(6 pages)   Reg. No. : _____

Code No. : 20333 E   Sub. Code : AMCS 62

B.Sc. (CBCS) DEGREE EXAMINATION,
NOVEMBER 2023

Sixth Semester

Computer Science — Core

SOFTWARE ENGINEERING AND TESTING

(For those who joined in July 2020 only)

Time : Three hours   Maximum : 75 marks

PART A — (10 × 1 = 10 marks)

Answer ALL questions.

Choose the correct answer.

1. Software development life cycle model selection is based on _____

    (a) Requirements

    (b) Development Team and users

    (c) Project type and its Risk

    (d) All

2. What does SDLC stands for?

    (a) System Design Life Cycle

    (b) Software Design Life Cycle

    (c) Software Development Lif Cycle

    (d) System Development Lif Cycle

3. Requirements gathering is tao popularly known as _____

    (a) Elicitation   (b) Inception

    (c) Iteration   (d) Collection

4. A person or a group o/person who either directly or indirectly concernes with the software is called _____

    (a) Client   (b) Customer

    (c) Stake hold/r   (d) Vendor

5. A graphical data model that shows the different processing functions and the data interchange among themus _____

    (a) Data flow Diagram

    (b) Flow chart

    (c) HIPO Chart

    (d) Herarchical chart

Page 2   Code No. : 20333 E

6. The most abstract data flow representation of a system is the _____

    (a) Data Flow Diagram

    (b) Structured chart

    (c) Flow chart

    (d) Context Diagram

7. Gunning's fog index is a metric designed to measure the _____ of a document.

    (a) Scalability   (b) Reliability

    (c) Readability   (d) All

8. A _____ is a set of all test that have been designed by a tester to test a given program.

    (a) Test care   (b) Test Script

    (c) Test Scenario   (d) Test Suite

9. The process of recovering the design and requirement from analysis of its code is

    (a) Software Reverse Engineering

    (b) Transformation

    (c) Backward Engineering

    (d) None

Page 3   Code No. : 20333 E

10. Control Flow Graph is an example for _____

    (a) White Box Testing

    (b) Black Box Testing

    (c) Integration Testing

    (d) System Testing

PART B — (5 × 5 = 25 marks)

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

Each answer should not exceed 250 words.

11. (a) Explain control flow-based design with example.

    Or

    (b) Explain prototype model with a neat diagram.

12. (a) Describe project estimation techniques in detail.

    Or

    (b) Explain the ways of gathering requirements.

13. (a) Describe the stages in software design.

    Or

    (b) How will you transform a DFD Model into structure chart?

Page 4   Code No. : 20333 E
[P.T.O]

14. (a) Describe the use of window system in detail.

Or

(b) Distinguish verification and validation.

15. (a) Explain software quality management system in detail.

Or

(b) Discuss about SEI CMM in detail.

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 incremental development model in detail.

Or

(b) Describe V-model in detail.

17. (a) Explain risk management in detail.

Or

(b) Define SRS. Who are its users? List out its characteristics.

18. (a) Describe the use of structured charts in detail.

Or

(b) Draw context diagram, level-1 DFD and level-2 DFD for super market prize scheme.

19. (a) Explain the different types of user interfaces.

Or

(b) Describe unit testing in detail.

20. (a) What is ISO 9000 certification? Explain ISO 9000 for software industry.

Or

(b) What is software reverse engineering? Explain the model for reverse engineering.

———————