Reg. No. : ....

Code No. : 20329 E   **Sub. Code : SMCS 51**

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2021.

Fifth Semester

Computer Science — Core

SOFTWARE ENGINEERING AND TESTING

(For those who joined in July 2017-2019)

Time : Three hours   Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer :

1.   What is full form of SDLC?

     (a)   System Design Life Cycle

     (b)   Software Design Life Cycle

     (c)   System Development Life Cycle

     (d)   Software Development Life Cycle

2. RAD Model has _____ phase.

   (a)   3   (b)   4

   (c)   5   (d)   6

3. Which of the following is not considered as a risk in project management?

   (a)   Specification delays

   (b)   Product competition

   (c)   Testing

   (d)   Staff Turnover

4. Which of the following is not defined in a good Software Requirement Specification (SRS) document?

   (a)   Functional Requirement

   (b)   Nonfunctional Requirement

   (c)   Goals of implementation

   (d)   None of these

5. Which tool is use for structured designing?

   (a)   Program flowchart

   (b)   Structure chart

   (c)   Data-flow diagram

   (d)   Module

6. In Design phase, which is the primary area of concern?

   (a) Architecture

   (b) Data

   (c) Interface

   (d) All of the mentioned

7. White Box techniques are also classified as

   (a) Design based testing

   (b) Structural testing

   (c) Error guessing technique

   (d) None of the mentioned

8. What is Cyclomatic complexity?

   (a) Black box testing

   (b) White box testing

   (c) Yellow box testing

   (d) Green box testing

9. Maintenance is classified into how many categories?

   (a) Two   (b) Three

   (c) Four   (d) Five

10. CMM stands for

    (a) Capability Management Module

    (b) Conservative Maturity Model

    (c) Capability Maturity Module

    (d) Capability Maturity Model

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Explain the waterfall model in detail.

Or

    (b) Explain the generic views of Software Engineering.

12. (a) Discuss about Software Requirement Engineering Process.

Or

    (b) What are the good characteristics of SRS?

13. (a) List the Classification of Design Activities.

Or

    (b) What is Structured Design in Software Engineering?

14. (a) What are the characteristics of good User Interface?

Or

(b) Explain Coding in Software Engineering.

15. (a) What is ISO 9000 Certification?

Or

(b) Explain Software Quality Management System.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Give a description of prototyping model.

Or

(b) What are SDLC models available?

17. (a) Write in details about the Responsibilities of a Software Project Manager.

Or

(b) What is functional requirements? Explain.

18. (a) List the classification of Design Activities.

Or

(b) What is context diagram in Software Engineering.

19. (a) Explain Unit Testing in Software Engineering.

Or

(b) Discuss about Black-box Testing and White-box Testing.

20. (a) What is the meaning of Software Reliability? Explain.

Or

(b) Discuss about SEI Capability Maturity Model.

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