

Register No.: Name:

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIRST SEMESTER M.C.A DEGREE EXAMINATION (Regular), FEBRUARY 2022

(2021 SCHEME)

Course Code: 21CA103

Course Name: Advanced Software Engineering

Max. Marks: 60

Duration: 3 Hours

PART A

(Answer all questions. Each question carries 3 marks)

1. Differentiate Reactive and Proactive risks.
2. Write a short note on the relation between user stories and user acceptance testing.
3. How is quality of a software ensured?
4. What is version control?
5. What is the significance of review meetings in agile software development methodology?
6. What is release management in DevOps?
7. What is Triple Modular Redundancy (TMR) in N-version programming?
8. Write a short note on security testing.
9. What is COTS? How it is useful in application development?
10. Write a short note on system complexity.

PART B

(Answer one full question from each module, each question carries 6 marks)

MODULE I

11. a) Explain waterfall model. (4)
- b) How is incremental waterfall model different from waterfall model? (2)

OR

12. Explain COCOMO Model. (6)

MODULE II

13. Explain the facilities provided by GIT when working with teams? (6)

OR

14. Discuss the significance of delivery in continuous integration. (6)

MODULE III

15. Explain the life cycle of DevOps with a suitable diagram. (6)

OR

16. a) What is Test Driven Development? (3)
- b) How coding is done in Test Driven Development? (3)

MODULE IV

17. Elaborate on the hazard-driven safety specification processes with a neat diagram. (6)

OR

18. Explain resilient systems design. (6)

MODULE V

19. Illustrate the processes of Component-Based Software Engineering (CBSE). (6)

OR

20. With a neat diagram explain the conceptual design activities of systems engineering. (6)
