

## Software Modelling and Design

### Question Bank

#### Unit 1, 2 & 3

Q1. Which among the following are not the valid notations for package and component diagram?

a) Notes

**b) Box**

c) Extension Mechanisms

d) Packages

Q2. Which of the following statement is false?

a) A note is a dog-eared box connected to any model element by a dashed line

b) The main way to extend UML is by constraints, properties, etc

**c) A dependency relation holds between two entities D and I where change in I does not affect D**

d) All of the mentioned

Q3. Which of these depicts the true definition for the UML extensions?

a) A constraint is a statement that must be true of the entities designated by one or more model elements

b) A property is a characteristic of the entity designated by a model element

c) A stereotype is a UML model element given more specific meaning

**d) All of the mentioned**

Q4. Which of the following is incorrect in reference to dependency?

a) Module D uses module I when a correct version of I must be present for D to work correctly

b) Module D depends for compilation on module I

**c) Class I imports elements from package D**

d) None of the mentioned

Q5. What is a collection of model elements called?

a) Box

b) Dependency

c) UML packages

**d) Package members**

**Q6.** A package diagram consists of the following?

- a) Package symbols
- b) Groupings of Use cases, classes, components
- c) Interface

**d) Package symbols, Groupings of Use cases, classes & components**

**Q7.** What types of units does Component follow?

- a) Modular Unit
- b) Replaceable Unit
- c) Unit with well defined interface

**d) All of the mentioned**

**Q8.** Components can be represented by which of the following?

- a) Component symbols
- b) Stereotypes
- c) Rectangular boxes

**d) Component symbols & Stereotypes**

**Q9.** What does a component diagram consists of?

- a) Components, their Relationship to the environment
- b) Packages and dependency
- c) Internal structure

**d) Internal structure, Components & their Relationship to the environment**

**Q10.** Which of these is true with respect to interfaces?

**a) Interfaces in component diagram defines relationship between components and environment**

- b) Interfaces realized by a class or a component are required interfaces
- c) Interface on which a class or component depends are called provided interfaces
- d) All of the mentioned

**Q11.** What is a delegation connector?

- a) A delegation connector ties a component interface to one or more internal classes or components
- b) Delegation connectors are solid arrows stereotyped <>
- c) A delegation connector may also extend from an internal class to an external interface

**d) All of the mentioned**

**Q12.** Which of these are diagrammatic heuristics?

- a) Use notes, constraints, properties and stereotypes to add information to UML models

- b) Use Stereotypes to name dependencies
- c) Use packages to group elements in static models

**d) All of the mentioned**

**Q13.** who consider diagrams as a type of Class diagram, component diagram, object diagram, and deployment diagram?

- A) structural**
- B) behavioral
- C) non-behavioral
- D) non structural

**Q14.** \_\_\_\_\_are Weak entities are represented in UML diagrams by using aggregations.

- A) qualified
- B) non-qualified
- C) non-qualified
- D) qualified**

**Q15.** \_\_\_\_\_ represented by In UML diagrams, relationship between component parts and object.

- A) ordination
- B) aggregation**
- C) segregation
- D) increment

**Q16.** which type they considered Activity diagram, use case diagram, collaboration diagram, and sequence diagram?

- A) non-behavioral
- B) non-structural
- C) structural
- D) behavioral**

**Q17.** which diagram is used to show interactions between messages are classified as?

- A) activity
- B) state chart
- C) collaboration**
- D) object lifeline

**Q18.** which diagram that helps to show Dynamic aspects related to a system?

- A) sequence
- B) interaction**
- C) deployment
- D) use case

**Q19.** simple name in UML Class and objects consist of \_\_\_\_\_.

- A) Letters
- B) Digits
- C) Punctuation Characters
- D) All of the mentioned**

Q20. which of the following Composite name consists of in a UML Class and object diagram?

- A) Delimiter
- B) Simple names
- C) Digits
- D) All of the mentioned**

Q21. which of these abstractions class consist?

- A) Set of the objects
- B) Operations
- C) Attributes
- D) All of the mentioned**

Q22. which of these compartments divided in class?

- A) Name
- B) Attribute
- C) Operation
- D) All of the mentioned**

Q23. which of the following attribute is a data item held by?

- A) Class
- B) Object
- C) All of the mentioned**
- D) None of the mentioned

Q24. Mentioned as \_\_\_\_\_ attributes for conceptual modelling?

- A) Initial Values
- B) Names
- C) All of the mentioned**
- D) None of the mentioned

Q25. An operation can be described as\_\_\_\_\_.

- A) Object
- B) Class
- C) Functions
- D) Object & Class**

**Q26.** \_\_\_\_\_are part of the class operation specification format.

- A) name
- B) parameter list
- C) return-type list
- D) all of the mentioned**

**Q27.** which among the optional statement is true?

- A) Associations may also correspond between instances of three

B) Association lines may be unlabeled

**C) All of the mentioned**

D) None of the mentioned

Q28. Multiplicity for an association \_\_\_\_\_.

A) **association is the number of instances with a single instance**

B) association is the number of instances with a number instance

C) All of the mentioned

D) None of the mentioned

Q30. \_\_\_\_\_ among these are the rules to be considered to form Class diagrams.

A) **Class symbols least a name compartment**

B) The compartment can be in random order

C) Attributes and operations can be listed

D) None of the mentioned

Q31. these are the heuristics \_\_\_\_\_.

A) Name classes attributes with noun phrases

B) Name operations with verb phrases

C) Stick to binary associations

**D) All of the mentioned**

**Q32.** An object symbol is divided into \_\_\_\_\_ part of compartment

A) Top

B) Bottom

**C) All of the mentioned**

D) None of the mentioned

Q33. \_\_\_\_\_ diagram is time-oriented?

A) Collaboration

**B) Sequence**

C) Activity

D) None of the mentioned

Q34. which term are combined Interaction Diagram?

**A) Sequence Diagram + Collaboration Diagram**

B) Activity Diagram + State Chart Diagram

C) Deployment Diagram + Collaboration Diagram

D) None of the mentioned

Q35. Structure diagrams emphasize the things present system being modeled.

**A) True**

B) False

Q36. \_\_\_\_\_ diagram in UML shows a complete of a modeled system at a specific time.

A) Sequence

B) Collaboration

C) Class

**D) Object**

**Q37.** \_\_\_\_\_UML diagrams has a static view.

- A) Collaboration
- B) Use case**
- C) State chart
- D) Activity

**Q38.** What does a simple name in UML Class and objects consist of?

- a) Letters
- b) Digits
- c) Punctuation Characters
- d) All of the mentioned**

**Q39.** 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**

**Q40.** A Class consists of which of these abstractions?

- a) Set of the objects
- b) Operations
- c) Attributes
- d) All of the mentioned**

**Q41.** A class is divided into which of these compartments?

- a) Name Compartment
- b) Attribute Compartment
- c) Operation Compartment
- d) All of the mentioned**

**Q42.** 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

**Q43.** What should be mentioned as attributes for conceptual modelling?

- a) Initial Values
- b) Names
- c) All of the mentioned**
- d) None of the mentioned

Q44. An operation can be described as?

- a) Object behavior
- b) Class behavior
- c) Functions
- d) Object & Class behavior**

Q45. Which of these are part of the class operation specification format?

- a) name
- b) parameter list
- c) return-type list
- d) all of the mentioned**

Q46. What among the following statement is true?

- a) Associations may also correspond to the 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

Q47. 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

Q48. 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

Q49. 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**

Q50. An object symbol is divided into what parts?

- a) Top compartment

b) Bottom Compartment

**c) All of the mentioned**

d) None of the mentioned

Q51. who consider diagrams as a type of Class diagram, component diagram, object diagram, and deployment diagram?

**A) structural**

B) behavioral

C) non-behavioral

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Q52. \_\_\_\_\_are Weak entities are represented in UML diagrams by using aggregations.

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C) structural

**D) behavioral**

Q55. which diagram is used to show interactions between messages are classified as?

A) activity

B) state chart

**C) collaboration**

D) object lifeline

Q56. which diagrams are used to distribute files, libraries, and tables across topology of the hardware

**A) deployment**

B) use case

C) sequence

D) collaboration

Q57. which diagram that helps to show Dynamic aspects related to a system?



- A) sequence
- B) interaction**
- C) deployment
- D) use case

Q58. simple name in UML Class and objects consist of \_\_\_\_\_.

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Q64. An operation can be described as\_\_\_\_\_.

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- B) Class
- C) Functions
- D) Object & Class**

**Q65.** \_\_\_\_\_are part of the class operation specification format.

- A) name
- B) parameter list
- C) return-type list
- D) all of the mentioned**

**Q66.** which among the optional statement is true?

- A) Associations may also correspond between instances of three
- B) Association lines may be unlabeled
- C) All of the mentioned**
- D) None of the mentioned

**Q67.** Multiplicity for an association \_\_\_\_\_.

- A) association is the number of instances with a single instance**
- B) association is the number of instances with a number instance
- C) All of the mentioned
- D) None of the mentioned

**Q68.** \_\_\_\_\_among these are the rules to be considered to form Class diagrams.

- A) Class symbols least a name compartment**
- B) The compartment can be in random order
- C) Attributes and operations can be listed
- D) None of the mentioned

**Q69.** these are the heuristics \_\_\_\_\_.

- A) Name classes attributes with noun phrases
- B) Name operations with verb phrases
- C) Stick to binary associations
- D) All of the mentioned**

**Q70.** An object symbol is divided into \_\_\_\_\_ part of compartment

- A) Top
- B) Bottom
- C) All of the mentioned**
- D) None of the mentioned

**Q71.** \_\_\_\_\_diagram is time-oriented?

- A) Collaboration
- B) Sequence**
- C) Activity
- D) None of the mentioned

**Q72.** which term are combined Interaction Diagram?

- A) Sequence Diagram + Collaboration Diagram**
- B) Activity Diagram + State Chart Diagram
- C) Deployment Diagram + Collaboration Diagram
- D) None of the mentioned

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