

Course Code: 20MCA107**Course Name: ADVANCED SOFTWARE ENGINEERING**

Marks:60

Duration: 3 Hours

PART A*Answer all questions, each carries 3 marks.*

Marks

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|----|---|-----|
| 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)
