

- 001.** Aggregation (encapsulation) relationship is represented in UML notation by Options **B**
 A Line with solid diamond at one end B Line with hollow diamond at one end
 C Line with an arrow at one end D Line without an arrow
- 002.** Control flow diagrams are **A**
 A Needed to model event driven systems B Required for all systems
 C Used in place of data flow diagrams D Used to represent system behavior
- 003.** In class diagram, inside each class what is to be printed? **B**
 A Its name, attributes, operations and derived class B Its name, attributes and operations
 C Its name and attributes D Its name and operations
- 004.** Which of the following UML diagrams represent the structural View of the software? **A**
 A Class Diagram B Sequence Diagram
 C Component Diagram D Deployment Diagram
- 005.** Which of the following is not a UML diagram? **C**
 A Class diagram B Object Diagram
 C Interface diagram D Use case model
- 006.** Which among these are the rules to be considered to form Class diagrams? **A**
 A Class symbols must have at least a name compartment B Compartment can be in random order
 C Operations can be listed at any suitable place D Attributes can be listed at any suitable place
- 007.** Key elements of use-case diagrams are **B**
 A People, computer B Actors, use cases
 C People, classes and objects D Uses, cases
- 008.** What are the elements of a WebApp interaction model? **C**
 A Activity diagrams, sequence diagrams, state diagrams, interface diagrams B Activity diagrams, collaboration diagrams, sequence diagrams, state diagrams
 C Use cases, sequence diagrams, state diagrams, interface prototype D Use cases, sequence diagrams, state diagrams, collaboration diagrams
- 009.** Which of the following are not the area of concern in design model? **D**
 A Architecture B Data
 C Interface D Project scope
- 010.** Which is not one of the analysis activities that is used to create a complete analysis model? **D**
 A Configuration analysis B Content analysis
 C Functional analysis D Market analysis
- 011.** The data flow diagram **B**
 A Depicts relationships between data objects B Depicts functions that transform the data flow
 C Used to represent system behavior D Needed to model event driven systems
- 012.** For purposes of behavior modelling an event occurs whenever **B**
 A A state and process exchange information B The system an anchor exchange information
 C Two actors exchange information D Two objects exchanges information
- 013.** The state transition diagram **D**
 A Depicts relationships between objects B Depicts functions that transform the data flow
 C Indicates how data re transformed by the system D Indicates system reactions to external events
- 014.** For purposes of behavior modeling state is an **C**
 A Consumer or producer of data B Data object hierarchy

- C Observable mode of behavior D Wee defined process
- 015.** In collaborative requirements gathering, the facilitator **C**
 A cannot be a member of the software team B cannot be a customer team
- C controls and facilitates the process D must be an outsider
- 016.** Outsourcing applications that run on Web is referred to as **B**
 A ubiquitous learning B net sourcing
 C ubiquitous computing D open source
- 017.** Which one of the following is a requirement that fits in a developers module ? **B**
 A Availability B Testability
 C Usability D Flexibility
- 018.** The importance of software design can be summarized in a single word **D**
 A Accuracy B Complexity
 C Efficiency D Quality
- 019.** which of the following is not one of the dimensions of quality used to access a WebApp? **B**
 A Content B Maintainability
 C Navigability D Usability
- 020.** Which of the following is not a WebApp interface mechanism? **C**
 A Browser B Cookies
 C Forms D Links
- 021.** Which is focused towards the goal of the organization? **A**
 A Feasibility study B Requirement gathering
 C Software requirement specification D Software requirement validation
- 022.** An architectural style not encompasses which of the following elements? **D**
 A Constraints B Set of components
 C Semantic models D Syntactic models
- 023.** Which of these are characteristics of a good design? **A**
 A Exhibits strong coupling between its modules B Implements all requirements in the analysis model
 C Includes test cases for all components D Writing the lengthy code
- 024.** To determine the architectural style or combination of styles that best fits the proposed system, requirements engineering is used to uncover **B**
 A Algorithmic complexity B Characteristics and constraints
 C Control and data D Design patterns
- 025.** The interviews, which are held between two persons across the table is _____. **D**
 A Written B Non-structured
 C Group D One-to-one
- 026.** Which document is created by system analyst after the requirements are collected from Various stakeholders? **A**
 A Software requirement specification B Software requirement validation
 C Feasibility study D Requirement Gathering
- 027.** In which elicitation process the developers discuss with the client and end users and know their expectations from the software? **A**
 A Requirement gathering B Organizing requirements
 C Negotiation & discussion D Documentation
- 028.** Requirement engineering process not includes which of these steps? **D**
 A Feasibility study B Requirement Gathering
 C Software Requirement specification & Validation D Coding
- 029.** Which design model is equivalent to a set of detailed drawings for each room in a house? **B**
 A Architectural design B Component - level design

- C Data design D Interface design
- 030.** Which tool is use for structured designing? **B**
 A Program flowchart B Structure chart
 C Data-flow diagram D Module
- 031.** Which design model is equivalent to the detailed drawings of the access points and external utilities for a house? **D**
 A Architectural design B Component - level design
 C Data design D Interface design
- 032.** what types of abstractions are not used in software design? **C**
 A Control B Data
 C Environment D Procedural
- 033.** Which of the following is not one of the five design class types **B**
 A Business domain Classes B Entity Classes
 C Process Classes D User interface Classes
- 034.** Which design model elements are used to depict a model of information represented from the users view? **C**
 A Architectural design elements B Component-level design elements
 C Data design elements D Interface design elements
- 035.** which design is equivalent to the floor plan of a house? **A**
 A Architectural design B Component - level design
 C Data design D Interface design
- 036.** What is incorrect about structural design? **C**
 A Structural design introduced notations and heuristics B Structural design emphasis on procedural decomposition
 C The advantage is data flow representation D It follows Structure chart
- 037.** What is the solution for Structural design? **C**
 A The specification model following data flow diagram B Procedures represented as bubbles
 C Specification model is structure chart showing procedure calling hierarchy and flow of data in and out of procedures D Emphasizing procedural decomposition
- 038.** The primary objective of system design is to **A**
 A Design the programs, databases and test plan B Design only user interfaces
 C Implement the system D find out how the system will perform
- 039.** A step by step instruction used to solve a problem is known as **D**
 A Sequential structure B A List
 C A plan D An Algorithm
- 040.** Who designs and implement database structures. **D**
 A Programmers B Project managers
 C Technical writers D Database administrators
- 041.** Debugging is: **B**
 A creating program code B finding and correcting errors in the program code
 C identifying the task to be computerized D creating the algorithm
- 042.** In the context of object-oriented software engineering a component contains **D**
 A Attribute and Operations B Instances of each class
 C roles for each actor D Set of collaborating classes
- 043.** Which of the these constructs is not used in structured programming? **A**
 A Branching B Condition
 C Repetition D Sequence

- 044.** which of the following is not an example of infrastructure components that may need to be integrated into the software architecture? **C**
- A Communications components B Database components
C Interface components D Memory management components
- 045.** Which of the following is an incorrect method for structural design? **B**
- A Transition of problem models to solution models B Handling of larger and more complex products
C Designing Object oriented systems D More procedural approach
- 046.** Which step among these follows the wrong sequence in software engineering design process? **C**
- A Analyze problem B Generate candidate architecture
C Finalize design D Select detailed design
- 047.** Which of the following is the essential feature of ADL? **B**
- A The ability to provide structures B The ability to declare a component and name its type
C The ability to support analytical capability D The ability to test the code
- 048.** _____ tool is used for structured designing. **A**
- A Structure chart B Data flow diagram
C Module D Program flow chart.
- 049.** Which of these is a graphical notation for depicting procedural detail? **D**
- A process diagram B decision table
C ER diagram D flowchart
- 050.** What are the diagrams used for process modeling? **B**
- A UML Diagrams B Data Flow diagrams
C Process diagrams D Flow chart
- 051.** Which of the following is not one of the major activities of domain engineering? **D**
- A Analysis B Construction
C Dissemination D Validation
- 052.** Which of the following is a technique used for component wrapping? **B**
- A Black - box wrapping B Clear - box wrapping
C Grey - box wrapping D White - box wrapping
- 053.** _____ enables users to interact using windows, icons with the computer system and application system. **C**
- A Operating system. B GUI
C User-interface D Command prompt
- 054.** . The best kind of module cohesion is _____. **A**
- A Coincidental cohesion B Functional cohesion
C Logical cohesion D Temporal cohesion
- 055.** _____ is the best kind of module coupling **C**
- A Control Coupling B Stamp Coupling
C Data Coupling D Content Coupling
- 056.** Guess which is not involved in design model. **B**
- A Architecture B Project scope
C Modular design D Data design
- 057.** Which of the following is not a construct? **D**
- A Sequence B Condition
C Repetition D Selection
- 058.** A _____ executes the loop task first, then tests a condition and repeats the task until the condition fails. **A**
- A repeat until B condition
C do while tests D if then-else
- 059.** Which of the following is not a characteristics of box diagram? **D**
- A functional domain B arbitrary transfer of control is

- C recursion is easy to represent D impossible
providing a notation that translates
actions and conditions
- 060.** Which of these is not one of the design activities associated with object oriented by hypermedia design? **C**
A Abstract interface design B Conceptual design
C Content Design D Navigational design
- 061.** Which of the following is not one of the four principles used to guide component-level design? **D**
A Dependency Inversion Principle B Interface Segregation Principle
C Open-closed Principle D Parsimonious Complexity Principle
- 062.** Which of the following is not one of the content architectural structures used by web engineers? **D**
A linear B grid
C hierarchical D parallel
- 063.** Similarly, the worst kind of module coupling is _____. **B**
A Control Coupling B External Coupling
C Content coupling D Exterior coupling.
- 064.** ____ focuses on entities instead on the activities of data processing. **C**
A Class-oriented design B DFD
C Object-oriented design D Function-oriented design
- 065.** Which of the following not part of the design pyramid for WebEdesign? **B**
A Architectural design B Business case design
C Content design D Navigation design
- 066.** _____ is a reuse-based approach to defining, implementing, and composing loosely coupled independent components into systems. **D**
A Component-based software engineering B Component composition
C Component model D Component interfaces
- 067.** Which of the following is not a dimension of scalability? **D**
A Size B Distribution
C Manageability D Interception
- 068.** The component-based development model is **C**
A Only appropriate for computer hardware design. B Not able to support the development of reusable components.
C Works best when object technologies are available for support. D Not cost effective by known quantifiable software metrics
- 069.** A decision table should be used **D**
A To document all conditional statements B To guide the development of the project management plan
C Only when building an expert system D When a complex set of conditions and actions appears in a component
- 070.** A program design language (PDL) is often a **A**
A Combination of programming constructs and narrative text B Legitimate programming language in its own right
C Machine readable software development language D Useful way to represent software architecture
- 071.** Which model depicts the look and feel of the user interface along with all supporting information? **A**
A Implementation model B User model
C User's model D System perception
- 072.** Which of the following is not a golden rule for interface design? **D**
A Place the user in control B Reduce the users memory load
C Make the interface consistent D Write lengthy code

- 073.** Which of the following is not a user interface design process? **C**
 A User, task, and environment analysis and modeling B Interface design
 C Knowledgeable, frequent users D Interface validation
- 074.** Component based software engineering emphasizes on _____ **C**
 A Coupling B Software planning
 C Reusability D Deployment
- 075.** QoS stands for **C**
 A Quality of security B Quality of system
 C Quality of service D Quality of software
- 076.** Service Oriented Architecture (SOA) is **B**
 A Strongly Coupled B Loosely Coupled
 C Strongly Cohesive D Loosely Cohesive
- 077.** RTOS stands for **B**
 A Real-life operating system B Real-time operating system
 C Real-time operating software D Real-life operating software
- 078.** _____ refers to the process that establishes physical connections among the elements in OO Design. **A**
 A Coupling B Cohesion
 C Associationship D Dependency.
- 079.** We can treat a design as a good design when the components are _____ cohesive and weakly _____. **A**
 A Strongly, Weakly B Weakly, Strongly
 C Strongly, Strongly D Weakly, Weakly.
- 080.** During system study, _____ are used to draw flowcharts. **B**
 A Special symbols B General symbols
 C Abbreviated symbols D Non-standard symbols.
- 081.** What incorporates data, architectural, interface, and procedural representations of the software? **A**
 A design model B users model
 C mental image D system image
- 082.** What establishes the profile of end-users of the system? **B**
 A design model B users model
 C mental image D system image
- 083.** What combines the outward manifestation of the computer-based system, coupled with all supporting information that describe system syntax and semantics? **C**
 A mental image B interface design
 C system image D interface validation
- 084.** Which of the following is not a type of user interface? **C**
 A Command language based B Menu based
 C Efficiency based D Direct manipulation based
- 085.** Which of the following devices are mainly responsible for the user interface? **A**
 A Input and output devices B Memory devices
 C Processor D Random Access Memory
- 086.** _____ represents an Information system graphically. **C**
 A Activity diagram B Pictogram
 C Data Flow diagram D Simply a flowchart.
- 087.** Guess that one word can depict the significance of software design. **D**
 A Efficiency B Complexity
 C Unambiguous D Quality
- 088.** _____ of a single module/component is the degree to which its responsibilities form a meaningful unit. **A**
 A Cohesion B Coupling
 C Associationship D Dependency

- 089.** Which of the following represents the degree of mutual interdependence between modules/components. **B**
 A Cohesion B Coupling
 C Associationship D Dependency
- 090.** Which type of user interface provide input by typing a string in the keyboard ? **B**
 A Graphical user interface B Command line user interface
 C Natural language interface D Menu interface
- 091.** Natural language user interface can accept input in the form of **B**
 A String command B Speech
 C Image D Video
- 092.** Which of the following is not a type of user interface? **C**
 A Command language based B Menu based
 C Efficiency based D Direct manipulation based
- 093.** Which of these framework activities is not normally associated with the user interface design processes? **A**
 A Cost estimation B Interface Construction
 C Interface validation D User and Task Analysis
- 094.** Which model depicts the image of a system that an end user creates in his or her head? **D**
 A Design model B User model
 C System model D System perception
- 095.** Which model depicts the profile of the end user of a computer system? **C**
 A Design model B Implementation model
 C User model D System model
- 096.** Who identifies, documents, and verifies that corrections have been made to the software? **C**
 A Project manager B Project team
 C SQA group D Testing group
- 097.** Six Sigma methodology defines three core steps. **C**
 A Analyze, improve, control B Analyze, design, verify
 C Define, measure, analyze D Define, measure, control
- 098.** Which of the following is not an appraisal cost in SQA? **C**
 A Inter-process inspection B Maintenance
 C Quality planning D Testing
- 099.** Which requirements are the foundation from which quality is measured? **B**
 A Hardware B Software
 C Programmers D Documentation
- 100.** Which of the following is not a SQA plan for a project? **B**
 A Evaluations to be performed B Amount of technical work
 C Audits and reviews to be performed D Documents to be produced by the SQA group
- 101.** Which of the following is not included in External failure costs? **A**
 A Testing B Help line support
 C Warranty work D Complaint resolution
- 102.** Faults are found most cost-effectively in which test activity? **C**
 A Design B Execution
 C Planning D Check Exit criteria completion
- 103.** Which of the following is not a phase of bathtub curve of hardware reliability? **D**
 A Useful Life B Burn-in
 C Wear-out D Time
- 104.** What happened if an expected result is not specified then **D**
 A We cannot run the test B We cannot automate the user input values
 C It may be difficult to determine if the D It may difficult to repeat the test

test has passed or failed

- 105.** What is Six Sigma? **C**
A It is the most widely used strategy for statistical quality assurance
B The Six Sigma refers to six standard deviations
C It is the most widely used strategy for statistical quality assurance AND The Six Sigma refers to six standard deviations
D A Formal Technical Review(FTR) guideline for quality walkthrough or inspection
- 106.** Which of the following is not a core step of Six Sigma? **B**
A Define
B Control
C Measure
D Analyse
- 107.** Which of the following is not included in prevention cost? **A**
A Equipment calibration and maintenance
B Formal technical reviews
C Test equipment reviews
D Quality planning reviews
- 108.** NHPP stands for **D**
A Non Homogeneous Poisson Product
B Non-Hetrogeneous Poisson Product
C Non-Hetrogeneous Poisson Process
D Non Homogeneous Poisson Process
- 109.** The CMM model is a technique to **B**
A Automatically maintain the software reliability
B Improve the software process.
C Test the software
D Execute the Software
- 110.** How is software reliability defined? **A**
A Time
B Efficiency
C Quality
D Speed
- 111.** How is reliability and failure intensity related to each other? **B**
A Direct relation
B Inverse relation
C Dependency relation
D No relation
- 112.** Which one of the following is not a software quality model? **A**
A ISO 9000
B McCall model
C Boehm model
D ISO 9126
- 113.** What is MTTF ? **B**
A Maximum time to failure
B Mean time to failure
C Minimum time to failure
D Maximum testing time of failure
- 114.** Test cases are designed during which of the following stages? **D**
A Test recording
B Test configuration
C Test planning
D Test specification
- 115.** Which of the following is not a Test Type? **C**
A Database Testing
B Security Testing
C Statement Testing
D Functional Testing
- 116.** What is V Model? **C**
A Test Design Technique
B Test Type
C SDLC Model
D Test Level
- 117.** How many levels are present in CMM? **C**
A Three
B Four
C Five
D Six
- 118.** A system maintaining its integrity while accepting a temporary halt in its operation is said to be in a state of **D**
A Full Fault Tolerance
B Graceful Degradation
C Fail Soft
D Fail Safe
- 119.** System testing is a **A**
A Black box testing
B Grey box testing
C White box testing
D Red box testing
- 120.** Alpha testing is: **D**

- | | | | | |
|---|---|---|--|--|
| A | Post-release testing by end user representatives at the developers site | B | The first testing that is performed | |
| C | Pre-release testing by end user representatives at their sites | D | Pre-release testing by end user representatives at the developers site | |
- 121.** Bottom-up integration has as its major advantage(s) that **C**
- | | | | |
|---|--|---|------------------------------------|
| A | Major decision points are tested early | B | No drivers need to be written |
| C | No stubs need to be written | D | Regression testing is not required |
- 122.** Unit testing is done by: **B**
- | | | | |
|---|-----------|---|------------|
| A | Users | B | Developers |
| C | Customers | D | Seller |
- 123.** Exhaustive testing is: **B**
- | | | | |
|---|----------------------|---|----------------------------|
| A | Always possible | B | Impractical but possible |
| C | Practically possible | D | Impractical and impossible |
- 124.** White-box testing can be started: **C**
- | | | | |
|---|--------------------|---|--------------------|
| A | After installation | B | After SRS creation |
| C | After programming | D | After designing |
- 125.** Beta Testing is done at: **B**
- | | | | |
|---|------------------------|---|-----------------|
| A | Developers end | B | Users end |
| C | Users & Developers end | D | System software |