

Reg No.: \_\_\_\_\_

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

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
FOURTH SEMESTER REGULAR AND SECOND SEMESTER SECOND YEAR DIRECT  
MCA DEGREE EXAMINATION(R&S), MAY 2019

**Course Code: RLMCA202**

**Course Name: APPLICATION DEVELOPMENT AND MAINTENANCE**

Max. Marks: 60

Duration: 3 Hours

**PART A**

*Answer all questions, each carries 3 marks.*

Marks

- |   |  |     |
|---|--|-----|
| 1 | What is the significance of continuous integration?                              | (3) |
| 2 | Explain the GIT Fetch Command with an example.                                   | (3) |
| 3 | What is dependency injection and how is it useful?                               | (3) |
| 4 | Explain the benefits of Capacity Testing?  | (3) |
| 5 | What is code Reversibility? Explain.   | (3) |
| 6 | What are some desirable features in a Text Editor used for Software Development? | (3) |
| 7 | Explain the concept of Testing against Contract.                                 | (3) |
| 8 | Explain the term Tracer Bullets or Trace Code in Programming.                    | (3) |

**PART B**

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

**Module I**

- |   |   |     |
|---|---|-----|
| 9 | Write a note of how release candidate is viewed when following the modern approach to Software Development. How is it different from the traditional view of Release Candidate? | (6) |
|---|---|-----|

**OR**

- |    |  |     |
|----|--|-----|
| 10 | Explain the different types of tests with the help of Brian Marick's testing quadrant diagram. | (6) |
|----|--|-----|

**Module II**

- |    |   |     |
|----|---|-----|
| 11 | When working with a team, how the following is done in GIT? |     |
|    | a) Adding a remote repository.                              | (3) |
|    | b) Retrieving remote repository changes.                    | (3) |

**OR**

- 12 How do you organize your repository with branches and tags in GIT? Explain with suitable examples. (6)

***Module III***

- 13 Explain the principles and practices that govern the design of a commit test suite. (6)

***OR***

- 14 List and explain the principles and practices of build and deployment scripting. (6)

***Module IV***

- 15 “For software delivery process the most important global metric is cycle time”. Do you agree to this statement? Justify your stand. (6)

***OR***

- 16 Explain layered approach to Acceptance Testing. (6)

***Module V***

- 17 a) List the basic tools used by pragmatic programmers in the software development process. (3)
- b) Discuss DBC as a powerful technique that focuses on documenting the rights and responsibilities of software modules to ensure program correctness. (3)

***OR***

- 18 a) Comment on the guidelines in managing your knowledge portfolio in order to be successful in your career. (3)
- b) What are the general strategies for dealing with the problems of duplication? (3)

***Module VI***

- 19 a) Does following the Law of Demeter really help to create more maintainable code? Justify your answer. (3)
- b) How can pragmatic techniques be applied to teams as a whole? (3)

***OR***

- 20 a) Comment on the importance of refactoring in software development. (6)

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