SETHU INSTITUTE OF TECHNOLOGY

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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15UCS502 – Object Oriented Analysis and Design

Multiple Choice Questions

1. Object oriented analysis means.
A. Finding and describing the objects or concepts in the problem domain.
B. Collaborating the objects or concepts in the problem domain.
C. Encapsulating the objects or concepts in the problem domain.
D. Programming the objects or concepts in the problem domain.
ANSWER: A

2. Object oriented design means.
A. Arranging software objects to fulfill the requirements.
B. Defining and collaborate software objects to fulfill the requirements.
C. Creating software objects to fulfill the requirements.
D. Defining and collaborate software objects to fulfill the requirements.
ANSWER: B

UML is a.
A. Unified markup language.
B. User defined modeling language.
C. Unified modeling language.
D. User defined markup language.
ANSWER: C

UML is used as programming language because.
A. Modified by developers.
B. Code will be generated by the user.
C. Code will be automatically generated.
D. Code will be executed by UML.
ANSWER: C

UP has been emerged as a.
A. Design process.
B. Iterative process.
C. Programming process.
D. Technical process.
ANSWER: B

Inception phase is used to.
A. Set vision, business case, scope, estimation.
B. Risk identification.
C. Iterative implementation.
D. Deployment.
ANSWER: A

Best practices in the UP.
A. Tackle high risk and early iteration.
B. Beta test.
C. Decision making.
D. Scheduling of projects.
ANSWER: A
Find out the artifact below.
A. Iteration.
B. Text documents.
C. Disciplines.
D. Environment.
ANSWER: B
POS system used to.
A. Purchase products.
B. Calculate tax.
C. Record sale.
D. Maintain database.
ANSWER: C
A description of customized UP step is called.
A. Development case.
B. Iteration plan.
C. Glossary.
D. Risk list.
ANSWER: A
Features, capabilities and security type of requirements comes under the category of.
A. Usability.
B. Functional.
C. Reliability.
D. Supportability.
ANSWER: B
A use case is a collection of.
A. Related success and support scenarios.
B. system success and support scenarios.
C. Related success and failure scenarios.
D. system success and support scenarios.
ANSWER: C
What diagram illustrate actor interactions and the operations initiated by them.
A. Sequence diagram.
B. Use case diagram.
C. Class diagram.
D. Package diagram.
ANSWER: A
What diagram illustrate the logical architecture as part of the design.
A. Class diagram.
B. Package diagram.
C. Component diagram.
D. State diagram.
ANSWER: B
What diagram to visualize workflows and business process.

A. Use case diagram.
B. State diagram.
C. Activity diagram.
D. Class diagram.
ANSWER: C
What test can help to find useful use cases.
A. Boss test.
B. Alpha test.
C. Beta test.
D. Black box Test.
ANSWER: A
In which model the diagrams are interpreted as describing things in a situation of the real word or domain of interest.
A. Conceptual perspective.
B. Specification perspective.
C. Implementation perspective.
D. Domain perspective.
ANSWER: A
Which actor is responsible for the use cases process sale, handle payment.
A. System admin.
B. Cashier.
C. Customer.
D. Manager.
ANSWER: B
EBP means.
A. Elementary building process.
B. Elementary business process.
C. Elaboration business process.
D. Elaboration building process.
ANSWER: B
Find out the visualizing tool.
A. Mozilla.
B. EBP.
C. UML.
D. ERP.
ANSWER: C
GRASP means.
A. General responsibility assignment software pattern.
B. Guideline responsibility assigned software pattern.
C. General responsibility assembled software pattern.
D. General responsibility assigned structural pattern.
ANSWER: A
Initiating action in other objects is.
A. Assigning responsibility.
B. Doing responsibility.
C. Knowing responsibility.
D. Behavior responsibility.
ANSWER: B
Knowing about related objects is.
A. Assigning responsibility.
B. Doing responsibility.

C. Knowing responsibility.
D. Behavior responsibility.
ANSWER: C
Patterns is a.
A. Problem guide.
B. Assignment of responsibility.
C. Named description of a problem and solution.
D. Technology.
ANSWER: C
Which pattern is the most basic responsibility assignment principle in object design?.
A. Creator.
B. Information expert.
C. High cohesion.
D. Low coupling.
ANSWER: B
Measure of how strongly one element is connected to other elements are called as.
A. Coupling.
B. Cohesion.
C. Creator.
D. Expert.
ANSWER: A
Measure of how functionally related the operations of a software element are called as.
A. Coupling.
B. Cohesion.
C. Creator.
D. Controller.
ANSWER: B
Who should be responsible for creating a new instance of some class?.
A. Coupling.
B. Cohesion.
C. Creator.
D. Controller.
ANSWER: C
Who should be responsible for receiving or handling a system operation message?.
A. Coupling.
B. Cohesion.
C. Creator.
D. Controller.
ANSWER: C
A class has sole responsibility for a complex task in one functional area is called.
A. Low cohesion.
B. High cohesion.
C. Low coupling.
D. High coupling.
ANSWER: A
How to provide a stable interface, through an in intermediate adapter object?.

A. Factory method.
B. Adapter method.
C. Bridge method.
D. Observer method.
ANSWER: B
Factory method is an example of.
A. Structural pattern.
B. GRASP pattern.
C. Creational pattern.
D. Behavioral pattern.
ANSWER: C
Adapter method is an example of.
A. Structural pattern.
B. GRASP pattern.
C. Creational pattern.
D. Behavioral pattern.
ANSWER: A
Strategy method is an example of.
A. Creator pattern.
B. Structural pattern.
C. GRASP pattern.
D. Creational pattern.
ANSWER: B
Behavioral pattern examples are.
A. Factory and singleton.
B. Bridge and adapter.
C. Strategy and observer.
D. Adapter and singleton.
ANSWER: C
LRG means.
A. Low representational gap.
B. Low responsibility group.
C. Low reaction gap.
D. Low representational group.
ANSWER: A
Which one is not a pattern.
A. Creator pattern.
B. Structural pattern.
C. Idea pattern.
D. Creational pattern.
ANSWER: A
Which pattern is not a GRASP pattern?.
A. Creator.
B. Adapter.
C. High cohesion.
D. Low coupling.
ANSWER: B
Example of structural pattern is.
A. Factory method.
B. Bridge method.
C. Observer method.
D. Strategy method.

ANSWER: B
Example of creator pattern is.
A. Bridge method.
B. Observer method.
C. Factory method.
D. Adapter method.
ANSWER: C
The primary purpose of a use case diagram is.
A. to construct a vocabulary that is understood by both the users and analysts.
B. to show the users interaction with the system.
C. to uncover additional details such as attributes and methods of a class.
D. model the interaction between the system and its environment.
ANSWER: B
Which of the following Is NOT in the Inception phase of the Unified Process.
A. Create a business case for the proposed system.
B. Do a feasibility analysis for the proposed system.
C. Perform business modeling.
D. Define the necessary database tables.
ANSWER: D
Which of the following is NOT in the Elaboration phase of the Unified process.
A. Completion of the business plan.
B. Completion of the risk assessment.
C. Forming the project plan.
D. Creating a Vision for the proposed system.
ANSWER: D
The three types of relationships use cases have in a use case diagram include:.
A. Extension, representation, elaboration.
B. Extension, inclusion, and generalization.
C. Inclusion, representation, realization.
D. Elaboration, generalization, boundarization.
ANSWER: B
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
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
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.
ANSWER: C
A Class consists of which of these abstractions?.
A. Set of the objects.
B. Operations.
C. Attributes.
D. All of the mentioned.
ANSWER: D
What does conceptual modelling represents ?.
A. Responsibility.
B. Attributes.
C. Important relationships between them.
D. All of the above.
ANSWER: D
An association indicates the relationship between _____.
A. nodes.
B. classes.
C. interfaces.
D. objects.
ANSWER: B
Which of the following are not in aggregation in " Car as a system".
A. Car and seat covers.
B. Car and music system.
C. Car and color.
D. Car and engine.
ANSWER: D
The visual representation of conceptual class is called.
A. data model.
B. domain model.
C. conceptual model.
D. design model.
ANSWER: B
An association contains numerical value is called.
A. multiplicity.
B. role.
C. qualified association.
D. aggregation.
ANSWER: A
Aggregation is which of the following?.
A. Expresses a part-of relationship and is a stronger form of an association relationship.
B. Expresses a part-of relationship and is a weaker form of an association relationship.
C. Expresses an is-a relationship and is a stronger form of an association relationship.
D. Expresses an is-a relationship and is a weaker form of an association relationship.
ANSWER: B
Composition is a stronger form of which of the following?.

A. Aggregation.
B. Encapsulation.
C. Inheritance.
D. All the above.
ANSWER: A
Weak entities are represented in UML diagrams by using aggregations called.
A. qualified segregation.
B. non-qualified segregation.
C. non-qualified aggregation.
D. qualified aggregation.
ANSWER: D
The fundamental concept of domain model is.
A. Generalization.
B. Aggregation.
C. Association.
D. None of the above.
ANSWER: A
A potential subclass should conform to the .
A. 100% rule.
B. Is a rule.
C. All the above.
D. None of the above.
ANSWER: C
If every member of a class C must also be a member of subclass, then class C is called an.
A. Conceptual subclass.
B. Abstract conceptual class.
C. Description class.
D. Super class.
ANSWER: B
What type of relationship for “Human body and Heart”.
A. Aggregation.
B. Composition.
C. Association.
D. Multiplicity.
ANSWER: B
A sequence diagram is.
A. is a model of the states of an object and the events that cause the object to change from one state to another.
B. a picture of the movement of data between external entities and the processes and data stores within the system.
C. a detailed, logical representation of the entities, associations, and data elements for an organization or business area.
D. depicts the interaction among objects during a certain period of time.
ANSWER: D
Which of the following is an example of a guard condition?.
A. [date<due date].
B. /date<due date/.
C. *date<due date*.
D. exit/date ^ due date.

ANSWER: A
A depiction of the interactions among objects during a certain period of time best describes a:.
A. sequence diagram.
B. composition diagram.
C. deployment diagram.
D. class diagram.
ANSWER: A
On a sequence diagram, an asynchronous message is shown as a(n).
A. full, solid arrowhead.
B. transverse tick mark.
C. hollow arrowhead.
D. half arrowhead.
ANSWER: D
Which of the following statements are TRUE about Use Cases?.
A. Use cases provide the basis of communication between sponsors and developers in planning phase.
B. Use cases description provides a good source to identify domAin concepts.
C. A use case is an interaction between a user and a system.
D. All the above.
ANSWER: D
Class diagrams at conceptual level should include.
A. attributes ONLY .
B. operations ONLY.
C. both attributes and operations.
D. None of the above.
ANSWER: A
What are the strengths and weakness of Interaction Diagrams?.
A. when you want to look at the behavior of several objects within a single use case.
B. they are good at precise definition of the behavior.
C. they are good at showing collaborations among objects.
D. A & C only.
ANSWER: D
Package diagrams are designed for.
A. organizing a large project into components.
B. depicting the overall structure of a system.
C. assisting testing.
D. All the above.
ANSWER: D
Which statements are true for a use case?.
A. a use case captures some user-visible and non-visible functions.
B. a use case must be initiated by an actor.
C. a use case can be traced to a discrete goal.
D. B & C only.
ANSWER: D
Which statements is false for an Actor?.
A. an actor is a role a user plays with respect to the system.
B. generalization is not applicable to actors.
C. an actor does not need to be human. A subsystem or external system can be modelled as an actor.

D. B only.
ANSWER: D
Which are valid relationships in Use Case Diagrams?.
A. Subtyping.
B. Include.
C. Extract.
D. Lifeline.
ANSWER: B
Which statements are true about associations in Class Diagrams?.
A. It is good practice to name every association and most data modelers prefer to name association using a "verb".
B. Most object modelers prefer to assign role name using a "noun" to association.
C. If there is no name on the role, the implied name is the name of target class.
D. B only.
ANSWER: D
Which of the following statement are true about collaboration diagrams?.
A. The numbering scheme starts from 0.
B. UML object naming syntax - objectName : ClassName.
C. Collaboration Diagrams are preferred because the layout indicates how objects are statically connected.
D. Interaction diagrams can support complex conditional or looping behavior either by creating separate diagrams for each scenario or by inserting conditions on message.
ANSWER: B
Which of the following statements are true about Package Diagrams?.
A. Package in UML is similar to Java, to avoid name collision.
B. Package is a grouping mechanism that can be applied to classes only.
C. Package diagrams are particularly useful for testing.
D. Package dependency and class dependency are not the same.
ANSWER: C
Which pattern to use when more than one object can handle a request, and the handler is unknown?.
A. Chain of Responsibility.
B. Command.
C. Strategy.
D. Observer.
ANSWER: A
Java.util.Enumeration is an example of which pattern?.
A. Iterator.
B. Command.
C. Observer.
D. Strategy.
ANSWER: C
Which are considered forces to select a Strategy Pattern?.
A. A client needs to use a family of related objects.
B. A change to an object requires changing other objects.
C. A client needs to choose from multiple algorithms.
D. Multiple classes are the same but differ only in their behaviors.

ANSWER: C
Which pattern is most appropriate when a decision must be made at the time a class is instantiated?.
A. Bridge.
B. Composite.
C. Factory Method.
D. Command.
ANSWER: A
You want to create families of related objects, to be used interchangeably to configure you application. What is the most appropriate GoF pattern to use?.
A. Chain of Responsibility.
B. Abstract Factory.
C. Builder.
D. Observer.
ANSWER: A
Which of the following are participants in the GOF abstract factory design pattern ?.
A. Factory methods.
B. Factory constructors.
C. Abstract factory.
D. Abstract product.
ANSWER: A
The OO testing integration strategy involves testing.
A. groups of classes that collaborate or communicate in some way.
B. single operations as they are added to the evolving class implementation.
C. operator programs derived from use-case scenarios.
D. none of the above.
Answer: A
GUI Stands For.
A. Graphical user Interface Design.
B. Graphical Using interface Design.
C. Both B and A.
D. None of these.
Answer: A
What are the main components of user interface.
A. Presentation Language.
B. Action Language.
C. Both A and B.
D. None of these.
Answer: Both A and B
Natural language user interface can accept input in the form of.
A. String command.
B. Speech .
C. Image .
D. None of these.
Answer: B
Coding and testing are done in.
A. Ad hoc manner.
B. Module manner.
C. Structure Chart manner.

D. Program floe chart manner.
Answer: D
Testing can be applied to.
A. Design.
B. Analysis.
c. Code.
D. Requirements.
Answer: C
Testing should be stopped when.
A. all the planned tests have been run.
B. none of these.
C. time has run out.
D. it depends on the risks for the system being tested.
Answer: D
What is the purpose of test completion criteria in a test plan.
A. to know when a specific test has finished its execution.
B. to ensure that the test case specification is complete.
C. to plan when to stop testing.
D. none of these.
Answer: C
Which of the following is a major task of test planning.
A. Determining the test approach.
B. Preparing test specifications.
C. Evaluating exit criteria and reporting.
D. Measuring and analyzing results.
Answer : A
What is the objective of debugging.
A. To localize a defect.
B. To fix a defect.
C. Both A and B.
D. To increase the range of testing.
Answer: C
Verification and Validation uses.
A. Internal and External resources respectively.
B. Internal resources only.
C. External resources only.
D. External and Internal resources respectively.
Answer: D
Coupling and Cohesion is explained by _____ .
A. Software Requirement Specification.
B. Cause-Effect Graph.
C. Structure Graph.
D. Dependency Matrix.
Answer: B
Testing beyond normal operational capacity is _____.
A. Load Testing.
B. Stress Testing.
C. Performance Testing.
D. none of these
Answer: C
Behavioral testing is.
A. White box testing.

B. Black box testing.
C. Grey box testing.
D. None of these.
Answer : B
What are the various Testing Levels.
A. Unit Testing.
B. System Testing.
C. Integration Testing.
D. All of the mentioned.
Answer : D
Which of the following is a part of testing OO code.
A. Validation tests.
B. Integration tests.
C. Class tests.
D. System tests.
E.All of the mentioned.
Answer: C
What refers to the externally observable structure of an OO program.
A. Deep structure
B. Surface structure
C. Core structure
D. All of the above
Answer: B
Which of the following testing types is not a part of system testing.
A. Recovery testing.
B. Stress testing.
C. System testing.
D. Random testing.
Answer: D
Which of the following is black-box oriented and can be accomplished by applying the same black-box methods discussed for conventional software.
A. Conventional testing.
B. OO system validation testing.
C. Test case design.
D. Both Conventional testing and OO system validation testing.
Answer: D
The construction of object-oriented software begins with the creation of.
A. design model
B. analysis model
C. code levels
D. both design and analysis model
Answer: D