Reg. No. : ....

Code No. : 30607 E   **Sub. Code : SMCS 51**

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2020.

Fifth Semester

Computer Science – Core

SOFTWARE ENGINEERING AND TESTING

(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.   RAD stands for ——————.

   (a)   Relative Application Development

   (b)   Rapid Application Development

   (c)   Rapid Application Document

   (d)   None

2. Which one of the following is not a phase of prototyping model?

   (a) Quick Design

   (b) Coding

   (c) Prototype Refinement

   (d) Engineering Product.

3. Identify the sub process of Process Improvement

   (a) Process Introduction

   (b) Process Analysis

   (c) De-Processification

   (d) Process Distribution

4. The environment that supports the software project is called

   (a) CLSS   (b) SEE

   (c) FAST   (d) CBSE

5. Which is the first step in the software development life cycle?

   (a) Analysis

   (b) Design

   (c) Problem definition

   (d) Problem Identification

6. A Step by step instruction used to solve a problem is known as

   (a) Sequential structure

   (b) A list

   (c) A plan

   (d) An algorithm

7. What establishes the profile of end-users of the system?

   (a) Design Model   (b) User's Model

   (c) Mental Image   (d) System Image

8. What is Cyclomatic Complexity?

   (a) Black Box Testing   (b) White Box Testing

   (c) Yellow Box Testing   (d) Green Box Testing

9. Inspections and testing are what kinds of Quality costs?

   (a) Prevention   (b) Internal Failure

   (c) External Failure   (d) Appraisal

10. Which of the following manuals is not a users documentation?

    (a) Beginner's Guide   (b) Installation Guide

    (c) Reference Guide   (d) SRS

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) What is Software Engineering? Explain.

Or

(b) How is object oriented software development differ from traditional software development?

12. (a) Explain iterative waterfall model for software life cycle and discuss various activities.

Or

(b) Explain about prototyping model.

13. (a) Explain about the various design concepts considered during design.

Or

(b) Explain about structured design.

14. (a) Describe the golden rule for interface design.

Or

(b) Explain boundary value analysis.

15. (a) What is software quality? Explain.

Or

(b) Explain about Hardware (vs) Software Reliability.

PART C — (5 × 8 = 40 marks)

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

Each answer should not exceed 600 words.

16. (a) Explain basic concepts of object orientation.

Or

(b) Discuss briefly about Spiral Model.

17. (a) Explain about good characteristic of SRS document.

Or

(b) Discuss about functional requirements.

18. (a) Explain Software Design and its design activities.

Or

(b) Explain detailed Design Characteristics.

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19. (a) Write briefly about black-box testing.

                    Or

     (b) Elaborate   briefly   about   software
          documentation.

20. (a) Explain about ISO 9000 for Software
          Industry.

                    Or

     (b) Write   briefly   about   Software   Reverse
          Engineering.

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