KDK College of Engineering Nagpur

Department of Information Technology

Multiple Choice Questions(MCQs)

Subject: Software Engineering

6th Sem BE Information Technology

Unit-1   Software Life Cycle Models

1. Build & Fix Model is suitable for programming exercises of _____ LOC (Line of Code).
a) 100-200
b) 200-400
c) 400-1000
d) above 1000
Answer: a

2. RAD stands for
a) Relative Application Development
b) Rapid Application Development
c) Rapid Application Document
d) None of the mentioned
Answer: b

3. Which one of the following models is not suitable for accommodating any change?
a) Build & Fix Model
b) Prototyping Model
c) RAD Model
d) Waterfall Model
Answer: d

4. Which is not one of the types of prototype of Prototyping Model?
a) Horizontal Prototype
b) Vertical Prototype
c) Diagonal Prototype
d) Domain Prototype
Answer: c

5. Which one of the following is not a phase of Prototyping Model?
a) Quick Design
b) Coding
c) Prototype Refinement
d) Engineer Product

6. Which of the following statements regarding Build & Fix Model is wrong?

a) No room for structured design

b) Code soon becomes unfixable & unchangeable

c) Maintenance is practically not possible

d) It scales up well to large projects

7. RAD Model has

a) 2 phases

b) 3 phase

c) 5 phases

d) 6 phases

8. What is the major drawback of using RAD Model?

a) Highly specialized & skilled developers/designers are required

b) Increases reusability of components

c) Encourages customer/client feedback

d) Increases reusability of components, Highly specialized & skilled developers/designers are required

9. SDLC stands for

a) Software Development Life Cycle

b) System Development Life cycle

c) Software Design Life Cycle

d) System Design Life Cycle

10. Which model can be selected if user is involved in all the phases of SDLC?

a) Waterfall Model

b) Prototyping Model

c) RAD Model

d) both Prototyping Model & RAD Model

Q11. Waterfall model is also called as?
  a)Agile process model
  b)Classic life cycle model
  c)Light-Weight Model
  d)None of above

Q12. State True or False
  In Plan-driven processes, all of the process activities are planned in advance and progress is measured against this plan.
  a) True   b) False

Q13. **S**oftware **R**equirements **s**pecification document (SRS) might include:
    a) Use cases
    b) Class diagram
    c) Sequence diagram
    d) all of above
Q14. Which of the following is not Users of a requirements document
    a) System customer
    b) System Engineer
    c) Manager
    d) System Architect
Answer: d
Q15. Waterfall model is not suitable for –
    a) small projects
    b) accommodating change
    c) complex projects
    d) none of the above
Q16. If requirements are easily understandable and defined then which model is best suited?
    a. Spiral model
    b. Waterfall model
    c. Prototyping model
    d. None of the above
Q17. Methods and steps, which are taken while designing the software.
 a) Software Paradigm
 b) Software Manufacturing
 c) Software Analysis
 d) Software maintenance
Q18. Which is NOT a software characteristic?
 a)Software does not wear out
 b)Software is flexible
 c)Software is not manufactured
 d)Software is always correct
Q19. Which of the items listed below is not one of the software engineering layers?
a) Process
b) Manufacturing
c) Methods
d) Tools
Q20. Which of these are the 5 generic software engineering framework activities?
a) communication, modeling, planning, construction, deployment
b) communication, planning, modeling, construction, deployment
c) analysis, designing, programming, debugging, maintenance
d) analysis, planning, designing, programming, testing

Q21. Which of the following are umbrella activities of Software Engineering.
 a) Risk Management
 b) Software quality assurance
 c) Formal Technical Review
 d) all of the mentioned
Q22.What are attributes of good software ?
 a) Software maintainability
 b) Software functionality
 c) Software development
 d) Software maintainability & functionality

Q23. Which of these software engineering activities are not a part of software processes ?
a) Software dependence
b) Software development
c) Software validation
d) Software specification

Q24. Which of these is true ?
a) Generic products and customized products are   types of software products
b) Generic products are produced by organization and sold to open market
c) Customized products are commissioned by particular customer
d) All of the mentioned

Q25. _____is the way in which we produce software.
   a) Product
   b) Process
   c) Metric
   d) Module
Q26. Which of the following is a phase(s) of software engineering?
   a) Software analysis
   b) Software Testing
   c) Software Maintenance
   d) All of above

Q27. Efficiency in a software product does not include _____
a) responsiveness
b) licensing
c) memory utilization
d) processing time
Answer: b

Q28. The reason for software bugs and failures is due to
a) Software companies
b) Software Developers
c) Both Software companies and Developers
d) All of the mentioned
Answer: c

Q29. What is the major advantage of using Incremental Model?
a) Customer can respond to each increment
b) Easier to test and debug
c) It is used when there is a need to get a product to the market early
d) Easier to test and debug & It is used when there is a need to get a product to the market early
Answer: d

Q30. What is the major advantage of using Incremental Model?
a) Customer can respond to each increment
b) Easier to test and debug
c) It is used when there is a need to get a product to the market early
d) Easier to test and debug & It is used when there is a need to get a product to the market early
Answer: d

Unit-2 project scheduling, Feasibility Scope,Software Metrics and measures,make-by decisions

1.Which of the following is not a factor useful in decision making process
   a) Non availability of ready-made solutions
   b) Cost of ready-made solutions
   c) Past success or failure in software acquisition
   d) Perceived risk
Answer : a

2. Scheduling in project management includes listing of-
   a) activities,
   b) deliverables,
   c) milestones within a project
   d) all of mentioned

3. Which of the following is not a Type of schedules in project management-
    a) Master project schedule
    b)Milestone schedule
    c) complete project schedule
    d) A detailed project schedule
Answer : c

4. Milestone schedule is also called as-
    a) summary schedule
    b)A detailed project schedule
    c) complete project schedule
    d) Master project schedule
Answer : a

5. The most common form of project schedule is a
    a) Pie chart
    b) Gantt chart.
    c) bar chart
    d) none
Answer : b

6.Task Set for Project Planning includes following-
        a) Establish project scope
        b) Determine feasibility
        c) Define required resources
        d)all of mentioned
Answer: d

7. Which of the following is not describe by Software scope– b
  a) functions and features
  b)maintainability and adaptability
   c) Contents
   d) data
 Answer: b

8. Techniques used to define scope are-
  a) narrative description of software scope

b) set of use cases
c) Both a & b
d) none of mentioned
Answer: c
9. Dimensions of Software feasibility are
  a) Technology
b) Finance
d) Time
d) all of mentioned
Answer: d
10.Major categories of software engineering resources includes
a) People
 b) Development environment
 c)Reusable software components
d) all of mentioned
Answer: d
11. In software development resources, Planners must identify which of the
following parameters for hardware and software and verify that these resources
will be available
a) the time window required
b) the space window required
c) both a & b
d) none of above
Answer: a

12. Approaches used to Generate an estimate of the software's size are
a) Problem-based estimation
b) Process-based estimation
c) Project-based estimation
d) both a & b
Answer: d
13. Which one is not a category of software metrics ?
a) Product metrics
b) Process metrics
c) Project metrics
d) People metrics
Answer: d

14. LOC is a
a) metric
b) code
c) Line Of Code
d) both (a) & (c)
Answer: d

15. Which of the following is not a direct measure of SE process?
a) Efficiency
b) Cost
c) Effort Applied
d) All of the mentioned
Answer: a

16. Which of the following is an indirect measure of product?
a) Quality
b) Complexity
c) Reliability
d) All of the Mentioned
Answer: d

17. In size oriented metrics, metrics are developed based on the
_____
a) number of Functions
b) number of user inputs
c) number of lines of code
d) amount of memory usage
Answer: c

18. In Halstead theory, effort is measured in
a) Person-months
b) Hours
c) Elementary mental discriminations
d) None of the above
Answer: a

19. Which is not a size metric?
a) LOC
b) Function count

c) Program length
d) Cyclomatic complexity
Answer: d
20. Which one is not a measure of software science theory?
a) Vocabulary
b) Volume
c) Logic
d) Level
Answer: c
21.Defects removal efficiency (DRE)depends on:
a) E – errors found before software delivery
b) D – defects found after delivery to user
c) Both E and D
d) Varies with project

Answer: c

22.According to the COCOMO model, a project can be categorized into
a) 3 types
b) 5 types
c)6 types
d) No such categorization
Answer: a
23. In Intermediate COCOMO model, Effort Adjustment Factor (EAF) is derived
from the effort multipliers by
a) Adding them
b)Multiplying them
c) Taking their weighted average
d) Considering their maximum
Answer: b
24. Project metrics are estimated during which phase?
a)Feasibility study
b) Planning
c) Design
d) Development
 Answer: b
25. According to Halsetad's metrics, program length is given by the

a) Sum of total number of operators and operands
b) Sum of number of unique operators and operands
c) Total number of operators
d. Total number of operands
 Answer: a

26. Complete COCOMO considers a software as a
a) Homogeneous system
b)Heterogeneous system
c)can not say
d)None
Answer: b

27. Consider you are developing a web application, which would make use of a lot of web services provided by Facebook, Google, Flickr. Would it be wise to make estimates for this project using COCOMO?
a)Yes, of course
b) Not at all
c) Not sure
d)none
Answer: a

28. Main types of schedules used in project management are-
a) Master project schedule
b) Milestone schedule
c) A detailed project schedule
d) All of mentioned
Answer: d
29. Which schedule tracks major milestones and key deliverables, but not every task required to complete the project.
a) Master project schedule
b) Summary schedule
c) A detailed project schedule
d) All of mentioned
Answer: b
30. Milestone schedule is also called as –
a) Summary schedule

b) A detailed project schedule
c) Main project schedule
d) None of mentioned
Answer: a

MCQ   U-3 Requirement Engineering

1.   Which one is not a step of requirement engineering?   c
   a)   Requirements elicitation
   b)   Requirements analysis
   c)   Requirements design
   d)   Requirements documentation

2.   Requirements elicitation means   d

   a)   Gathering of requirements
   b)   Capturing of requirements
   c)   Understanding of requirements
   d)   All of the above
3.   SRS stands for   a
   a)   Software requirements specification
   b)   System requirements specification
   c)   Systematic requirements specifications
   d)   None of the above
4.   SRS document is for   d
   a)   "What" of a system?
   b)   How to design the system?
   c)   Costing and scheduling of a system
   d)   System's requirement.
5.   Which one is not a type of requirements?   d
   a)   Known requirements
   b)   Unknown requirements
   c)   Undreamt requirements
   d)   Complex requirements
6.   Which one is not a requirements elicitation technique? d
   (a) Interviews
   (b) The use case approach
   (c) FAST
   (d)Data flow diagram.
7. Requirements review process is carried out to   b
   (a) Spend time in requirements gathering
   (b) Improve the quality of SRS
   (c) Document the requirements
   (d) None of the above
8. FAST stands for   c
   (a) Functional Application Specification Technique

(b) Fast Application Specification Technique
(c) Facilitated Application Specification Technique
(d) None of the above

9. QFD in requirement engineering stands for   d
    (a) Quality function design
    (b) Quality factor design
    (c) Quality function development
    (d) Quality function deployment

10. Which of the following is not a Categories of requirements in QFD are   d
    a) Normal
    b) Exciting
    c) Expected
    d) Challenging

11. Who controls the FAST (Facilitated Application Specification Techniques) meeting ?   c
a) System Analyst
b) Scribe
c) Facilitator
d) Manager

MCQ-Requirement Elicitation analysis

12. Who proposed template for writing Use cases   a
(a) Jacobson & others
(b) Cockburn & others
(c) Pressman & others
(d) None

13. Use Cases are _____ for the description of user requirements modeled in a structured language like English.   b
(a) unstructured outline or template
(b) structured outline or template
(c) graphical representations

14. What are the types of requirement in Quality Function Deployment(QFD) ?   d
a) Known, Unknown, Undreamed
b) User, Developer
c) Functional, Non-Functional
d) Normal, Expected, Exciting

15. Who distinguished between primary and secondary actor of use cases   c
(a) Jacobson & others
(b) Pressman & others
(c) Cockburn & others
(d) None

16. What kind of approach was introduced for elicitation and modelling to give a functional view of the system ?   b
a) Object Oriented Design (by Booch)
b) Use Cases (by Jacobson)
c) Fusion (by Coleman)
d) Object Modeling Technique (by Rumbaugh)

17. Repositories to store information about all data items defined in DFD is –   d
(a) Data Directory

(b) Data definition
(c) Directory Definition
(d) Data Dictionary

18. In E-R diagram, Attribute is represented by ___ symbol.   b
    (a) Rectangle
    (b) Ellipse
    (c) Diamond shaped
    (d) None

19. How many feasibility studies is conducted in Requirement Analysis ?   b
    a) Two
    b) Three
    c) Four
    d) None of the mentioned

20. _____ and _____ are the two issues of Requirement Analysis.   a
    a) Performance, Design
    b) Stakeholder, Developer
    c) Functional, Non-Functional
    d) None of the mentioned

21. Which of the following property does not correspond to a good Software Requirements
    Specification (SRS) ?   b
    a) Verifiable
    b) Ambiguous
    c) Complete
    d) Traceable

22. Which of the following statements about SRS is/are true ?   c
    i. SRS is written by customer
    ii. SRS is written by a developer
    iii. SRS serves as a contract between customer and developer
    a) Only i is true
    b) Both ii and iii are true
    c) All are true
    d) None of the mentioned

23. The SRS document is also known as _____ specification.   a
    a) black-box
    b) white-box
    c) grey-box
    d) none of the mentioned

24. Which of the following is not included in SRS ?   c
    a) Performance
    b) Functionality
   c) Design solutions
    d) External Interfaces

Data Modeling analysis

25. Conceptual model is created by –   a

a) Business stakeholders and Data Architects
b) Data Architects and Business Analysts
c) DBA and developers
d) None

26. Which of the following is not a diagram studied in Requirement Analysis ?   d

a) Use Cases

b) Entity Relationship Diagram

c) State Transition Diagram

d) Activity Diagram

27. Techniques used to model data & process in scenario based modelling is   c
a) Use case diagram
b) Activity diagram
c) Both a & b
d) None

28. Which model in system modelling depicts the dynamic behaviour of the system ?   b
a) Context Model
b) Behavioral Model
c) Data Model
d) Object Model

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

30. The UML supports event-based modeling using _____ diagrams.   c
a) Deployment
b) Collaboration
c) State chart
d) All of the mentioned

31. Which system model is being depicted by the ATM operations shown below: b
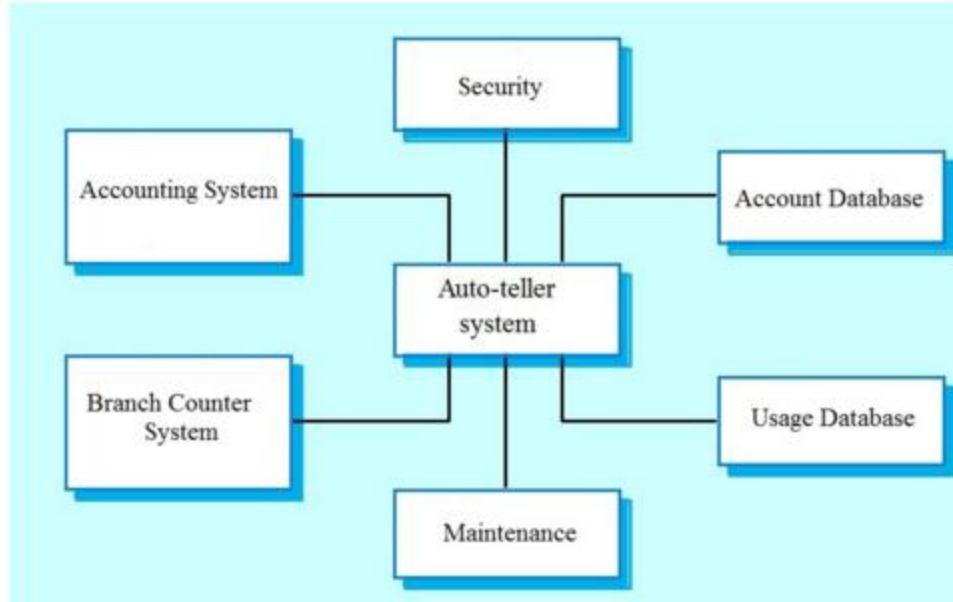
a) Structural model

b) Context model

c) Behavioral model

d) Interaction model

32. Which of the following Requirement Elicitation Techniques is applicable to messy, changing and ill-defined problem situations ?   c
a) Quality Function Deployment (QFD)
b) Prototyping
c) Soft Systems Methodology (SSM)
d) Controlled Requirements Expression (CORE)

33. Keeping the requirements of QFD in mind which of the following is/are an example of an Expected Requirement ?(select all possible options
a) Ease of software installation
b) Overall operational correctness and reliability
c) Specific system functions
d) Quality graphical display

34. Consider the Use-Case Diagram as given-
Find the number of controller classes required in domain model for a software development project   b
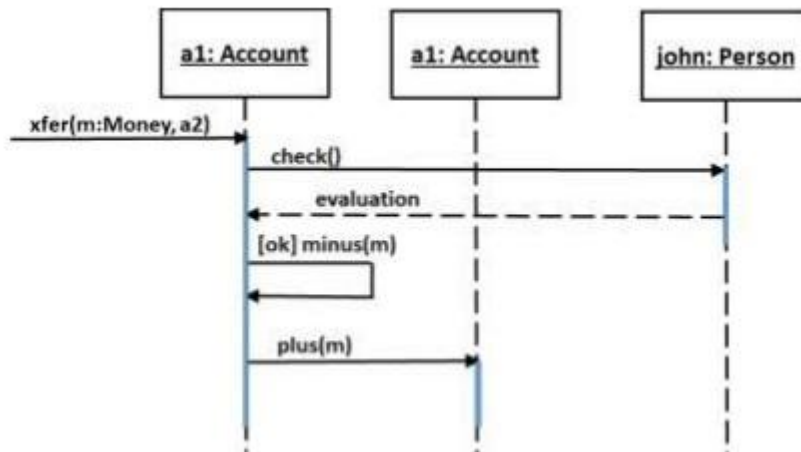
Course Management Software
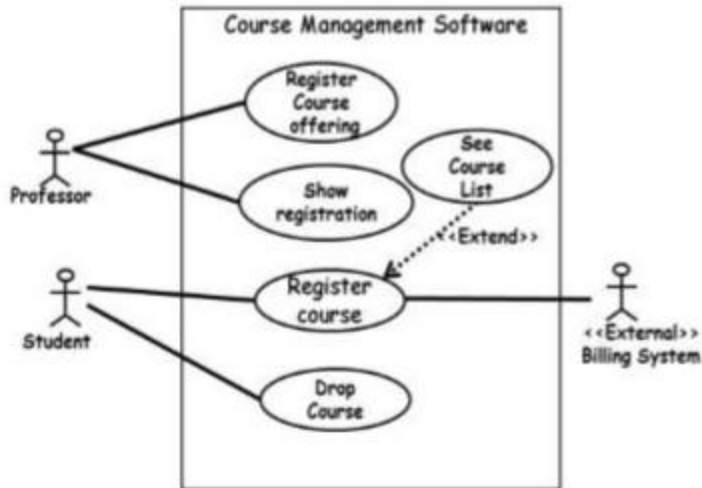
a) 3
b) 4
c) 6
d) 7

35. Consider the Use-Case Diagram as given-
Find the number of boundary classes required in domain model for a software development project   b

a) 4
b) 5
c) 6
d) 7

36. Consider the following UML sequence diagram. Based on the given sequence diagram, which method(s) should be implemented for the Account class?   b

a) xfer()
b) xfer(), plus(), minus()
c) check(), plus(), minus()
d)   xfer(), evaluation(), plus(), minus()

37. Requirements analysis is critical to the success of a development project.   a
    a) True
    b) False
    c) Depends upon the size of project
    d) None of the mentioned

MCQ-U-4-SE

1. In Design phase, which is the primary area of concern ?
    a) Architecture
    b) Data
    c) Interface
    d) All of the mentioned
    View Answer

Answer: d

2. The importance of software design can be summarized in a single word which is:
    a) Efficiency
    b) Accuracy
    c) Quality
    d) Complexity
    View Answer

Answer: c

3. Cohesion is a qualitative indication of the degree to which a module
    a) can be written more compactly
    b) focuses on just one thing
    c) is able to complete its function in a timely manner
    d) is connected to other modules and the outside world
    View Answer

Answer: b

4. Coupling is a qualitative indication of the degree to which a module
    a) can be written more compactly
    b) focuses on just one thing
    c) is able to complete its function in a timely manner
    d) is connected to other modules and the outside world
    View Answer

Answer: d

5. Design engineering activity deals entirely with the _____domain   b
    a)   Problem

b) Solution

c) Both

d) None

6. Which of the following is not a design principle for software design   b

   a) **Traceable to analysis model**

   b) **Should "Reinvent The Wheel"**

   c) **Minimize Intellectual distance**

   d) **Exhibit uniformity and integration**

7. Which of following is not a forms of abstraction mechanisms in software design   d

   a) functional abstraction,

   b) data abstraction and

   c) control abstraction

   d) event abstraction

8. Which of following is not a an advantages associated with information hiding   a

   a) Leads to high coupling

   b) Emphasizes communication through controlled interfaces

   c) Decreases the probability of adverse effects

   d) Results in higher quality software

9. A module is said to be functionally independent if it has   b

   a) Low cohesion and high coupling

   b) high cohesion and Low coupling

   c) Low cohesion and Low coupling

   d) High cohesion and high coupling

10. Which one of the following is not carried out during the high-level design of a software system?

    c

    a) Module structure,

    b) Call relationship or invocation relationship among the modules

    c) Algorithms for individual modules

    d) Interface among different modules

11. Which one of the following is usually not an advantage of designing a system such that the modules have functional independence?   d

    a) Reusability

    b) Testability

    c) Maintainability

    d) Run time efficiency

12. Which one of the following is the least desirable type of cohesion?   b

    a) Functional

    b) Coincidental

    c) Temporal

    d) Procedural

13. In the design of a certain system, suppose all error handling functions have been put in a module, then the module will have which one of the following types of cohesion?   b

a) Functional
b) Logical
c) Temporal
d) Procedural

14. The coupling between to modules is determine by which one of the following? a
    a) Interface complexity
    b) Combined size of the two modules
    c) Combined coherence of the two modules
    d) Sum of the cyclomatic metrics of the two modules
15. If two modules communicate with each other using two integer values and a floating-point value, then what can be said about the type of coupling between the two modules?   a
    a. Data
    b. Control
    c. Common
    d. Content

16. If two modules communicate with each other using a large integer array, then what can be said about the type of coupling between the two modules?   b
    a. Data
    b. Stamp
    c. Common
    d. Content

17. Suppose two modules share a large integer array such that the array is visible and modifiable in both the modules, then what can be said about the type of coupling that is existing between the two modules?   c
    a. Data
    b. Stamp
    c. Common
    d. Content

18. Which one of the following characteristics of a design indicates a poor design?   c
    a. Large depth
    b. Large width
    c. High fan-out
    d. High fan-in

Unit-5 SE – Software Testing

1. Software testing is: d
   a) the process of demonstrating that errors are not present
   b) the process of establishing confidence that a program does what it is supposed to do
   c) the process of executing a program to show it is working as per specifications
   d) the process of executing a program with the intent of finding errors
2. Software mistakes during coding are known as: b
   a) Failures
   b) Bugs
   c) defects
   d) errors
3. Unit testing is done by   c
   a) User
   b) Developer
   c) Tester
   d) None of above
4. Pick correct statement from the following   c
   a) Every error causes a failure
   b) Every error causes a fault
   c) Every failure is caused by a fault
   d) Every bug causes a failure
5. Which one of the following is true concerning verification   d
   a) Helps answer the question: Have you built the right thing?
   b) Checks the final product against specification
   c) Usually carried out by the test team
   d) Checks whether an artifact produced in a phase confirms to the corresponding artifacts produced in a previous phase
6. Why is it necessary to test a large program at three different levels: unit, integration, as well as system levels, rather than testing only at the system level?   C
   a. It reduces the number of test cases that can be designed
   b. It reduces the test execution effort
   c. It reduces the debugging effort
   d. It reduces test case design effort
7. Code coverage analysis is used to measure which one of the following?   b

   a. Thoroughness of testing

   b. Quality of test cases

   c. Quality of code

   d. Distribution of bugs

8. Which one of the following is not a black box testing technique?   d

a) Boundary value testing
b) Cause-effect (Decision Table) testing
c) Combinatorial testing
d) Basic Condition testing

9. Which one of the following is an implicit assumption made in equivalence class testing?   a
   a) A program behaves in similar ways to every input value belonging to an equivalence
      class.
   b) Different equivalence classes of a program contain similar bugs
   c) Different equivalence classes of a program contain dissimilar bugs
   d) Equivalence classes define the behaviorally similar components of a program

10. Customers typically carry out which one of the following types of testing?
    a) Unit testing
    b) Integration testing
    c) Acceptance testing
    d) Regression testing.

11. Which one of the following types of bugs may not get detected in black-box testing, but are very
    Likely to be get detected by white-box testing?   c
       a) Syntax errors
       b) Behavioral errors
       c) Trojans
       d) Performance errors

12. White-box testing is also called -   b
       a) functional testing
       b) structural testing
       c) fault oriented testing
       d) none
13. Which of the following is not a White box testing technique?   a
    a) Boundary value analysis

    b) Statement Testing
    c) Decision Testing
    d) Condition Coverage
14. Acceptance testing is also known as   d
    a) Grey box testing
    b) White box testing
    c) Alpha Testing
    d) Beta testing
15. Which of the following is non-functional testing?   b
    a) Black box testing
    b) Performance testing
    c) Unit testing
    d) None of the mentioned
16. Which of the following is not used in measuring the size of the software   c
    a) KLOC

b) Function Points
  c) Size of module
 d) None of the mentioned
17. Unit testing is an example of _____ testing technique that is usually performed by the developer   b
  a) Black Box
  b) White Box
  C) Grey box
  d) none
18. Integration testing is the process of testing the _____between two software units or module. d
  a) methods
  b) procedures
  c) routines
  d) interface
19. Which of the following integration testing approach is simple and practicable only for very small systems.   c
 a) Top-down
b) bottom-up
c) bigbang
d) smoke testing

MCQ-Unit-6

"Software Risks and Identification".

1. What all has to be identified as per risk identification?
a) Threats
b) Vulnerabilities
c) Consequences
d) All of the mentioned
Answer: d

2. Which one is not a risk management activity?
a) Risk assessment
b) Risk generation
c) Risk control
d) None of the mentioned
Answer: b

3. What is the product of the probability of incurring a loss due to the risk and the potential magnitude of that loss?
a) Risk exposure
b) Risk prioritization

c) Risk analysis
d) All of the mentioned
Answer: a

4. What threatens the quality and timeliness of the software to be produced?
a) Known risks
b) Business risks
c) Project risks
d) Technical risks
Answer: d

5. What threatens the viability of the software to be built?
a) Known risks
b) Business risks
c) Project risks
d) Technical risks

Answer: b

6. Which of the following is not a business risk?
a) building an excellent product or system that no one really wants
b) losing the support of senior management due to a change in focus or change in people
c) lack of documented requirements or software scope
d) losing budgetary or personnel commitment
Answer: c

7. Which of the following is a systematic attempt to specify threats to the project plan?
a) Risk identification
b) Performance risk
c) Support risk
d) Risk projection
Answer: d

8. Which risks are associated with the overall size of the software to be built or modified?
a) Business impact risks
b) Process definition risks
c) Product size risks
d) Development environment risks
Answer: c

9. Which risks are associated with constraints imposed by management or the marketplace?
a) Business impact risks
b) Process definition risks
c) Product size risks
d) Development environment risks

Answer: a

10. Which of the following term is best defined by the statement:"the degree of uncertainty that the product will meet its requirements and be fit for its intended use."?
a) Performance risk
b) Cost risk
c) Support risk
d) Schedule risk

Answer: a.

11. Risk management is one of the most important jobs for a
a) Client
b) Investor
c) Production team
d) Project manager

Answer: d

12. Which of the following risk is the failure of a purchased component to perform as expected?
a) Product risk
b) Project risk
c) Business risk
d) Programming risk
Answer: a

13. Which of the following term is best defined by the statement: "There will be a change of organizational management with different priorities."?
a) Staff turnover
b) Technology change
c) Management change
d) Product competition

Answer: c

14. Which of the following term is best defined by the statement: "The underlying technology on which the system is built is superseded by new technology."?
a) Technology change
b) Product competition
c) Requirements change
d) None of the mentioned

Answer: a

15. What assess the risk and your plans for risk mitigation and revise these when you learn more about the risk?
a) Risk monitoring
b) Risk planning
c) Risk analysis
d) Risk identification

Answer: a

16. Which of the following risks are derived from the organizational environment where the software is being developed?
a) People risks
b) Technology risks
c) Estimation risks
d) Organizational risks

Answer: d

17. Which of the following risks are derived from the software or hardware technologies that are used to develop the system?
a) Managerial risks
b) Technology risks
c) Estimation risks
d) Organizational risks

Answer: b

18. Which of the following term is best defined by the statement: "Derive traceability information to maximize information hiding in the design."?
a) Underestimated development time
b) Organizational restructuring
c) Requirements changes
d) None of the mentioned

Answer: c

19. Which of the following strategies means that the impact of the risk will be reduced?
a) Avoidance strategies
b) Minimization strategies
c) Contingency plans
d) All of the mentioned

Answer: b

20. Risk management is now recognized as one of the most important project management tasks.
a) True
b) False

Answer: a

Reengineering

21. What are the problems with re-structuring?
a) Loss of comments
b) Loss of documentation
c) Heavy computational demands
d) All of the mentioned

Answer: b

22. Which of the following is not a module type?
a) Object modules
b) Hardware modules
c) Functional modules
d) Process support modules

Answer: a

23. Reverse engineering of data focuses on
a) Internal data structures
b) Database structures
c) ALL of the mentioned
d) None of the mentioned

Answer: c

24. Forward engineering is not necessary if an existing software product is producing the correct output.
a) True
b) False

Answer: b

25. Which of the following is not an example of a business process?
a) designing a new product
b) hiring an employee
c) purchasing services
d) testing software

Answer: d

26. Which of the following is a data problem?
a) hardware problem
b) record organisation problems
c) heavy computational demands
d) loss of comments

Answer: b

27. When does one decides to re-engineer a product?
a) when tools to support restructuring are disabled
b) when system crashes frequently
c) when hardware or software support becomes obsolete
d) subsystems of a larger system require few maintenance

Answer: c

28. Which of the following is not a business goal of re-engineering ?
a) Cost reduction
b) Time reduction
c) Maintainability
d) None of the mentioned
Answer: d

29. Which of these benefits can be achieved when software is restructured?
a) Higher quality programs
b) Reduced maintenance effort
c) Software easier to test
d) All of the mentioned

Answer: d

30. Data re-engineering may be part of the process of migrating from a file-based system to a DBMS-based system or changing from one DBMS to another.
a) True
b) False

Answer: a

31. BPR stands for
a) Business process re-engineering
b) Business product re-engineering

c) Business process requirements
d) None of the mentioned

Answer: a

32. Source code translation is a part of which re-engineering technique?
a) Data re-engineering
b) Refactoring
c) Restructuring
d) None of the mentioned

Answer: c

33. In reverse engineering process, what refers to the sophistication of the design information that can be extracted from the source code?
a) interactivity
b) completeness
c) abstraction level
d) direction level

Answer: c

34. In reverse engineering, what refers to the level of detail that is provided at an abstraction level?
a) interactivity
b) completeness
c) abstraction level
d) directionality

Answer: b

35. The core of reverse engineering is an activity called
a) restructure code
b) directionality
c) extract abstractions
d) interactivity

Answer: c

36. What have become de rigueur for computer-based products and systems of every type?
a) GUIs
b) Candidate keys
c) Object model
d) All of the mentioned

Answer: a

37. Forward engineering is also known as
a) extract abstractions
b) renovation
c) reclamation
d) both renovation and reclamation

Answer: d

38. Reverse engineering is the process of deriving the system design and specification from its
a) GUI
b) Database
c) Source code
d) All of the mentioned

Answer: c

39. Reverse engineering techniques for internal program data focus on the definition of classes of objects.
a) True
b) False

Answer: a

40. Which of the following steps may not be used to define the existing data model as a precursor to re-engineering a new database model:
a) Build an initial object model
b) Determine candidate keys
c) Refine the tentative classes
d) Discover user interfaces

Answer: d

41. Much of the information necessary to create a behavioral model can be obtained by observing the external manifestation of the existing
a) candidate keys
b) interface
c) database structure
d) none of the mentioned

Answer: b

42. Extracting data items and objects, to get information on data flow, and to understand the existing data structures that have been implemented is sometimes called
a) data analysis
b) directionality
c) data extraction
d) client applications

Answer: a

43. Reverse engineering and Re-engineering are equivalent processes of software engineering.
a) True
b) False

Answer: b

44. Transformation of a system from one representational form to another is known as
a) Re-factoring
b) Restructuring
c) Forward engineering
d) Both Re-factoring and Restructuring

Answer: d

45. Which of the following is not an objective of reverse engineering?
a) to reduce maintenance effort
b) to cope with complexity
c) to avoid side effects
d) to assist migration to a CASE environment

Answer: d