BRAINWARE UNIVERSITY

Term End Examination 2021 - 22
Programme – Bachelor of Technology in Computer Science & Engineering
Course Name – Software Engineering
Course Code - BCSE601
(Semester VI)

Time allotted : 1 Hrs.25 Min.   Full Marks : 70

[The figure in the margin indicates full marks.]

Group-A
(Multiple Choice Type Question)   1 x 70=70

Choose the correct alternative from the following :

(1) Which of the following is an activity that distributes estimated effort across the planned project duration by allocating the effort to specific software engineering tasks?
   a) Software Macroscopic schedule
   b) Software Project scheduling
   c) Software Detailed schedule
   d) None of the mentioned

(2) If an Indirect approach is taken, then the sizing approach is represented as
   a) LOC
   b) FP
   c) Fuzzy Logic
   d) LOC & FP

(3) Programming language experience is a part of which factor of COCOMO cost drivers?
   a) Personnel Factor
   b) Product Factor
   c) Platform Factor
   d) Project Factor

(4) Which of the following is not one of the five information domain characteristics of Function Point (FP) decomposition?
   a) External Inputs
   b) External Outputs
   c) External Process
   d) External Inquiries

(5) Who suggested the four different approaches to the sizing problem?
   a) Putnam
   b) Myers
   c) Boehm
   d) Putnam and Myers

(6) How many forms exist of Barry Boehm's COCOMO Model?
   a) Two
   b) Three
   c) Four
   d) None from Exists

(7) If a Direct approach to software project sizing is taken, size can be measured in
   a) LOC
   b) FP
   c) LOC & FP
   d) None of the mentioned

(8) 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

(9) 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) Requirements changes

(10) 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 Risk

d) Organizational Risk

(11) Which of the following risks are derived from the organizational environment where the software is being developed? a. b. c. d.

a) People Risk

b) Technology risks

c) Estimation risks

d) Organizational risks

(12) Recruitment analysis is critical to the success of a development process.

a) True

b) False

c) Depends upon the size of project

d) None of the mentioned

(13) Which tool is use for structured designing?

a) E-R diagram

b) Structure chart

c) Data-flow diagram

d) Both a,b

(14) In the Analysis phase, the development of the _____ occurs, which is a clear statement of the goals and objectives of the project?

a) Documentation

b) Flowchart

c) program specification

d) data flow diagram

(15) Cohesion is a qualitative indication of the degree to which a module

a) can not be written more compactly

b) focuses on just one thing

c) is able to complete its module in a timely manner

d) is connected to other function and the outside world

(16) Which of the following is/are the valid relationships in Use Case Diagrams?

a) Generalization

b) Component

c) System

d) All of the mentioned

(17) Which of the following property does not correspond to good software Requirement Specification (SRS)?

a) Verifiable

b) Ambiguous

c) Complete

d) Traceable

(18) Which of the following is not a step in the recruitment engineering process?

a) Recruitment specification

b) Requirement analysis

c) Feasibility study

d) Recruitment Prioritization

(19) What is the system requirement of the documents?

a) SRS

b) SDD

c) SRD

d) DDD

(20) The SRS is said to be consistent if and only if

a) Its structure and style are such that any changes to the requirements can be made easily while retaining the style and structure

b) Every requirement stated therein is one that the software shall meet.

c) Every requirement stated therein is verifiable.

d) No subset of individual requirements described in it conflict with each other

(21) Which of the following is included in SRS?

a) Cost

b) Design Constraints

c) Staffing

d) Delivery Schedule

(22) Which of the following is not included in SRS?

a) Performance
b) Functionality

c) Design Solutions
d) External Interfaces

(23) Consider the following Statement: "The output of a program shall be given within 10 secs of event X 10% of the time."What characteristic of SRS is being depicted here?

a) Consistent
b) Verifiable

c) Non- verifiable
d) Correct

(24) Considering the example of issue/return of a book, cataloging etc. in a library management. What type of management requirement is being depicted here?

a) Enduring
b) Volatile

c) Both enduring and Volatile
d) All of the mentioned

(25) Which of these software engineering activities is not a part of software process?

a) Software verification
b) Software dependence

c) Software validation
d) None of these

(26) The reason for software bugs and failures is due to

a) Software companies
b) Software Developers

c) Both a & b
d) None of these

(27) The importance of software design can be summarized in a single word

a) accuracy
b) complexity

c) efficiency
d) quality

(28) Which of these are characteristics of a good design?

a) exhibits strong coupling between its modules
b) implements all requirements in the analysis model

c) Provides a complete picture of the software
d) both b & c

(29) Which of the following is not a characteristic common to all design methods?

a) configuration management
b) functional component representation

c) quality assessment guidelines
d) refinement heuristics

(30) Which of the following is not a characteristic common to all design methods?

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(31) The importance of software design can be summarized in a single word which is:

a) Efficiency
b) Accuracy

c) Quality
d) Complexity

(32) Coupling is a qualitative indication of the degree to which a module

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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

(33) What encapsulates both data and data manipulation functions? a. b. c. d.

a) Object
b) Class

c) Super class
d) Sub class

(34) Which of the following is a disadvantage of OOD?

a) Easier maintenance
b) Objects may be understood as stand-alone entities

c) Objects are potentially reusable components
d) None of the mentioned

(35) The context diagram is also known as

a) Level-0 DFD
b) Level-1 DFD

c) Level-2 DFD
d) All of the mentioned

(36) A directed arc or line in DFD represents

a) Data Store
b) Data Process

c) Data Flow
d) All of the mentioned

(37) The spiral model was originally proposed by

a) Barry Boehm

b) Pressman

c) Royce

d) None of above

(38) What is the final outcome of the requirements analysis and specification phase a. b. c. d.

a) drawing the data flow diagram

b) the SRS document

c) testing the project

d) none of these

(39) Which one of the following is NOT desired in a good Software Requirement Specifications (SR S) document?

a) Functional dependency

b) Algorithms for Software Implementation

c) Non Functional Requirements

d) Goals of design

(40) What is the appropriate pairing of items in the two columns listing various activities encountered in a software life cycle? P. Requirements Capture 1.Module Development and Integration Q. Design 2.Domain Analysis R. Implementation 3.Structural and Behavioral Modeling S. Maintenanc 4.Performance Tuning a. b.

a) P-3, Q-2, R-4, S-1

b) P-2, Q-3, R-1, S-4

c) P-3, Q-2, R-1, S-4

d) P-2, Q-3, R-4, S-1

(41) What is Cyclomatic complexity?

a) Black box testing

b) White box testing

c) Yellow box testing

d) Green box testing

(42) Which of the following is/are White box technique?

a) Statement Testing

b) Decision Testing

c) Condition Coverage

d) All of the mentioned

(43) Alpha testing is done at

a) Developer's end

b) User's end

c) Developer's & User's end

d) None of the mentioned

(44) . The testing in which code is checked

a) Black box testing

b) White box testing

c) Red box testing

d) Green box testing

(45) Testing done without planning and Documentation is called

a) Unit testing

b) Regression testing

c) Adhoc testing

d) None of the mentioned

(46) What is Functional Testing? a. b. c. d.

a) SDLC Model

b) Test Type

c) Test Design Technique

d) Test Level

(47) What are the various Testing Levels?

a) Unit Testing

b) System Testing

c) Integration Testing

d) All of the mentioned

(48) Acceptance testing is also known as

a) Grey box testing

b) White box testing

c) White box testing

d) Beta testing

(49) Which of the following is non-functional testing?

a) Black box testing.

b) Performance testing

c) Unit testing

d) None of the mentioned

(50) Beta testing is done at

a) User's end

b) Developer's end

c) User's & Developer's end

d) None of the mentioned.

(51) Behavioral testing is

a) White box testing

b) Black box testing

c) Grey box testing

d) None of the mentioned

(52) Which of the following is black box testing

a) Basic path testing

b) Boundary value analysis

c) Code path analysis

d) None of the mentioned

(53) Software Maintenance includes

a) Error corrections

b) Enhancements of capabilities.

c) Deletion of obsolete capabilities

d) All of the mentioned

(54) Maintenance is classified into how many categories?

a) Two

b) Three

c) Four

d) Five

(55) Which selective retest technique selects every test case that causes a modified program to produce a different output than its original version?

a) Coverage

b) Minimization

c) Safe

d) Maximization

(56) Which regression test selection technique exposes faults caused by modifications?

a) Efficiency

b) Precision

c) Generality

d) Inclusiveness

(57) Which of the following manuals is not a user documentation

a) Beginner's Guide

b) Installation guide

c) Reference Guide

d) SRS

(58) Which of the following is not an appraisal cost in SQA?

a) Maintenance

b) inter-process inspection

c) quality planning

d) Testing

(59) Who identifies, documents, and verifies that corrections have been made to the software?

a) Project manager

b) Project Team

c) SQA Group

d) All the mentioned above

(60) Which of the following is not included in External failure costs?

a) Testing

b) help line support

c) warranty work

d) Complaint resolution

(61) CMM Stands for?

a) Capability Management Module

b) Conservative Maturity Model

c) Capability Maturity Module

d) Capability Maturity Model

(62) According to ISO 9001, the causes of nonconforming product should be

a) Deleted

b) Eliminated

c) Identified

d) eliminated and identified

(63) ISO 9001 is not concerned with _____ of quality records.

a) Collection

b) Maintenance

c) Verification

d) dis-positioning

(64) In CMM, the life cycle activities of requirements analysis, design, code, and test are described in a. b. c. d.) d)

a) Software Product Engineering

b) Software Quality Assurance

c) Software Subcontract Management

d) Software Quality Management

(65) Which of the following requires design control measures, such as holding and recording design reviews and qualification tests?

a) CMM

b) ISO 9001

c) ISO 9000-3

d) None of the mentioned

(66) Which of the following is not considered as a risk in project management?

a) Specification delays

b) Product competition

c) Testing

d) Staff turnover

(67) The process each manager follows during the life of a project is known as . .

a) Project Management

b) Manager life cycle

c) Project Management Life Cycle

d) All of the mentioned

(68) A 66.6% risk is considered as

a) very low

b) low

c) moderate

d) High

(69) Which of the following is/are main parameters that you should use when computing the costs of a software development project?

a) travel and training costs

b) hardware and software costs

c) effort costs (the costs of paying software engineer s and managers

d) all of the mentioned

(70) Quality planning is the process of developing a quality plan for

a) Team

b) Project

c) Customers

d) project manager