

DEPARTMENT : MCA , BCET
PAPER NAME : OBJECT ORIENTED ANALYSIS & DESIGN

1. A model is a _____ of reality.
 - a. Complication
 - b. Simplification
 - c. Realization
 - d. Generalization

2. Models help us to _____ a system as it is or the way it is wanted.
 - a. Analyze
 - b. Design
 - c. Visualize
 - d. Measure

3. In which principle, the models created explain the identification of a problem and find its solution?
 - a. The Choice of Model is Important
 - b. Levels of Precision May Differ
 - c. The Best Models are connected to Reality
 - d. No Single Model is Sufficient

4. Algorithmic and object-oriented are the two common ways for modeling _____.
 - a. Non-software Systems
 - b. Software Systems
 - c. Vocabulary of a System
 - d. Client/Server System

5. _____ helps to communicate the overall system architecture unambiguously.
 - a. Flow charts
 - b. Designing
 - c. SRS
 - d. Templates

6. _____ defines the system's actions and how different parts contribute to it.
 - a. Behavior
 - b. Structure
 - c. Model
 - d. Use case

7. _____ can be done for both simple and complex systems.
 - a. Generalization n
 - b. Specification cm,
 - c. Modeling
 - d. Collaboration

8. The best kind of models helps to choose _____.
 - a. Degree of detail

- b. Design view
- c. Single model
- d. Choice of model

9. A set of _____ models are used to approach a complex system.

- a. Dependent w"
- b. Independent
- c. Both dependent and independent
- d. Different

10. An Object-oriented program is structured as a community of interacting agents, called _____

- a. Objects
- b. Classes
- c. Functions
- d. Statements

11. UML is useful to _____ a system as it is or as we want it to be.

- a. Visualize
- b. Specify
- c. Document
- d. All of the above

12. A collection of operations that specify the services rendered by a class or component known as _____

- a. Class
- b. Interaction
- c. Interface
- d. Collaboration

13. _____ is an abstraction of a set of functions that the system performs.

- a. Class
- b. Interaction
- c. Use case
- d. Collaboration

14. _____ is a physical element that exists at runtime and represents a computational resource.

- a. Node
- b. Actor
- c. Name
- d. Object

15. Which one of the following is not a structural thing?

- a. Class
- b. Package
- c. Use case
- d. Node

16. _____ can represent the invocation of an operation, a step in a business p an entire business process.

- a. State machine
- b. Interaction
- c. Use case
- d. Activity

17. The explanatory parts of the UML model are known as _____

- a. Behavioral things
- b. Grouping things
- c. Structural things
- d. Annotational things

18. A link is an instance of _____

- a. Generalization
- b. Association
- c. Dependency
- d. Realization

19. _____ are used to create new building blocks from existing blocks.

- a. Tagged Values
- b. Stereotypes
- c. Constraints
- d. Diagrams

20. In which phase is the scope of the project defined?

- a. Inception
- b. Elaboration
- c. Construction
- d. Transition

21. Which one of the following OOAD artifacts is the MOST useful?

- a. Use cases
- b. Interaction diagrams
- c. Activity diagrams
- d. Package diagrams

22. All public methods in business model objects are defined directly or indirectly because of a _____ requirement.

- a. Use case
- b. Dependency
- c. Association
- d. Sequence

23. UML interfaces are used to _____

- a. Define an API for all classes
- b. Program in Java, but not in C++ or Smalltalk
- c. Define executable logic to reuse across classes

d. Specify required services for types of objects

24. An actor is _____

- a. A person
- b. A job title
- c. A role
- d. A system

25. The system icon identifies _____

- a. The boundaries of the system
- b. The scope of the project so
- c. The context of the system
- d. Another system in the role of an actor

26. A person may function in _____

- a. Only one role
- b. Many roles
- c. One role per system
- d. One role per use case

27. Devices and other systems _____

- a. May be actors
- b. May only receive output from a use case
- c. May only provide input to a use case
- d. Are out of scope because we are describing only one system at

28. Associations _____

- a. May exist only between actors and use cases
- b. Identify the flow of data between actors and use cases
- c. Identify interactions between actors and use cases
- d. Identify dependencies between actors and use cases

29. Use cases _____

- a. Identify business processes
- b. Identify system goals
- c. Describe workflow
- d. Prioritize system procedures

30. The association stereotype «Extends» indicates _____

- a. Delegation of part of a task to another use case
- b. The target use case is a subprocess of the source use cases
- c. A specialized form of a use case
- d. A deviation from the UML standard

31. The method of design encompassing the process of object oriented decomposition and a notation for depicting both logical and physical and as well as static and dynamic models of the system under design is known as:

- a. Object- Oriented Programming
- b. Object- Oriented Design

- c. Object- Oriented Analysis
- d. None of the mentioned

32. What is the programming style of the object oriented conceptual model?

- a. Invariant relationships
- b. Algorithms
- c. Classes and objects
- d. Goals, often expressed in a predicate calculus.

33. The essential characteristics of an object that distinguish it from all other kinds of objects and thus provide crisply defined conceptual boundaries, relative to the perspective of the viewer is called:

- a. Encapsulation
- b. Modularity
- c. Hierarchy
- d. Abstraction

34. Abstraction is classified into _____ types

- a. 4
- b. 3
- c. 2
- d. 1

35. The process of compartmentalizing the elements of an abstraction that constitute its structure and behavior is called as

- a. Hierarchy
- b. Encapsulation
- c. Modularity
- d. Entity Abstraction

36. Single inheritance, Multiple inheritance, and Aggregation comes under _____

- a. Modularity
- b. Typing
- c. Hierarchy
- d. None of the mentioned

37. In which of the following mechanisms, types of all variables and expressions are fixed at compilation time.

- a. Strong Typing
- b. Weak Typing
- c. Static Binding/ early binding
- d. Dynamic Binding/ late binding

38. In which of the following mechanisms, types of all variables and expressions are not known until runtime

- a. Strong Typing
- b. Weak Typing
- c. Static Binding/ early binding

d. Dynamic Binding/ late binding

39. Which of the following statements about Persistence is correct?

- a. It is the enforcement of the class of an object, such that objects of different types may not be interchanged, or at the most they may be interchanged only in very restricted ways.
- b. It is the property of an object through which its existence transcends time and/or space.
- c. It is the property that distinguishes an active object from one that is not active.
- d. All of the mentioned

40. What is that concept in type theory in which a single name may denote objects of many different classes that are related by some common super class referred to _____

- a. Monomorphism
- b. Type Checking
- c. Polymorphism
- d. Generalization

41.A _____ is an abstraction of something for the purpose of understanding it before building it.

- a. Mock-up
- b .Model
- c. Prototype
- d. All of the above

42.Object-Oriented Modelling allows-

- a. Higher productivity
- b. lower maintenance cost
- c. better quality can be achieved
- d. All of the above

43.During the design phase, the overall _____ of the system is described.

- a. Architecture
- b. System flow
- c. Data flow
- d. None

44.The Object Oriented Modeling for building systems takes the _____ as the basis.

- a. Class
- b. Object
- c. Model
- d. Modules

45.The basic step/s of system designing using Object-Oriented Modelling is/are _____

- a. System Analysis
- b. System Design
- c. Object Design
- d. All of the above

46. In which of the following phase, the class objects and the interrelationships of these classes are translated and actually coded by using an object-oriented programming language?

- a. Analysis
- b. Design
- c. Development
- d. Testing

47. In which of the following phase required databases are created and the complete system is transformed into an operational one?

- a. Analysis
- b. Design
- c. Implementation
- d. None

48. The OMT consists of three related but different viewpoints each capturing important aspects of the system

- a. The static, dynamic, and functional behaviors of the system
- b. Analysis, Design, Coding
- c. Real-life environment, objects, and behavior of a system
- d. None

49. A class describes ——

- a. a collection of similar objects
- b. a template where basic characteristics of a set of objects are defined
- c. the basic attributes and the operations of the objects of that type
- d. All of the above

50. An/A —— is a data value held by objects in a class.

- a. Data
- b. Functions
- c. Attributes
- d. None of the above

51. In OMT, the link is represented by a

- a. Line
- b. The line labeled with its name
- c. Arrow labeled with its name
- d. None

52. A link is a physical or conceptual connection between

- a. Object instances
- b. Classes
- c. Objects
- d. None

53. Which of the following specifies how many instances of one class may relate to a single instance of an associated class

- a. Link or association
- b. Multiplicity

- c. Relationships
- d. None

54. To show multiplicity a solid ball is the symbol for “many”, meaning

- a. zero
- b. one or more
- c. Zero, one or more
- d. None

55. A line without any ball indicates _____

- a. No association
- b. Association
- c. one-to-one association
- d. None

56. The object model describes the _____ of a system.

- a. static
- b. structural
- c. data aspects
- d. Static, structural, and data aspects

57. The dynamic model describes the _____ aspect of a system

- a. temporal
- b. behavioral
- c. control
- d. Temporal, behavioral, and control

58. The functional model describes the _____ aspects of a system.

- a. Behavioral
- b. transformational
- c. functional
- d. All of the above

59. A link is a physical or conceptual connection between

- a. Objects
- b. Object instances
- c. Classes
- d. All of the above

60. An association maybe _____

- a. unary
- b. binary
- c. ternary or n-ary
- d. All of the above

61. Which of the following specifies how many instances of one class may relate to a single instance of an associated class?

- a. Multiplicity
- b. Association

- c. Degree
- d. None of the above

62. The attribute(s) is/are associated with the association is called

- a. Link attribute
- b. Derived attribute
- c. Multi-valued attribute
- d. None

63. Which of the following is a property of the links in an association?

- a. Attribute
- b. Link attribute
- c. Degree of attribute
- d. None

64. Which of the following is a name that uniquely identifies one end of an association?

- a. Label name of the link
- b. Role name
- c. Link attribute name
- d. None

65. Which of the following is the “part-whole” or “a-part-of” relationship in which objects representing the component of something are associated with an object representing the entire assembly?

- a. Generalization
- b. Specialization
- c. Aggregation
- d. None

66. Aggregations are drawn like associations, using a small hollow _____ indicating the assembly end of the relationship.

- a. Diamond
- b. Box
- c. Circle
- d. Triangle

67. Aggregation can be _____

- a. fixed
- b. variable
- c. recursive
- d. All of the above

68. Inheritance is a _____ relationship between two classes.

- a. “is-a”
- b. Part of
- c. Both a and b
- d. None

69. Generalization is reverse of _____

- a. Aggregation
- b. Inheritance
- c. Specialization
- d. None

70. When a class replaces the implementation of a method that it has inherited is called —

- a. Overloading
- b. Overriding
- c. Overwriting
- d. None

71. When a (derived) class inherits properties (data and operations) from a single base class, it is called as

- a. Inheritance
- b. single inheritance
- c. Multilevel inheritance
- d. None

72. _____ describes those aspects of the system that changes with the time

- a. Object model
- b. Functional model
- c. Dynamic model
- d. None of the above

73. Which of the following model implement control aspects of the system?

- a. Object model
- b. Dynamic model
- c. Functional model
- d. None of the above

74. Which of the following models depicts states, transitions, events, and actions?

- a. Functional model
- b. Dynamic model
- c. Object model
- d. None of the above

75. A/An _____ is a one-way transmission of information from one object to another.

- a. Message
- b. Event
- c. Change of event
- d. None of the above

76. The functional model is represented graphically with _____

- a. State transition diagram
- b. Entity-relationship diagram
- c. Data flow diagrams
- d. None

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98. Which design pattern ensures that only one object of particular class gets created

- a. Observer pattern
- b. Strategy pattern
- c. Singleton Pattern
- d. Facade Pattern

99. MVC is a three layer architecture that contains a

- a. model, view and controller
- b. machine, view, content object
- c. machine, view, controller
- d. model, view and content objects

100. Which of the following patterns create objects without revealing the creation logic to the user and refer to newly formed objects using a common interface

- a. Factory pattern
- b. Transfer object pattern
- c. Abstract Factory pattern
- d. Singleton pattern

Answer Key :

1.b	11.d	21.a	31.b	41.d	51.b	61.a	71.b	81.a	91.b
2.c	12.c	22.a	32.c	42.d	52.a	62.a	72.c	82.a	92.a
3.a	13.c	23.d	33.d	43.a	53.b	63.b	73.b	83.b	93.a
4.b	14.a	24.c	34.a	44.b	54.c	64.b	74.b	84.a	94.a
5.b	15.b	25.c	35.b	45.d	55.c	65.c	75.b	85.c	95.c
6.a	16.d	26.b	36.c	46.c	56.d	66.a	76.c	86.c	96.b
7.a	17.d	27.a	37.c	47.c	57.d	67.d	77.b	87.a	97.c
8.a	18.b	28.c	38.d	48.a	58.d	68.a	78.c	88.b	98.c
9.b	19.b	29.b	39.b	49.d	59.b	69.c	79.b	89.d	99.a
10.a	20.a	30.c	40.c	50.c	60.d	70.b	80.b	90.d	100.a

