

(6 pages)

Reg. No. :

**Code No. : 20254 E Sub. Code : JMCA 51/
SMCA 51**

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021.

Fifth Semester

Computer Application — Main

SOFTWARE ENGINEERING

(For those who joined in July 2016-2019)

Time : Three hours

Maximum : 75 marks

PART A — ($10 \times 1 = 10$ marks)

Answer ALL questions.

Choose the correct answer :

1. _____ software runs specific hardware devices which are typically sold on the open market.
 - (a) Generic
 - (b) Embedded
 - (c) Utility
 - (d) Data processing

2. A class acts as a container to hold its features and defines an interface that allows only some of them to be seen from outside is said be
- (a) Encapsulation (b) Inheritance
 - (c) Super class (d) Sub class
3. _____ is a typical sequence of actions that an actor performs in order to complete a given task.
- (a) Test case (b) Use case
 - (c) Switch case (d) Pattern
4. _____ is an effective way to gather information from a group of people.
- (a) Brainstorming (b) Interview
 - (c) Observation (d) Eliciting
5. Expand OCL
- (a) Object Control Language
 - (b) Object Constraint Language
 - (c) Output Constraint Language
 - (d) Output Control Language

6. Instances of classes is called _____.
- (a) Sequence (b) Interaction
(c) Component (d) Object
7. In UML, _____ is a collection of modeling elements that are grouped together because they are logically related.
- (a) object (b) interface
(c) package (d) component
8. _____ contains the underlying classes whose instances are to be viewed and manipulated in MVC.
- (a) View (b) Control
(c) UML (d) Model
9. Name the test which provide the system with inputs and observe the outputs, but they cannot see what is going on inside
- (a) gray test (b) black-box test
(c) white-box (d) glass box test

10. _____ software process model, software development as a series of hills, each representing a separate loop of the spiral.
- (a) Water fall (b) Prototype
(c) Spiral (d) Evolutionary

PART B — ($5 \times 5 = 25$ marks)

Answer ALL questions, choosing either (a) or (b).

Each answer should not exceed 250 words.

11. (a) List out the Ethics in Software Engineering.

Or

- (b) Comment on Data abstraction.

12. (a) What is requirement in software engineering?

Or

- (b) How to obtain information using Brain storming technique?

13. (a) Explain the classification of labels in association.

Or

- (b) Discuss the elements in an interaction diagram.

14. (a) Describe the features of Architectural design.

Or

- (b) Why you need to develop an architectural model?

15. (a) Mention the strategies for glass-box testing.

Or

- (b) Give a testing strategy for performing Not handling null conditions.

PART C — ($5 \times 8 = 40$ marks)

Answer ALL questions by choosing (a) or (b).

Each answer should not exceed 800 words.

16. (a) Write note on Inheritance.

Or

- (b) Explain the categories of software engineering projects.

17. (a) Describe the Process and Platform requirement of the system.

Or

- (b) Discuss about prototyping.

18. (a) Explain the activities and actions in state diagram.

Or

- (b) Write note on Associations and Multiplicity.

19. (a) What is meant by Cohesion? Explain its types.

Or

- (b) Discuss the Multi-Layer architectural pattern.

20. (a) Explain the Defects in timing and co-ordination.

Or

- (b) Write note on spiral and evolutionary software process model.
