

Reg No.: Muberra

0520MCA107122001

Name: \_\_\_\_\_

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**

First Semester MCA (2 Years) Degree Examination December 2020 (2020 Scheme)

**Course Code: 20MCA107**

**Course Name: ADVANCED SOFTWARE ENGINEERING**

Marks:60

Duration: 3 Hours

**PART A**

*Answer all questions, each carries 3 marks.*

Marks

- |     |   |     |
|-----|---|-----|
| 1   | What is the need for software engineering?                                | (3) |
| 2   | Write a short note on project estimation methods in software development. | (3) |
| ✓ 3 | What are the basic concepts of version control system?                    | (3) |
| 4   | How software quality is measured?   | (3) |
| 5   | Define the concept of antipatterns.                                       | (3) |
| 6   | What are assertions?  | (3) |
| 7   | Define product backlog.   | (3) |
| 8   | What is the relevance of software testing?                                | (3) |
| 9   | What is the purpose of software configuration?                            | (3) |
| 10  | What is test automation?  | (3) |

**PART B**

*Answer any one question from each module. Each question carries 6 marks.*

**Module I**

- 11 Explain predictive and adaptive waterfall models. How is it different from model in which development phases overlap each other? (6)

**OR**

- 12 With an example, explain requirement specification. (6)

**Module II**

- 13 Explain the core operations in Git Version Control System to manage a software project. Clone a repository using Git (6)

**OR**

- 14 Explain the differences between “git fetch” and “git pull”. How can conflicts be resolved in git? (6)

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**Module III**

- 15 Write a short note on creational design pattern. (6)

**OR**

- 16 Illustrate the importance of writing tests with assertions. (6)

**Module IV**

- 17 With a neat diagram, explain the scrum framework. (6)

**OR**

- 18 Explain the relevance of bug life cycle with a neat diagram. (6)

**Module V**

- 19 Write a short note on the strategies involved in continuous integration. (6)

**OR**

- 20 What is CI/CD pipeline? Write the principles of software delivery. (6)

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