MCQ: OOFA

1) 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

2) 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) Polymorphism
b) Modularity
c) Hierarchy
d) Abstraction

3) 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

4) Single inheritance, Multiple inheritance, and Aggregation comes under _____
a) Modularity
b) abstration
c) Hierarchy.
d) None of the mentioned.

5) 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

6) Which of the following programming language are object oriented in nature?
a) Smalltalk and Simula
b) FORTRAN and ALGOL
c) C and Ada
d) C and ALGOL

7) Callback is an operation provided by
a) Inheritance
b) Encapsulation

c) Modularity
d) Abstraction

Note: A **callback** is a function that is passed as an argument to another function or method and is expected to be executed (or "called back") at a later time within that function or method.

8) Inheritance is an example of which type of hierarchy
a) Class Structure
b) Object structure
c) both
d) None of the mentioned

9) Superclass represents _____ abstractions
a) Generalized Abstractions
b) Specialization abstractions
c) both
d) None of the mentioned

10) Subclass represents _____ abstractions
a) Generalized abstractions
b) Specialization Abstractions
c) Both
d) None of the mentioned

11) Choose the incorrect statement in terms of Objects.
a) Objects are abstractions of real-world
b) Objects can't Manage themselves.
c) Objects encapsulate state and representation information.
d) All of the mentioned.

12) What encapsulates both data and data manipulation functions?
a) Object.
b) class.
c) Super class.
d) Sub class.

13) Which of the following is a mechanism that allows several objects in a class hierarchy to have different methods with the same name?
a) Aggregation
b) Polymorphism.
c) Inheritance.
d) All of the mentioned.

14) Which of the following points related to Object-oriented development (OOD) is true?
a) OOA is concerned with developing an object model of the application domain

b) OOD is concerned with developing an object-oriented system model to implement requirements
c) All Mentioned Above
d) None of the mentioned

15)How is generalization implemented in Object Oriented programming languages?
a) Inheritance.
b) Polymorphism.
c) Encapsulation.
d) Abstract classes.

16)Which of the following is a disadvantage of OOD?
a) Easier maintenance
b) Objects may be
understood as stand-alone entities
c) Objects are potentially reusable components
d) None Mentioned Above

17)Which of the following describes" Is-a-Relationship"?
a) Aggregation
b) Inheritance.
c) Dependency.
d) All of the mentioned.

18)Object that collects data on request rather than autonomously is known as
a) Active object
b) Passive Object
c) Multiple instance
d) None of the mentioned

19)Objects are executed
a) sequentially
b) in Parallel
c) Sequentially & Parallel
d) none of the mentioned

20)Which of the following is not needed to develop a system design from concept to detailed object-oriented design?
a) Designing system architecture
b) Developing design models
c) Specifying interfaces
d) Developing Debugging System

21)Which of the following is a dynamic model that shows how the system interacts with its environment as it is used?
a) system context model

b) Interaction Model
c) environmental model
d) both system context and interaction

22)Which of the following is a structural model that demonstrates the other systems in the environment of the system being developed?
a) System Context Model.
b) interaction model.
c) environmental model.
d) both system context and interaction.

23)Which model describes the static structure of the system using object classes and their relationships?
a) Sequence model
b) Subsystem model
c) Dynamic model
d) Structural Model

24)Which model shows the flow of object interactions?
a) Sequence Model
b) Subsystem model
c) Dynamic model
d) Both Sequence and dynamic model

25)The object _____
a) Can be passed by reference
b) Can be passed by value
c) Can be passed by Reference or Value
d) Can be passed with reference

26)Which feature may be violated if we don't use classes in a program?
a) Inheritance can't be implemented
b) Object must be used is violated
c) Encapsulation only is violated
d) Basically all Features of OOP get Violated

27)The feature by which one object can interact with another object is _____
a) Data transfer
b) Data binding
c) Message Passing
d) Message reading

28)Which among the following, for a pure OOP language, is true?
a) The language should follow 3 or more features of OOP
b) The language should follow at least 1 feature of OOP

c) The language must follow only 3 features of OOP
d) The Language must follow all the Rules of OOP.

29)Which of the following property is associated with objects?
a) State
b) Behavior
c) Identity
d) All Mentioned Above

30)A _____ is a description of a set of objects that share the same attributes, operations, relationships, and semantics.
a) Structure
b) Class.
c) Constructor.
d) Function.

31)Which of the following approach help us understand better about Real time examples, say Vehicle or Employee of an Organization?
a) Procedural approach
b) Object Oriented Approach
c) Both a and b
d) None of the mentioned

32)Which of the following Paradigm is followed by Object Oriented Language Design?
a) Process oriented model
b) Data Controlling Access to Code.
c) Both a and b.
d) None of the mentioned.

33)Which of the following approach is followed by Object Oriented Language during the execution of a program?
a) Bottom-Up Approach
b) Top-down approach
c) Both a and b
d) None of the mentioned

34)Which of the following is/are advantage of using object-oriented programming?
a) Code Reusability
b) Can create more than one instance of a class without interference
c) Platform independent
d) All Mentioned Above

35)Which among the following is the main use of object?
a) to create instance of a function
b) To create instance of a program

c) To create Instance of Class
d) to create instance of structures

36)Which among the following is not a property of an object?
a) Identity
b) properties
c) attributes
d) Names.

37)Class is _____ abstraction.
a) Object
b) Logical.
c) Real.
d) Hypothetical.

38)Object is _____ abstraction.
a) Object
b) Logical
c) Real.
d) Hypothetical.

39) Abstraction gives higher degree of _____
a) Class usage
b) Program complexity
c) Idealized Interface
d) Unstable interface

40)Use case descriptions consist of interaction among which of the following?
a) product
b) use case
c) actor
d) Product & Actor

41)Use case description contents include _____
a) Use case name and number
b) Actors
c) Stakeholder and needs
d) All Mentioned Above

42)What are the methods in which use case descriptions can be written?
a) Actors in a use case are almost always stakeholders
b) Preconditions must be true before statement begins
c) Need list should be reviewed when writing each use case
d) All Mentioned Above

43)Which descriptions are true for the use case description format?
a) Underline text refers to another use case

b) Extensions section uses complicated numbering scheme
c) Indentation is used to make extensions easier to read
d) All Mentioned Above

44)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

45)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

46)UML provides which of these levels of visibility that can be applied to attributes and operations?
a) Public
b) Package
c) Protected and Private
d) All Mentioned Above

Answers:

1.(c) 11.(b) 21.(b) 31.(b) 41.(d)

2.(d) 12.(a) 22.(a) 32.(b) 42.(d)

3.(b) 13.(b) 23.(d) 33.(a) 43.(d)

4.(c) 14.(c) 24.(a) 34.(d) 44.(d)

5.(c) 15.(a) 25.(c) 35.(c) 45.(a)

6.(a) 16.(d) 26.(d) 36.(d) 46.(d)

7.(d) 17.(b) 27.(c) 37.(b)

8.(a) 18.(b) 28.(d) 38.(c)

9.(a) 19.(c) 29.(d) 39.(c)

10.(b)20.(d) 30.(b) 40.(d)