**Chapter (1-4)**

**Q1.**The goal is to identify risk and focus on it early.  
  
A) RAD  
B) **Spiral**  
C) Incremental  
D) Sequential

**Q2.** Rapid application development (RAD) is an incremental software development process  
model that emphasizes an extremely long development cycle.  
  
A) True  
B) **False**

**Q3.** SDLC stands for  
a) **Software Development Life Cycle**  
b) System Development Life cycle  
c) Software Design Life Cycle  
d) System Design Life Cycle

**Q4**. The first step in the systems development life cycle (SDLC) is:  
A. Analysis.  
B. Design.  
**C. Problem/Opportunity Identification.**  
D. Development and Documentation

**Q5.**Actual programming of software code is done during the \_\_\_\_\_\_\_\_\_\_\_\_   
step in the SDLC.  
A. Maintenance and Evaluation  
B. Design  
C. Analysis  
**D. Development and Documentation**

**Q6.**

\_\_\_\_\_\_\_\_\_\_\_\_ is the process of translating a task into a series of   
commands that a computer will use to perform that task.  
A. Project design  
B. Installation  
C. Systems analysis  
**D. Programming**

**Q7.** Which one of the following is not stage of SDLC ?

1. System analysis
2. **Problem identification**
3. System Design
4. Feasibility study

Q8. Which of the following is the most important phase of SDLC ?

1. **Requirements analysis**
2. Design
3. Testing
4. Coding

Q9. UML stands for

1. **Unified Modelling Language**
2. Unified Markup Language
3. Undefined Modelling Language
4. Undefined Markup Language

Q10. Class diagram, component diagram, object diagram and deployment diagram are considered as types of

1. **structural diagrams**
2. behavioral diagrams
3. non-behavioral diagrams
4. non structural diagrams

Q11. 1. Usecase descriptions consists of interaction among which of the following ?  
a) Product  
b) Usecase  
c) Actor  
**d) a, c**

Q12. The UML supports event-based modeling using \_\_\_\_\_\_\_\_\_\_\_\_ diagrams.  
a. Deployment  
b. Collaboration  
**c. State chart**

d. activity

**Q13.** Activity diagrams are used to model the processing of data.  
**a) True**  
b) False

**Q14.** Which model in system modelling depicts the static nature of the system ?  
a) Behavioral Model  
b) Context Model  
c) Data Model **d) Structural Model**

**Q15.** Requirements engineering is a generic process that does not vary from one software project to another.

1. **True**
2. False

Q16. Which of following is not a UML diagram used creating a system analysis model?

1. Activity diagram
2. **Dataflow diagram**
3. State diagram
4. Class diagram

Q17.What is the first step of requirement elicitation ?  
**a) Identifying Stakeholder**  
b) Listing out Requirements  
c) Requirements Gathering

d) Analyzing Requirements

Q18. Arrange the tasks involved in requirements elicitation in an appropriate manner.  
i. Consolidation  
ii. Prioritization  
iii. Requirements Gathering  
iv. Evaluation  
a) iii, i, ii, iv  
**b) iii, iv, ii, i**  
c) iii, ii, iv, i  
d) ii, iii, iv, i

Q19. What requirement gathering method developed at IBM in 1970s is used for managing requirement elicitation ?  
a) JAD  
b) Traceablity  
c) FAST  
**d) Both a and b**

**Q20.** Requirements elicitation is a cyclic process  
**a) True**  
b) False

Q21. In object oriented design of software which of the following is not true?

[A] objects inherit the properties of the class

[B] classes are defined based on the attributes of the object

**[C] objects can belong to two classes**

[D] classes are always different

Q22.

**OOD languages provide a mechanism where methods performing similar tasks but vary in arguments, and that can be assigned to the same name is called \_\_\_\_\_ .**

a. Classes

b. Object

c**. Polymorphism**

d. Encapsulation

Q23. **If the objects focus on the problem domain, then we are concerned with \_\_\_\_\_\_.**

**a. Object Oriented Analysis**

b. Object Oriented Design

c. Object Oriented Analysis and Design

d. None of the above

Q24. **Which is not a step of Requirement Engineering?**

a**.** Requirements elicitation

b. Requirements analysis

**c.** **Requirements design**

d. Requirements documentation

**Q25.** UMLs are used for

1. **Object oriented module development**
2. Coding of system
3. Testing of system
4. All of these

Q26 what is Realization

1. **Semantic relationship between components of class**
2. Syntactic relationship between components of class

Q29.software system can be analyzed using which modeling technique

1. **Business modeling**
2. Component modeling
3. System modeling
4. Software modelling

Q30. A state machine diagram is also known as

1. **state diagram**
2. machine diagram
3. event diagram
4. object diagram

**MODULE 2**

**(CHAPTER4-CHAPTER 8)**

Q1.Base classes are known as

1. **Super class**
2. Subclass
3. Derived class
4. Big class

Q2which is not the relationships among the class

a. association

**b. component**

c. generalization

d. realization

Q3.what are attributes?

a. actions of classes

**b. properties of classes**

c.notations

d.visibility

Q4. Static modeling technique is used to depict the

1. Dynamic constituents
2. **Static consitituents**
3. Static behavior
4. Dynamic behavior

Q5. Which of the following visibilities provided by UML indicates that the attribute/operation in the base class are protected?

1. +
2. –
3. **#**
4. ~

Q6. Which is not a part of syntax for operations?

1. Visibility
2. Name
3. Parameter-list
4. **Type**

Q7. Which one is not a parameter type?

1. In
2. Out
3. **Outin**
4. Inout

Q8. Which shape is used for object diagram?

1. **Rectangular**
2. Triangle
3. Square
4. Oval

Q9. Which is not a type of relationship?

1. Association
2. Dependency
3. **Specification**
4. Realization

Q10. Multiplicity represents

1. **No of objects of a class connected to object of another class**
2. No of relationships of class
3. No of subclass
4. No of attributes

Q11. Which one is not type of multiplicity relationships?

1. Exactly one(1)
2. One or zero(0…1)
3. Many(0…\*)
4. **More than 0**

Q12.which of the following represents the semantic relationship between two classes such that a change in the attributes and operations of one class affects the attributes and operations of the other class?

1. Generalization
2. **Dependency**
3. Realization
4. Aggregation

Q13. Which of the following visibilities provided by UML indicates that the attribute or operation is visible to the classes within the same package ?

1. +
2. –
3. #
4. **~**

Q14. What is abstract class?

1. **That does not have any direct instances**
2. That have one instances
3. That have many instances
4. That have direct instances

Q15. A parameterized class also called as

1. Abstract class
2. **Template class**
3. Factory class
4. Self-linked class

Q16. What is self linked class?

1. Class that has objects that fulfill no role
2. **Class that has objects that fulfill more than one role**
3. Class that has objects that fulfill one role
4. Class that has objects have same roles

Q17.Factory class is

1. Class having multiple objects having different attribute values
2. Class having multiple objects having one attribute value
3. Class having objects with no attribute value
4. **Class having objects wth same attribute value**

Q16 . association relationship between two objects of the same class is represented by

1. Generalization
2. Qualified association
3. **Recursive aggregation**
4. Dependency

Q17. Association relationship that relates an object of a class to a particular object of another class?

1. Dependency
2. Recursive association
3. Generalization
4. **Qualified association**

Q18. An interface is

1. **Collection of operation that are used to represent the services provided by a class or component**
2. Collection of attribute of objects in class
3. Collection of relationship in a class within the objects
4. Collection of objects that belong to same class

Q19. Dynamic modeling represents

1. technique that represents static components of a software system
2. technique that represents no of classes involved in system
3. **technique that represents the behavior of the static constituents of a software system**
4. technique that represents design of the system.

Q20. Which diagram are used to represent the behavior of static aspects of interaction diagram

1. usecase diagram
2. interaction diagram
3. component diagram
4. **collaboration diagram**

Q21. Which of the following diagrams represents the interaction among objects in the form of messages?

1. composite structure diagram
2. **communication diagram**
3. timing diagram
4. interaction overview diagram

Q22. Dynamic modeling is also known as

1. static modeling
2. structural modeling
3. **behavioral modeling**
4. system modeling

Q23. Which of these is not a event?

1. Call event
2. Signal event
3. Time event
4. **Action event**

Q24. Event trigger is one which

1. Indicates a Boolean expression
2. Indicates the state that an object wil acquire after event an event occurs
3. **Signifies an occurrence that may cause a transition in the state of an object**
4. Represents the current state of the object

Q25. Whih of the following components signifies an occurrence that may cause a transition in the state of an object ?

1. Action
2. **Event trigger**
3. Source state
4. Target state

Q26. What is concurrent state?

1. When object simultaneously exists in multiple substates
2. **When object exists in two substates at a given time**
3. When object exists in only one substates
4. When object is not present in any of the substates

Q27. Which of the following elements of activity diagram represents the control flow that performs particular operation?

1. Action state
2. Activity state
3. **Transition**
4. Decision

Q28. What is complex transition?

1. **transition that has more than one source or target state**
2. transition that has no target state
3. transition that has many target state
4. transition that has no source and target state

Q29. Which one is a flow?

1. Event flow
2. Action flow
3. State flow
4. **Object f low**

Q30. What is signal?

1. **Are the events that occur outside the process but still have a impact on the process.**
2. Are the events that occur inside the process but still have a impact on the process
3. Are the events that occur inside the process but does not have impact on process
4. Are the events that occur outside the process but does not have impact on the process

**Module 3(chapter9-13)**

Q1. Which diagram depicts the constituents of a software system groped together based on a specific criteria?

1. Component diagram
2. Sequence diagram
3. **Package diagram**
4. Deployment diagram

Q2. The application can be logically portioned into-

1. Classes
2. **Subsystems**
3. System
4. Module

Q3. Which symbol indicates the constituent is private and as a result is not accessible to the constituents outside the package?

1. **–**
2. +
3. #
4. $

Q4. Which package contains order class and order database table?

1. Parts package
2. Tender package
3. Tender policy package
4. **Order package**

Q5.which is not the technique of modeling the components of a software system?

1. Source code modeling
2. **Class modeling**
3. Executable file modeling
4. Database modeling

Q6. In UML node is represented by

1. **3-D rectangular box**
2. Oval
3. 2-D figure
4. Triangle

Q7. Which of the following diagrams is used to visualize the hardware on which the software components need to be deployed?

1. Package diagram
2. Component diagram
3. **Deployment diagram**
4. Interaction overview diagram

Q8. Set of principles and guidelines that provide the standard solution to a given problem is known as

1. Responsibility
2. **Pattern**
3. Components
4. Methods

Q9. What is the full form of GRASP?

1. General roles assignment software pattern
2. **General responsibility assignment software patterns**
3. General responsibility assignments system patterns
4. General roles assignments system patterns

Q10. What is creator pattern?

1. **Which provides the guidelines for assigning respobsibility to a new object of a class.**
2. Which provides the guidelines for handling system events.
3. Which provide the techniques for creating objects .
4. Which describes the class .

Q11 . A composite pattern represents

1. Simple object
2. **Complex object**
3. Class
4. Subclass

Q12. Which is not a behavioral pattern

1. Chain of responsibility
2. Command
3. **Rule**
4. Observer

Q13.Which of the following pattern provides guidelines to assign responsibility to a class that contain the relevant information?

1. **Expert**
2. Creator
3. Controller
4. Structural

Q14. Which of the following structural design patterns simplifies the software development by providing simplified interface?

1. Proxy
2. Decorator
3. Composite
4. **Facade**

Q15. The goal of the quality process is to

1. **Examine the quality**
2. Developing the model
3. Developing classes
4. Developing the system

Q16.which is not among the three dimension of quality process?

1. Technology
2. Methodology
3. **Psychology**
4. Sociology

Q17.Which of the following quality checks ensures that the series of activities and tasks performed to develop software products are correct?

1. Code quality
2. **Process quality**
3. Management quality
4. Model or architectural

Q18.

What does this notation specifies?

1. Role
2. **Flow of activity**
3. Task
4. Output

Q19.

What does this notation specifies

1. Task
2. Role
3. Output
4. **Process component**

Q20. Which of the following process components indicates the execution of a sequence of process components with varying intensity?

1. **Iteration**
2. Output
3. Task
4. Activity

Q21.what will extend the vocabulary of UML?

1. Constraints
2. Tagged values
3. **Stereotypes**
4. Data

Q22. Constraints represents

1. Project management related information
2. **Represents restriction and relationships**
3. Properties of the builing block of UML
4. Information of UML diagrams

Q23. Which is not the process component of the software development process?

1. Requirement modeling
2. Coding
3. System designing
4. **Making diagrams**

Q24. What is CAF?

1. **Calculating adjustment factor**
2. Component adjustment factor
3. Component adjustment file
4. Calculating adjustment file

Q25. What is functional point?

1. Developing technique
2. **Estimation technique**
3. Management technique
4. Requirement gathering technique

Q26. Transaction function points are of

1. 2 types
2. Many types
3. **3 types**
4. 4 types

Q27. Total unadjusted FP count(TUFP)

1. TUFP= sum of data FPs - sum of transaction FPs
2. TUFP= sum of data FPs \* sum of transaction FPs
3. TUFP= sum of data FPs / sum of transaction FPs
4. **TUFP= sum of data FPs + sum of transaction FPs**

Q28. To calculate the VAF you need to determine the degree of influence (DI), 5 represents

1. Average influence
2. **Strong influence throughout**
3. Incidential influence
4. Moderate influence

Q29. What is AFP?

1. Approximate function point
2. Approximate function project
3. **Adjustment function point**
4. Adjustment function project

Q30. Formula for AFP is

1. **AFP =(TUFP+ CFP) \* VAF**
2. AFP =(TUFP+ CFP) -VAF
3. AFP =(TUFP+ CFP) / VAF
4. AFP =(TUFP\* CFP) + VAF

Q31. Which one is not the class based design metrics for object oriented systems

1. Depth of inheritance tree
2. Weighted methods per class
3. Response for a class
4. **Number of components**

Q32. Which of the following metrics is used to measure the complexity of a class in terms of complexity of its operations?

1. NOC
2. DIT
3. **WMC**
4. RFC

Q33. Which one is false –

To measure the complexity of class diagram you need to determine

1. Size of its classes
2. Number of relationships among classes
3. Visibility of attributes of the classes
4. **Number of objects of the class**