Reg No.:_____ Name:_____

0520RLMCA107122002

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

First Semester MCA (Two Years) Degree (S,FE) Examination May 2024

Course Code: 20MCA107

Course Name: ADVANCED SOFTWARE ENGINEERING

` Max mark:60 Duration: 3 Hours

PART A

Answer all questions, each carries 3 marks. Marks

1	List out the main characteristics of a good software.	(3)
2	Write the advantages of prototyping development model.	(3)
3	Differentiate git pull and git fetch commands.	(3)
4	Write a note on literate programming.	(3)
5	Explain the four essential elements of design pattern.	(3)
6	A design pattern may turn into an antipattern. Justify the statement.	(3)
7	Write any three software-testing principles.	(3)
8	Distinguish between black box testing and white box testing.	(3)
9	Write down the principles of software delivery.	(3)
10	How dependencies are managed in software configuration management.	(3)

PART B

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

Module I

11	Explain COCOMO. How can you estimate a software project using COCOMO II model?	(6)

OR

12	Spiral model follows a risk-driven approach to help project teams decide on what development approach to take for various parts of the project. Justify the statement.	(6)

Module II

13	Illustrate the core operations in Git version control system to manage a software project in local system and remote server.	(6)

OR

14	Explain the four dimensions of software quality.	(6)

Module III

15	Illustrate the architecture of xUnit framework with a neat diagram.	(6)

OR

16	How design pattern is useful in software development? Explain in detail about different types of design patterns.	(6)

Module IV

17	Define agility. Explain various agile design principles.	(6)

OR

18	Write short notes on equivalence class testing and control flow testing.	(6)

Module V

19	Explain the essential practices of continuous integration.	(6)

OR

20	With a neat diagram, explain the architecture of deployment pipeline.	(6)

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