BRAINWARE UNIVERSITY

Term End Examination 2021 - 22
Programme – Bachelor of Computer Applications
Course Name – Software Engineering
Course Code - BCAC601
(Semester VI)

Time : 1 Hr.15 Min.   Full Marks : 60

[The figure in the margin indicates full marks.]

Group-A

(Multiple Choice Type Question)   1 x 60=60

Choose the correct alternative from the following :

(1) UML stands for
   a) Unified Modeling Language   b) Unified Management Language
   c) Unique Modeling Language   d) United Modeling Language

(2) Cohesion measures
   a) Functional Strength of two modules   b) Interdependency of modules
   c) Logical complexity among modules   d) None of these

(3) Which diagram useful to get an idea of user interface?
   a) DFD   b) ERD
   c) Decision Tree   d) PERT Chart

(4) What type of relationship is represented by Shape class and Square?
   a) Realization   b) Generalization
   c) Aggregation   d) Dependency

(5) What encapsulates both data and data manipulating functions
   a) Class   b) Super Class
   c) Activity   d) Member Function

(6) Which one is not a risk management activity?
   a) Risk assessment   b) Risk generation
   c) Risk control   d) None of the mentioned

(7) PERT is known as
   a) Project Evaluation and Review Technique   b) Project Estimation and Review Technique
   c) Project Equation and Review Technique   d) None of these

(8) LOC falls under which category?
   a) Reliability Metrics   b) Cost metrics

c) Process metrics   d) Product metrics

(9) Mention white box testing can be started?

   a) after SRS creation   b) after designing

   c) after programming   d) after installation

(10) Software Maintenance includes

   a) Error corrections   b) Enhancements of capabilities

   c) Deletion of obsolete capabilities   d) All of the mentioned

(11) Which of the life cycle models covers Risk as a part

   a) RAD Model   b) Waterfall Model

   c) Spiral Model   d) Evolutionary Model

(12) What is prototype?

   a) Mini-model of existing system   b) Mini-model of proposed system

   c) Working-model of existing system   d) None of these

(13) Which of the following life cycle models can be chosen if client is not very much aware of the requirement?

   a) Spiral   b) Waterfall

   c) RAD   d) Prototype Model

(14) Which model adjusts with changing requirements?

   a) Waterfall Model   b) Spiral Model

   c) Agile Model   d) Evolutionary Model

(15) Which model is known as meta model?

   a) Spiral Model   b) Agile Model

   c) RAD Model   d) Prototype Model

(16) Which model put much effort on Testing?

   a) Spiral Model   b) Waterfall Model

   c) Verification and Validation Model   d) None of the above

(17) The detailed study of existing system is referred to as

   a) Feasibility study   b) System design

   c) System Analysis   d) System Testing

(18) What is SDLC?

   a) Software Development Life Cycle   b) System Deployment life cycle

   c) Software deactivation life cycle   d) None of the above

(19) Which of the following life cycle models can be chosen if the development team has less experience on similar projects?

   a) Waterfall Model   b) Spiral Model

   c) RAD Model   d) Iterative enhancement model

(20) What are the two issues of Requirement Analysis?

   a) Performance, Design   b) Stakeholder, Developer

   c) Functional, Non-Functional   d) None of the mentioned

(21) The user system requirements are the part of which particular document

   a) SDD   b) SRS

   c) Design Document   d) Design Document

(22) How is generalization implemented in Object Oriented programming languages?

   a) Inheritance   b) Polymorphism

c) Encapsulation d) Abstract Class

(23) What is a collection of operations that specify a service of a class or component?

a) Use Cases b) Actor

c) Interface d) Relationship

(24) Which UML diagram gives a static view?

a) Class Diagram b) Use Case Diagram

c) Sequence Diagram d) Activity Diagram

(25) Which one may be used to show relationship among different entities?

a) Entity-relation diagram b) Activity diagram

c) Use Case diagram d) Gantt Chart

(26) State whether the following statements about data flow model are True or False. i) Data flow model shows how the order for the goods moves from process to process. ii) Data flow diagrams are good way to describe sub-system with complex interfaces.

a) True, False b) False, True

c) False, False d) True, True

(27) DFD works for which following purpose

a) Decomposition of work b) Control Flow

c) Both a and b d) None of these

(28) Function point can be calculated as

a) . FP= UFP * CAF b) FP=UFP + CAF

c) FP=UFP -CAF d) None of these

(29) CAF in function point can be calculated as

a) CAF= [count total * 0.65*DI] b) CAF = count total * [0.65 + 0.01 * (DI)2

c) CAF= count total * [0.65 + 0.01] * sum(Fi) d) CAF = [0.65 + (0.01 * DI)]

(30) A 66.6% risk is considered as

a) Low b) Very Low

c) High d) Very High

(31) Group A Group B (a) DFD i. Calculate effort of a software (b) Function point metric ii. It is a testing procedure (c) Cyclomatic complexity iii. Used for design of a Find the pr oper matching in following case

a) (a)-i,(b)-ii,(c)-iii b) (a)-iii,(b)-i,(c)-ii

c) (a)-ii,(b)-i,(c)-iii d) (a)-iii,(b)-i,(c)-ii

(32) Which of the following is not an information domain required for determining function point in FPA?

a) Number of user Input b) Number of user Inquiries

c) Number of external Interfaces d) Number of errors

(33) Which diagram does not include requirement analysis?

a) Use Cases b) Entity Relationship Diagram

c) State Transition Diagram d) Activity Diagram

(34) SCM is _____

a) Software Configuration management b) Supply content management

c) Software content management d) None of the above

(35) Critical task may be estimated as

a) LS-ES b) LF-E

c) Both a and b d) LS * ES

(36) Which one of the following is a requirement that fits in a developer's module?

a) Availability
b) debugging
c) Usability
d) Flexibility

(37) Alpha and Beta Testing are forms of _____ testing

a) Acceptance Testing
b) System Testing
c) Unit Testing
d) Integration Testing

(38) Which statement about testing is not true

a) Testing done to discover error
b) Testing increases productivity
c) 100% error discovery is possible
d) None of these

(39) The testing of software against SRS is called

a) Acceptance Testing
b) Integration Testing
c) System Testing
d) Regression Testing

(40) Which granularity level of testing checks the behavior of module cooperation?

a) Unit Testing
b) Integration Testing
c) Acceptance Testing
d) Regression Testing

(41) What will be the cyclomatic complexity for the following code void main() { int a, b,c =0; c=a+b; printf("result is",c); }

a) 1
b) 0
c) 2
d) 3

(42) What is the main aim of testing?

a) To discover the undiscover error
b) To enhance overall productivity
c) . Both a and b
d) None of these

(43) Which test refers to the retesting of a unit, integration and system after modification, in order to ascertain that the change has not introduced new faults?

a) Regression Test
b) Smoke Test
c) Alpha Test
d) Beta Test

(44) CFG is known as

a) Control Flow Graph
b) Control Frequency Graph
c) Context Flow Graph
d) Content Flow Graph

(45) Which one is true about Exhaustive testing?

a) always possible
b) practically possible
c) impractical but possible
d) . impractical and impossible

(46) Cyclomatic Complexity of an if-else statement may be

a) 0
b) 2
c) 1
d) 3

(47) Test cases should uncover errors like

a) Nonexistent loop termination
b) Comparison of different data types
c) Both a and b
d) None of the above

(48) Bottom Up approach comes under

a) Acceptance testing
b) Integration testing
c) Unit Testing
d) None of these

(49) Testing is done on the basis of

a) Test cases
b) PERT Chart
c) Use cases
d) Gnatt Chart

(50) Each module of software tested to discover any error in the code

a) Unit Testing

b) Acceptance Testing

c) Mutation Testing

d) Integration Testing

(51) Smoke Testing is a type of which following testing

a) Unit Testing

b) Integration Testing

c) System Testing

d) Acceptance Testing

(52) Test suit is known as

a) Collection of test cases

b) Evaluation of test cases

c) Testing tool

d) Test termination condition only

(53) Find the proper matching in following case Group A Group B (a) selenium i. Cost esti mation model (b) COCOMO ii. Testing tool (c) MTTF iii. Reliability metric

a) (a)-i,(b)-ii,(c)-iii

b) (a)-ii,(b)-iii,(c)-i

c) (a)-ii,(b)-i,(c)-iii

d) (a)-iii,(b)-i,(c)-ii

(54) For which of the following testing one need not to be aware of the internal working pro cedure?

a) Branch Coverage

b) Code Coverage

c) Both a and b

d) Boundary Value Analysis

(55) Which one is not a testing procedure?

a) after SRS creation

b) after designing

c) after programming

d) after installation

(56) Which one is not a black box testing procedure?

a) Ad Hoc Testing

b) End to End Testing

c) Regression Testing

d) Integration Testing

(57) Which testing can't be performed with the first built of the software?

a) Regression Testing

b) Unit Testing

c) Acceptance Testing

d) Both b and c

(58) A tester is executing a test to evaluate and it complies with the user requirement for a c ertain field be populated by using a dropdown box containing a list of values, at that ti me tester is performing _____ .

a) Black Box Testing

b) White Box Testing

c) Load Testing

d) Regression Testing

(59) MTTF and MTBF are used in

a) Process Metrics

b) Project Metrics

c) Reliability Metric

d) Cost Metrics

(60) …………….. is a measure of the frequency of occurrence with which unexpected beha vior is likely to occur.

a) Probability of Failure on Demand (POFOD)

b) Rate of Failure Occurrence (ROCOF)

c) Mean Time to Failure (MTTF)

d) Rate of Failure Occurrence (ROCOF)