Register No.: ....   Name: ....

SAINTGITS COLLEGE OF ENGINEERING (AUTONOMOUS)

(AFFILIATED TO APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, THIRUVANANTHAPURAM)

FIRST SEMESTER M.C.A DEGREE EXAMINATION (S), FEBRUARY 2023

(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. Define requirements engineering.
2. What is meant by plan driven development?
3. Write short notes on reviews and inspections.
4. Explain the steps in system building.
5. Differentiate release testing and development testing.
6. How is release management done in DevOps?
7. Write short note on reliability engineering.
8. What is sociotechnical resilience?
9. Define reuse-based software engineering.
10. What are the essentials of component-based software engineering?

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

MODULE I

11. Explain software engineering process models.   (6)

OR

12. Explain the steps in project scheduling.   (6)

MODULE II

13. Elaborate on version management using Git.   (6)

OR

14. Explain change management process.   (6)

MODULE III

15. Describe DevOps life cycle with a diagram.   (6)

OR

16. Explain test driven development with a diagram.   (6)

MODULE IV

17. Elaborate on fault tolerant architectures and its types. (6)

OR

18. Describe safety engineering processes. (6)

MODULE V

19. Explain architectural patterns for distributed systems. (6)

OR

20. Elaborate on RESTful services. (6)

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