

(6 pages)

Reg. No. : .....

Code No. : 10239 E Sub. Code : SMCA 51/  
AMCA 51

B.C.A. (CBCS) DEGREE EXAMINATION, APRIL 2023.

Fifth Semester

Computer Application - Core

SOFTWARE ENGINEERING

(For those who joined in July 2017 – 2020 onwards)

Time : Three hours

Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions, Choose the correct answer:

1. \_\_\_\_\_ is the process of creating a representation of the domain on the software.  
(a) modeling (b) design  
(c) programming (d) quality assurance
2. An \_\_\_\_\_ is a chunk of structural data in a running software system.  
(a) class (b) object  
(c) module (d) methods

7. \_\_\_\_\_ is the design of computational mechanism.  
(a) algorithm design (b) class design  
(c) protocol design (d) architecture design
8. In UML \_\_\_\_\_ is a collection of modeling elements that are grouped together because they are logically related.  
(a) subsystem. (b) packages  
(c) element (d) data
9. An effective and efficient testing strategy is often called \_\_\_\_\_ strategy  
(a) black-box (b) white-box  
(c) high-yield (d) none
10. Which model form the foundation of many software development methodologies in use today.  
(a) spiral model  
(b) waterfall model  
(c) evolutionary model  
(d) concurrent engineering model

Page 3 Code No. : 10239 E

3. \_\_\_\_\_ measures the amount of time that a server is running and available to respond to users  
(a) availability  
(b) reliability  
(c) recovers  
(d) throughput
4. \_\_\_\_\_ describes the services provided to the user and to other system.  
(a) background information  
(b) problem  
(c) functional requirements  
(d) non-functional requirements
5. What is used to show how classes are related to in general?  
(a) association (b) methods  
(c) objects (d) module
6. Which diagram is used to model the dynamic aspects of a software system.  
(a) interaction (b) state  
(c) activity (d) none

Page 2 Code No. : 10239 E

PART B — (5 × 5 = 25 marks)

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

11. (a) What are the measures of software quality? Discuss.  

Or

(b) Explain the concepts that define object orientation.
12. (a) Write a short note on Domain Analysis.  

Or

(b) Explain the risk factor in domain and requirement analysis.
13. (a) Write the essentials of UML class diagrams.  

Or

(b) Explain Interaction Diagram.
14. (a) Explain Top down and Bottom up design.  

Or

(b) Write the importance of developing Architectural Modal.

Page 4 Code No. : 10239 E

[P.T.O.]

15. (a) Mention the defects in Numerical Algorithm.

Or

(b) What are the skills needed for building Software Engineering teams?

PART C — (5 × 8 = 40 marks)

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

16. (a) What are the activities common to software projects? Discuss about them.

Or

(b) Illustrate classes and objects with examples.

17. (a) Discuss the problem and the cope in detail.

Or

(b) Explain the various types of requirement in detail.

18. (a) Explain the Association and Multiplicity with examples.

Or

(b) Explain briefly about activity diagrams. Give examples.

Page 5 Code No. : 10239 E

19. (a) Write about the techniques for making good design decisions.

Or

(b) List out the Architectural pattern.

20. (a) What is effective and efficient testing? Explain in detail.

Or

(b) Explain the software process model in detail.

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Page 6 Code No. : 10239 E