

**BACHELOR OF COMPUTER APPLICATION
THIRD SEMESTER
SOFTWARE ENGINEERING
BCA-302(REPEAT)**

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs.

Full Marks: 70

(Objective)

Time: 30 mins.

Marks: 20

Choose the correct answer from the following:

1×20=20

1. What is Software?
 - a. Set of programs
 - b. Documentation and configuration of data
 - c. Set of programs, documentation, and configuration of data
 - d. None of these
2. _____ is not suitable for accommodating any change?
 - a. RAD Model
 - b. Waterfall Model
 - c. Build & Fix Model
 - d. Prototyping Model
3. Project planning consists of
 - a. Estimating some basic attributes like cost, duration & effort
 - b. Scheduling manpower and other resources
 - c. Staffing, risk identification
 - d. All of these
4. White-box testing are
 - a. Statement Coverage testing
 - b. Condition Coverage Testing
 - c. Data Flow Testing
 - d. All of these
5. Alpha testing is performed by -----
 - a. Developer team
 - b. Users' friendly customers
 - c. Customers
 - d. None of these
6. The key objective of integration testing is to remove
 - a. Design errors
 - b. Interface errors
 - c. Procedure errors
 - d. All of these
7. Which of the following is not an advantage of software reuse?
 - a. Lower cost
 - b. Faster software development
 - c. High effectiveness
 - d. Low risks
8. While constructing a data dictionary, the analyst considers
 - a. each data flow in the DFD has one data dictionary entry
 - b. Definitions must be readily accessible by name.
 - c. There should be no redundancy in the data definition.
 - d. None of these
9. The Data Flow Diagram (DFD) shows
 - a. the flow of data
 - b. the data where they are stored
 - c. the processes
 - d. All of these

10. System specifications are used to
 - a. get an accurate picture of the system
 - b. describe system flows
 - c. avoid ambiguity
 - d. All of these
11. Which of the following is not a part of a Data Flow Diagram?
 - a. Disk storage
 - b. Arrow
 - c. Process represented by a bubble circle
 - d. Data store
12. Which of the following is a desirable property of a system?
 - a. Independency
 - b. Low Cohesiveness
 - c. Multifunctional
 - d. High Coupling
13. SRS document is prepared by
 - a. System analyst
 - b. Project Manager
 - c. Testing Engineer
 - d. None of these
14. Which of the following testing is the part of non-functional testing?
 - a. Unit testing
 - b. Performance testing
 - c. Integration testing
 - d. System testing
15. Which of the following is not project management goal?
 - a. Keeping overall costs within budget
 - b. Delivering the software to the customer at the agreed time
 - c. Maintaining a happy and well-functioning development team
 - d. Avoiding customer complaints
16. What are attributes of good software?
 - a. Software maintainability
 - b. Software functionality
 - c. Software maintainability & functionality
 - d. Software development
17. Which of the following is the most widely used interface?
 - a. Command based
 - b. Text based
 - c. Graphical User Interface
 - d. None of these
18. Software engineering primarily means on
 - a. Reliable software
 - b. Cost effective software
 - c. Reliable and cost effective software
 - d. None of these
19. Test suit is
 - a. Set of test cases
 - b. Set of inputs
 - c. Set of outputs
 - d. None of these
20. The simplest metric to estimate project size is
 - a. Lines of Codes (LOC)
 - b. Function Point Metric
 - c. Feature Point Metric
 - d. None of these

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(Descriptive)

Time : 2 hrs. 30 mins.

Marks : 50

[Answer question no.1 & any four (4) from the rest]

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| 1. What is Software Life Cycle Models? What are the different phases of classical water fall model? Explain – Software Engineering is a layered technology. | 2+3+5=10 |
| 2. What are the different types of maintenance that a software product need? Explain software reverse engineering. | 5+5=10 |
| 3. What do you mean by the terms cohesion and coupling in the context of software design? Enumerate the different type of cohesion that a model might exhibit. | 3+4+3=10 |
| 4. What is an interface? Discuss the characteristics of a good interface | 2+8=10 |
| 5. Why is it important for an organization to undertake an effective reuse program? What can be reused? Discuss the basic issues in any reuse program. | 2+2+6=10 |
| 6. What is testing? Explain Unit testing, Integration testing and system testing. Explain Black box testing with example | 2+3+5=10 |
| 7. Who are the different categories of users of the SRS document? What are their expectations from the SRS document? Give the organization of the SRS document. | 2+5+3=10 |
| 8. Explain different categories of software development projects according COCOMO model. State the basic COCOMO model. | 6+4=10 |

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