

Reg No.: JVE21MCA-2020

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APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
First Semester MCA (2 Year) Degree Examination December 2021

Course Code: 20MCA107

Course Name: ADVANCED SOFTWARE ENGINEERING

Max. Marks: 60

Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks.

Marks

- | | | |
|----|---|-----|
| 1 | How do you measure software reliability? | (3) |
| 2 | What is COCOMO estimation model? | (3) |
| 3 | What are the four dimensions of software quality? | (3) |
| 4 | Explain the three states in which files reside in Git. | (3) |
| 5 | What are the characteristics of a design class? | (3) |
| 6 | Write about any three key classes in xUnit architecture. | (3) |
| 7 | List out the steps in agile methodology. | (3) |
| 8 | Explain decision table testing with suitable diagram. | (3) |
| 9 | What are the benefits of configuration management? | (3) |
| 10 | Distinguish between build automation and deployment automation. | (3) |

PART B

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

Module I

- 11 Draw a waterfall model and explain the life cycle of a software system. (6)

OR

- 12 Prepare a basic software requirement specification for basic library system. (6)

Module II

- 13 What is a Git repository? Explain the process of Cloning a Git repository. (6)

OR

- 14 Explain how to view the commit history in Git. Write the syntax of the commands used. (6)

Module III

- 15 Explain the concepts of Anti-pattern. (6)

OR

- 16 What are single condition tests and expected error tests in Unit Test? Explain (6)

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Module IV

- 17 Explain the meetings involved in scrum software development methodology. (6)

OR

- 18 What is blackbox testing? Explain. (6)

Module V

- 19 Define continuous integration. Explain the essential practices required for continuous integration. (6)

OR

- 20 With a neat diagram, explain deployment pipeline and the various stages of deployment pipeline. (6)
