation : Compartments can be in order, Attributes and operations must be listed one per line.

12. Which of these are the heuristics ?

a) Name classes, attributes, and roles with noun phrases

b) Name operations and associations with verb phrases

c) Stick to binary associations

d) All of the mentioned

View Answer

Answer : d

Explanation : All the heuristic mentioned are true.

13. An object symbol is divided into what parts ?

a) Top compartment

b) Bottom Compartment

c) All of the mentioned

d) None of the mentioned

View Answer

Answer : c

Explanation : An object is divided into top and bottom compartments.

Which of the following UML diagrams has a static view?

a) Collaboration

b) Use case

c) State chart

d) Activity

View Answer

Answer:b

Which diagram in UML shows a complete or partial view of the structure of a modeled system at a specific time?

a) Sequence Diagram

b) Collaboration Diagram

c) Class Diagram

d) Object Diagram

View Answer

Answer: d

Interaction Diagram is a combined term for

a) Sequence Diagram + Collaboration Diagram

b) Activity Diagram + State Chart Diagram

c) Deployment Diagram + Collaboration Diagram

d) None of the mentioned

View Answer

Answer: a

 Structure diagrams emphasize the things that must be present in the system being modeled.

a) True

b) False

View Answer

Answer: a

Which of the following diagram is time oriented?

a) Collaboration

b) Sequence

c) Activity

View Answer

Answer:b

 How many diagrams are here in Unified Modelling Language?

a) six

b) seven

c) eight

d) nine

View Answer

Answer:d

Explanation: The nine UML diagrams include use-case, sequence, collaboration, activity, state-chart, deployment, class, object and component.

Class diagram, component diagram, object diagram and deployment diagram are considered as types of

  A structural diagrams

   B behavioral diagrams

  C non-behavioral diagrams

  D non structural diagrams

Ans:A

Class diagram, component diagram, object diagram and deployment diagram are considered as types of

A>structural diagrams

B>behavioral diagrams

C>non-behavioral diagrams

D>non structural diagrams

Ans:D

In UML diagrams, relationship between object and component parts is represented by

A> ordination

B> aggregation

C> segregation

D> increment

Ans:B