



**M.SC(IT) I YEAR(2017-2019)**  
**CORE: OBJECT ORIENTED ANALYSIS AND DESIGN-163D**  
**Semester : I**  
**Multiple Choice Questions**

- 1) \_\_\_\_\_ names should provide a general description of the use-case function.
  - a) **Use-case.**
  - b) Upper-case.
  - c) Lower-case.
  - d) Small-case.
  
- 2) \_\_\_\_\_ members are accessible only from within a class.
  - a) public.
  - b) **private.**
  - c) Protected.
  - d) global .
  
- 3) \_\_\_\_\_ model constitute the test plans, specifications and reports.
  - a) Use case.
  - b) Domain object.
  - c) Analysis.
  - d) **Test.**
  
- 4) \_\_\_\_\_ capture solutions, not just abstract principles or strategies
  - a) **Pattern.**
  - b) Pattern language.
  - c) Proto typing.
  - d) Software architecture.
  
- 5) \_\_\_\_\_ inheritance allows objects to change an devolve over time.
  - a) static.
  - b) **dynamic.**
  - c) multiple.
  - d) hybrid.
  
- 6) \_\_\_\_\_ is a set of tools and technologies that can be used to build an application faster.
  - a) CAST.
  - b) **RAD.**
  - c) CAD.
  - d) LED.

- 7) \_\_\_\_\_ is a simulation of the interface but no functionality.
- a) vertical prototype.
  - b) horizontal prototype.**
  - c) analysis prototype.
  - d) domain prototype.
- 8) \_\_\_\_\_ is an industrialized approach to the software development process
- a) CBD.**
  - b) CASE.
  - c) RAD.
  - d) OOD.
- 9) \_\_\_\_\_ is any function being performed for example verify password or pin in ATM system.
- a) Process.**
  - b) Dataflow.
  - c) External entity.
  - d) Data store.
- 10) \_\_\_\_\_ is not a commonly accepted prototype.
- a) vertical prototype.**
  - b) analysis prototype.
  - c) domain prototype.
  - d) class prototype.
- 11) \_\_\_\_\_ represents the relationships between objects and classes.
- a) together.
  - b) binding.
  - c) association.**
  - d) bidirectional
- 12) \_\_\_\_\_ are physical locations that the system must keep information about.
- a) Classes.
  - b) Methods.
  - c) Area.
  - d) Places**
- 13) \_\_\_\_\_ development process identify class and object relationship.
- a) Micro.**
  - b) Macro.
  - c) Booch.
  - d) Use case.

- 14) \_\_\_\_\_ presented by the state diagram and event flow diagram.
- a) Object model.
  - b) External model.
  - c) Dynamic model.**
  - d) Functional model.
- 15) \_\_\_\_\_ are scenarios for understanding system requirements.
- a) Protocols.
  - b) Rules.
  - c) Use cases.**
  - d) Cases.
- 16) \_\_\_\_\_ is the process of extracting the needs of a system and what the system must do to satisfy the requirements.
- a) analysis.**
  - b) design.
  - c) development.
  - d) prototyping.
- 17) \_\_\_\_\_ analysis is a process of understanding the system's requirements and establishing the goals of an application.
- a) Social object.
  - b) Business object.**
  - c) Personal object.
  - d) Domain object.
- 18) \_\_\_\_\_ in the textual description are considered to be classes and verbs to be methods of the classes.
- a) abstracts.
  - b) Nouns.**
  - c) Objects.
  - d) Clauses.
- 19) \_\_\_\_\_ is an object-oriented language
- a) C
  - b) Pascal
  - c) Java**
  - d) FORTRAN
- 20) \_\_\_\_\_ model can be viewed as a snapshot of system's parameter.
- a) Dynamic model.
  - b) Static model.**
  - c) Use case model.
  - d) Test model.

- 21) \_\_\_\_\_ uses icons to represent objects.
- a) **GUI.**
  - b) API.
  - c) windows.
  - d) application.
- 22) \_\_\_\_\_ are an important mechanism for classifying objects.
- a) Methods.
  - b) Objects.
  - c) **Classes.**
  - d) Codes.
- 23) \_\_\_\_\_ is the essence of good object-oriented analysis and design.
- a) Specification.
  - b) **Classification.**
  - c) Categorization.
  - d) Interpretation
- 24) \_\_\_\_\_ helps to reveal issues and gaps in the analysis and design.
- a) Communicating.
  - b) **Documenting.**
  - c) Interviewing.
  - d) Analyzing.
- 25) \_\_\_\_\_ is the process of checking to see if an object belongs to a category or a class.
- a) **Classification.**
  - b) Validation.
  - c) Testing.
  - d) Correction.
- 26) \_\_\_\_\_ is an abstract representation of system.
- a) **Model.**
  - b) Case diagram.
  - c) Class diagram.
  - d) Sequence diagram.
- 27) \_\_\_\_\_ model defines the outside (actors) and inside(users) of the system.
- a) **Use case model.**
  - b) Domain object model.
  - c) Analysis object model.
  - d) Test model.

- 28) \_\_\_\_\_ represents a set of objects related in a particular context and interaction.
- a) Context diagram.
  - b) Collaboration diagram.**
  - c) Sequence diagram.
  - d) Interaction diagram.
- 29) \_\_\_\_\_ software is expected to provide a solution to a problem.
- a) System
  - b) Application**
  - c) Engineering.
  - d) Design.
- 30) \_\_\_\_\_ are used to distinguish one type of object from another.
- a) methods.
  - b) procedures.
  - c) formulas.
  - d) classes.**
- 31) \_\_\_\_\_ diagram shows the implementation of phase of systems development.
- a) State chart diagram.
  - b) Implementation diagram.**
  - c) UML diagram.
  - d) Use case diagram.
- 32) \_\_\_\_\_ essentially are non-specific function calls.
- a) messages.**
  - b) call return.
  - c) parameter.
  - d) function call.
- 33) \_\_\_\_\_ mechanism is used to create new, high-level, and more specialized data abstractions.
- a) static-binding.
  - b) data abstraction.**
  - c) .inheritance.
  - d) data-binding.
- 34) \_\_\_\_\_ models the physical entities.
- a) Component diagram.**
  - b) State chart diagram.
  - c) Analysis diagram.
  - d) Implementation diagram.

- 35) \_\_\_\_\_ symbol represents aggregation.
- a) Square.
  - b) Diamond.**
  - c) Rectangle.
  - d) Line.
- 36) \_\_\_\_\_ is a solid path connecting two classes.
- a) Association role.
  - b) Class interface notation.
  - c) Binary association notation.**
  - d) Qualifier.
- 37) \_\_\_\_\_ requirements mean that certain requirements necessary for successful system development but not complete.
- a) Complete.
  - b) Incomplete.**
  - c) Tangible.
  - d) System.
- 38) \_\_\_\_\_ classes are points in time that must be recorded.
- a) Concept.
  - b) Events**
  - c) People.
  - d) Places.
- 39) \_\_\_\_\_ is the visual rendering of model elements.
- a) Guidelines
  - b) Notation.**
  - c) Blue print.
  - d) Model elements.
- 40) \_\_\_\_\_ model presents how the source code should be carried out and written.
- a) Test model.
  - b) Domain object model.
  - c) Analysis object model.**
  - d) Use case model
- 41) \_\_\_\_\_ shows the sequence of states that an object goes through during its life time.
- a) State chart diagram.**
  - b) UML diagram.
  - c) Component diagram.
  - d) Test model.

- 42) \_\_\_\_\_classification is intellectually hard work and may seem rather arbitrary.
- a) File.
  - b) Intelligent.**
  - c) Poor.
  - d) Excellent.
- 43) \_\_\_\_\_is a fundamentally different than traditional structure design approaches.
- a) Object oriented programming.
  - b) Object oriented development.
  - c) Object oriented analysis and design.**
  - d) Object oriented design.
- 44) \_\_\_\_\_model can be viewed as a collection of procedures or behaviors.
- a) Static model.
  - b) Test model.
  - c) Use case model
  - d) Dynamic model.**
- 45) \_\_\_\_\_are physical realization of one or more software pattern solution.
- a) Design Pattern.
  - b) Frame work.**
  - c) Object oriented design.
  - d) Object oriented analysis
- 46) A \_\_\_\_\_ is a source of destination of a data element.
- a) Frame work.**
  - b) Careful editing.
  - c) Writers workshop.
  - d) All the above.
- 47) A \_\_\_\_\_ inherits all of the properties and methods defined in its super class.
- a) sub class.**
  - b) main class.
  - c) child class.
  - d) root class.
- 48) A \_\_\_\_\_ is a specification of structure, behavior, and the description of an object.
- a) Class.**
  - b) Method.
  - c) Function.
  - d) Procedure.

- 49) A \_\_\_\_\_ is dispensed by a part of the object-oriented programming system that is responsible for guaranteeing the uniqueness of every identifier.
- a) AID.
  - b) OID.**
  - c) LED.
  - d) OOD.
- 50) A \_\_\_\_\_ consist of method and data.
- a) rule.
  - b) protocol.
  - c) class.**
  - d) concept.
- 51) A \_\_\_\_\_ diagram represents the sequence and interactions of a given scenario.
- a) class.
  - b) DFD.
  - c) system.
  - d) sequence.**
- 52) A \_\_\_\_\_ is an atomic set of activities that are performed either fully or not at all.
- a) code.
  - b) Transaction.**
  - c) Procedure.
  - d) Function.
- 53) A "pattern is waiting" which is not yet know to rescuer, sometimes is called a \_\_\_\_\_.
- a) Pattern.
  - b) Pattern language.
  - c) Proto pattern.**
  - d) Software architecture.
- 54) A common problem that leads to requirement ambiguity is a fuzzy and \_\_\_\_\_.
- a) ambiguous.**
  - b) unambiguous.
  - c) finite. .
  - d) infinite
- 55) A design is broken down into \_\_\_\_\_.
- a) functions.
  - b) Modules.
  - c) Component.
  - d) Packages.**



- 56) A method implements the \_\_\_\_\_ of an object.
- a) task.
  - b) behavior.**
  - c) action.
  - d) work.
- 57) A qualifier is shown as a \_\_\_\_\_.
- a) small rectangle.**
  - b) diamond.
  - c) square.
  - d) directed line.
- 58) A software system is a set of \_\_\_\_\_ for performing certain action on certain data.
- a) programs.
  - b) procedures.
  - c) mechanisms.**
  - d) methods.
- 59) A use case is an interaction between users and \_\_\_\_\_.
- a) developer.
  - b) system.**
  - c) admin.
  - d) server.
- 60) All documents shares a \_\_\_\_\_ cover sheet.
- a) Black.
  - b) Common.**
  - c) Pink.
  - d) White.
- 61) An \_\_\_\_\_ is a source of destination of a data element.
- a) Process.
  - b) Data flow.
  - c) Data store.
  - d) External entity.**
- 62) An \_\_\_\_\_ allows the same set of models to be used for analysis, design, and implementation.
- a) Object-Oriented environment.**
  - b) Unix environment.
  - c) Network environment.
  - d) Socio-technical environment.

- 63) An \_\_\_\_\_ class is a collection of people, resources, and facilities.
- a) **organization.**
  - b) people.
  - c) event.
  - d) place.
- 64) An \_\_\_\_\_ use case is not complete and has no initiation actors but is used by a concrete use case.
- a) Standard.
  - b) **Abstract.**
  - c) Static.
  - d) Dynamic.
- 65) An \_\_\_\_\_ could be utterly irrelevant.
- a) Subjective.
  - b) Objective.
  - c) **Adjective.**
  - d) Object.
- 66) An \_\_\_\_\_ is a user playing a role with respect to the system.
- a) developer.
  - b) End user.
  - c) Customer.
  - d) **Actor.**
- 67) An important issue in association is \_\_\_\_\_.
- a) relationship.
  - b) **cardinality.**
  - c) simplicity.
  - d) diversity.
- 68) An object is simply an \_\_\_\_\_ of a class.
- a) **instance.**
  - b) data.
  - c) variables.
  - d) methods.
- 69) Analysis is a \_\_\_\_\_ activity.
- a) easy.
  - b) **Difficult.**
  - c) Ambiguous.
  - d) Unambiguous.

- 70) Anti pattern represents \_\_\_\_\_ practice.
- a) Best practice.
  - b) Worst practice.**
  - c) Lesson learned.
  - d) Good practice.
- 71) Blum argues that \_\_\_\_\_ is the exercise of determining correctness.
- a) correspondence.
  - b) validation.
  - c) correctness.
  - d) verification.**
- 72) CASE stands for \_\_\_\_\_.
- a) Computer analysis and system engineering.
  - b) Computer aided software engineering.**
  - c) Computer aided system engineering.
  - d) Computer analyzed system engineering
- 73) Class of classes is also known as \_\_\_\_\_.
- a) data-class.
  - b) meta-class.**
  - c) delta class.
  - d) outer class
- 74) CRC cards are \_\_\_\_\_ index cards.
- a) 4\*5 inches
  - b) 4\*2 inches
  - c) 4\* 4 inches
  - d) 4 \* 6 inches**
- 75) CRC is developed by \_\_\_\_\_.
- a) Cunningham, Wilkerson, and Beck.**
  - b) Cunningham, Wilkerson, and Ali.
  - c) Bahrami, Wilkerson, and Ali.
  - d) Wilkerson, Beck and Bahrami.
- 76) CRC stands for \_\_\_\_\_.
- a) Classes, Responsibilities and Collaborators.**
  - b) Classes, Records and Collaborators.
  - c) Clauses, Responsibilities and Collaborators.
  - d) Cardinality, Responsibilities and Collaborators.

- 77) DCOM, Microsoft's alternative to OMG's, \_\_\_\_\_
- a) CAD
  - b) CORBA**
  - c) CASE
  - d) Office Information Systems
- 78) Different objects can respond to the same message in different ways is known as \_\_\_\_\_.
- a) inheritance.
  - b) polymorphism.**
  - c) inline.
  - d) program.
- 79) Directed line represents \_\_\_\_\_.
- a) Aggregation.
  - b) Generalization.**
  - c) Association.
  - d) Attribute.
- 80) Eighty percentage of work is done with \_\_\_\_\_ percent of the documentation.
- a) 10%
  - b) 20 %.**
  - c) 30 %.
  - d) 40 %.
- 81) Encapsulation provides protection mechanism with public, private, and \_\_\_\_\_.
- a) abstract.
  - b) local.
  - c) global.**
  - d) protected.
- 82) Expression of usage within the trade is called \_\_\_\_\_.
- a) model elements.
  - b) blue print.
  - c) guidelines.**
  - d) notation.
- 83) Good quality software is \_\_\_\_\_.
- a) Correct, Robust, Extendible
  - b) Reusable, Compatible
  - c) Both (a) & (b)**
  - d) None of the above

- 84) Identity often implemented through \_\_\_\_\_.
- a) primary key.
  - b) unique identifier.**
  - c) unique key.
  - d) identifier.
- 85) In \_\_\_\_\_ methods can access only by the receiver.
- a) pre-class protection.
  - b) pre-object protection .**
  - c) per data protection.
  - d) per-method protection.
- 86) In an object oriented environment, software is a collection of \_\_\_\_\_ objects.
- a) discrete.**
  - b) static.
  - c) dynamic.
  - d) primary.
- 87) In an object-oriented system everything is an \_\_\_\_\_ and each is responsible for itself.
- a) entity.
  - b) object.**
  - c) interface.
  - d) integer.
- 88) In CRC \_\_\_\_\_ is cheap, portable, readily available and familiar
- a) card.**
  - b) sheet.
  - c) block.
  - d) paper.
- 89) In effective the documentation make the document as \_\_\_\_\_ as possible.
- a) big.
  - b) short.**
  - c) large.
  - d) very large.
- 90) Inheritance involves at least \_\_\_\_\_
- a) Two objects
  - b) At least two objects**
  - c) Only one object
  - d) None of the above

- 91) Like use-case diagrams the \_\_\_\_\_ are used to model scenarios in the systems.
- a) data flow diagram.
  - b) system flow diagram.
  - c) sequence diagram.**
  - d) E-R diagram.
- 92) Make localized changes to the system to add new requirements and eliminate bugs is \_\_\_\_\_.
- a) Maintenance.**
  - b) Conceptualization.
  - c) Analysis and design.
  - d) Implementation.
- 93) Most traditional development methodologies are either \_\_\_\_\_ centric or data centric.
- a) program.
  - b) attribute.
  - c) algorithm.**
  - d) number.
- 94) UML uses the term \_\_\_\_\_ to specify a role affiliated with each end of associations.
- a) Multiplicity.
  - b) Navigability.**
  - c) Association.
  - d) Qualifier.
- 95) Object oriented design is a \_\_\_\_\_.
- a) iterative process.**
  - b) non-iterative process.
  - c) jumping.
  - d) discrete process.
- 96) Object-oriented technology is built upon a sound engineering foundation, whose elements are called as \_\_\_\_\_.
- a) class model.
  - b) object model.**
  - c) diagrammatic model.
  - d) functional model.
- 97) Objects are instances of \_\_\_\_\_.
- a) Template
  - b) Specialized template
  - c) Classes**
  - d) Both (a) & (b)

- 98) Objects of the "real"world are mapped in to\_\_\_\_\_.
- a) use case model.
  - b) domain object model.**
  - c) analysis object model.
  - d) test model.
- 99) One object can refer other object is known as \_\_\_\_\_.
- a) aggregation.**
  - b) cardinality.
  - c) client server.
  - d) association.
- 100) One use case is associated with other use case is known as \_\_\_\_\_.
- a) intend association.
  - b) Extend association.**
  - c) Association.
  - d) Binding.
- 101) Poly means many and morph means \_\_\_\_\_.
- a) form.**
  - b) method.
  - c) kind.
  - d) action.
- 102) Properties represented the \_\_\_\_\_ of an object.
- a) type.
  - b) state.**
  - c) kind.
  - d) action.
- 103) Reusability is supported by \_\_\_\_\_ concept.
- a) method overloading.
  - b) polymorphism
  - c) inheritance.**
  - d) inline function.
- 104) Sequence or collaboration diagrams are associated with a \_\_\_\_\_.
- a) use case.**
  - b) x case.
  - c) y case.
  - d) z case.

- 105) Software development life cycle consists of \_\_\_\_\_ macro processes.
- a) 4
  - b) 6
  - c) 3**
  - d) 5
- 106) System development can be viewed as a\_\_\_\_\_.
- a) process.**
  - b) plain.
  - c) design.
  - d) testing.
- 107) Systems development activities consist of systems \_\_\_\_\_ and maintenance.
- a) Recruiting people
  - b) Purchase of materials
  - c) Development**
  - d) none of the above
- 108) The \_\_\_\_\_ class diagram is also called an object model.
- a) Main.
  - b) Sub.
  - c) UML.**
  - d) Child.
- 109) The \_\_\_\_\_ is also notes sub and super classes to show the classes structure.
- a) book.
  - b) card.**
  - c) CD.
  - d) paper.
- 110) The \_\_\_\_\_ model consist class diagram.
- a) Booch.
  - b) OMT.
  - c) Ramburgh object.
  - d) Object.**
- 111) The \_\_\_\_\_ represent physical objects or groups of objects that are tangible.
- a) tangible things and devices.**
  - b) intangible things and devices.
  - c) things and devices.
  - d) hardware and software.



- 112) The \_\_\_\_\_ approach supports abstraction at the function level.
- a) bottom-up
  - b) narrow
  - c) top-down**
  - d) backtracking
- 113) The \_\_\_\_\_ approach supports abstraction at the function level.
- a) programs.
  - b) methods.**
  - c) data.
  - d) numerical.
- 114) The \_\_\_\_\_ and attributes within a class are held together tightly
- a) routines.**
  - b) code.
  - c) program.
  - d) syntax.
- 115) The \_\_\_\_\_ result are objects and dynamic and functional models.
- a) System design.
  - b) Analysis.**
  - c) Object design.
  - d) Implementation.
- 116) The \_\_\_\_\_ steps can overlap each other.
- a) Unified approach.**
  - b) Static approach.
  - c) Dynamic approach.
  - d) Finite approach.
- 117) The \_\_\_\_\_ class encompasses principles that are not tangible but used to organize or keep track of business activities.
- a) events.
  - b) places.
  - c) concept.**
  - d) people.
- 118) The class name should be \_\_\_\_\_.
- a) regular.
  - b) singular.**
  - c) dynamic.
  - d) static.

- 119) The following formula is coined by \_\_\_\_\_ "algorithms+ data structures =programs"
- a) **Niklaus Wirth.**
  - b) Booch.
  - c) Ali Bahrami.
  - d) Balagurusamy.
- 120) The fundamental modeling concepts and semantics that is included in a modeling language is called\_\_\_\_\_.
- a) **guidelines.**
  - b) .notation.
  - c) model elements.
  - d) Elements
- 121) The heart of the UA is\_\_\_\_\_.
- a) Booch.
  - b) **Rumbough.**
  - c) Jacobson's
  - d) Ali.
- 122) The idea in locating \_\_\_\_\_ is to identify how classes interact.
- a) **collaborators.**
  - b) classes.
  - c) records.
  - d) responsibilities
- 123) The interface of a class can be
- a) Public
  - b) Protected
  - c) Private
  - d) **All of the above**
- 124) The intersection among object roles to achieve a given goal is called\_\_\_\_\_.
- a) **collaboration.**
  - b) binding.
  - c) linking.
  - d) locking.
- 125) The main advantage of an object-oriented system is that the class tree is \_\_\_\_\_ and can grow.
- a) static.
  - b) **dynamic.**
  - c) parallel.
  - d) sequential.

- 126) The main objective of \_\_\_\_\_ is to communicate with readers and not impress them with buzz words.
- a) common cover.
  - b) 80-20 rule.
  - c) **familiar vocabulary.**
  - d) vocabulary.
- 127) The objects of the "real" world are mapped in to the \_\_\_\_\_ model?
- a) **Domain object model.**
  - b) Use case model.
  - c) Analysis object model.
  - d) Implementation model
- 128) The process of determining at run time which function to involve is termed as \_\_\_\_\_.
- a) static binding.
  - b) hand binding.
  - c) soft binding.
  - d) **dynamic binding.**
- 129) The process of looking for patterns to document is called \_\_\_\_\_.
- a) Focus on practicability.
  - b) Pattern thumbnail.
  - c) Proven solution.
  - d) **Pattern mining**
- 130) The relationships among the other use cases and a new extracted use case is called a \_\_\_\_\_.
- a) **uses association.**
  - b) Extend association.
  - c) Association.
  - d) Binding.
- 131) The Schematic differences among the databases are handled by \_\_\_\_\_
- a) Structure design method.
  - b) Schematic design method
  - c) **neutralization**
  - d) federated
- 132) The static and dynamic relationships between \_\_\_\_\_ pattern and other within the same pattern language and system.
- a) **Related problem.**
  - b) Known uses.
  - c) Rational.
  - d) Forces.

- 133) The task of predicting correspondence is \_\_\_\_\_.
- a) **Validation**
  - b) Correspondence
  - c) Correctness
  - d) Verification
- 134) The term \_\_\_\_\_ was first formally utilized in the simula language.
- a) class.
  - b) object.
  - c) **method.**
  - d) data.
- 135) The term super class used instead of \_\_\_\_\_.
- a) **base.**
  - b) derived.
  - c) sub.
  - d) root.
- 136) The traditional techniques view software as a collection of \_\_\_\_\_ and isolated data.
- a) methods.
  - b) classes.
  - c) **programs.**
  - d) data.
- 137) The UML class diagram also referred to as \_\_\_\_\_.
- a) dynamic modeling.
  - b) static modeling.
  - c) **object modeling.**
  - d) test modeling.
- 138) The use case concept was introduced by \_\_\_\_\_.
- a) Booch.
  - b) Ramburgh.
  - c) **Ivar Jacobson.**
  - d) Sally shlaer.
- 139) The \_\_\_\_\_ represents the objects existence during the interaction.
- a) Life span.
  - b) Life time.
  - c) **Life line.**
  - d) Time span.

- 140) UML stands for \_\_\_\_\_.
- a) **Unified Modeling Language.**
  - b) Union Method Language.
  - c) Unified Method Language.
  - d) Union Member Language.
- 141) Validation is always \_\_\_\_\_.
- a) **subjective.**
  - b) objective.
  - c) testing.
  - d) checking.
- 142) What is the primary concern of the macro process?
- a) Conceptualization.
  - b) Maintenance.
  - c) **Technical management of the system.**
  - d) All the above.
- 143) Which covers the entire life cycle and stress traceability between the different phases?
- a) **Jacobson et al methodologies.**
  - b) Object model.
  - c) Static model.
  - d) Implementation.
- 144) Which is a fast, intuitive approach for identifying and modeling all the objects making up a system?
- a) **OMT.**
  - b) UML.
  - c) Functional model.
  - d) Implementation.
- 145) Which model describes non formal text with no clear flow of events?
- a) **Use case.**
  - b) Macro development.
  - c) Micro development.
  - d) All the above.
- 146) Which phase in OOBE defines the system to be built in terms of the problem domain object model?.
- a) **Analysis object model.**
  - b) Design and implementation model.
  - c) Testing phase.
  - d) All the above.

- 147) Who developed the coad light weight and prototype-oriented approach to methods?
- a) Booch.
  - b) Peter coad.**
  - c) Ivar Jacobson.
  - d) Rumburgh.
- 148) Who developed the object-oriented design concept in 1986?
- a) Booch.**
  - b) Sally shlaer.
  - c) Wirfs-brock.
  - d) Ivar Jacobson.
- 149) Who introduced the concept of the use-case and object oriented software engineering in 1994?
- a) Sally Shlaer.
  - b) Booch.
  - c) Ivar Jacobson.**
  - d) Wirfs-brock.
- 150) Who produced class-responsibility-collaboration cards?
- a) Beck and cunningam.**
  - b) Salley shaler.
  - c) Jim Rumbaugh.
  - d) All the above.

Staff Name :LAXMI SREE B R