

(6 pages)

Reg. No. :

**Code No. : 20239 E Sub. Code : SMCA 51/
AMCA 51**

B.C.A. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2022.

Fifth Semester

Computer Application — Core
SOFTWARE ENGINEERING

(For those who joined in July 2017 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1. _____ software is designed to be sold on open market.
- (a) Custom software
 - (b) Generic software
 - (c) Embedded software
 - (d) None of these

2. _____ are also known as clients.
- (a) Customers (b) Users
 - (c) Developers (d) Managers
3. _____ is a process by which a software engineer learns background information.
- (a) Domain analysis
 - (b) Requirement analysis
 - (c) Specification analysis
 - (d) Information analysis
4. _____ is a statement about what the proposed system will do.
- (a) Task (b) Order
 - (c) Requirement (d) Interface
5. _____ is used to show how two classes are related to each other.
- (a) Association (b) Generalization
 - (c) Multiplicity (d) None of these
6. Aggregations are specified using a _____ symbol.
- (a) rectangle (b) circle
 - (c) diamond (d) line

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7. In _____ design, you start with very high level structure of the system.

- (a) top-down (b) bottom-up
(c) architecture (d) class

8. _____ occurs when there are inter dependencies between one module and another.

- (a) Cohesion (b) Coupling
(c) Utility (d) Network

9. _____ chart shows the sequence in which tasks must be completed.

- (a) PERT (b) Gantt
(c) Earn value (d) None

10. _____ is the process of deciding the sequence a set of activities will be performed.

- (a) Scheduling (b) Tracking
(c) Testing (d) Planning

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PART B — (5 × 5 = 25 marks)

Answer ALL questions, choosing either (a) or (b).
Each answer should not exceed 250 words.

11. (a) Discuss the nature of software.

Or

(b) What is an object? Explain with example.

12. (a) What are functional requirements? Explain.

Or

(b) Give a brief account on generalization.

13. (a) What is reflexive association? Explain.

Or

(b) Explain sequence diagrams.

14. (a) Define coupling. What are the different types of coupling?

Or

(b) Explain Broker architectural pattern.

15. (a) Discuss project scheduling and tracking.

Or

(b) Explain the roles of development team.

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[P.T.O.]



PART C — (5 × 8 = 40 marks)

Answer ALL questions, choosing either (a) or (b)
Each answer should not exceed 600 words.

16. (a) Explain in detail the activities common to software projects.

Or

- (b) Explain the features of object oriented language.

17. (a) Discuss and explain the techniques for analyzing and gathering requirements.

Or

- (b) Explain about difficulties and risks in domain and requirements analysis.

18. (a) Explain aggregation and interfaces.

Or

- (b) Explain State diagrams.

19. (a) Explain MVC architectural pattern.

Or

- (b) Explain the process of writing a good design document.

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20. (a) Explain the defects in ordinary algorithms.

Or

- (b) Explain the defects in numerical algorithms.
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