

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

Fourth Semester MCA Degree Regular and Supplementary Examination July 2021

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 | Describe the steps for effective use of version control. | (3) |
| 2 | Write a short note on installing and configuring Git. | (3) |
| 3 | Explain about fixing commits in Git. | (3) |
| 4 | List the deployment pipeline practices. | (3) |
| 5 | What is the importance of automated acceptance testing? Explain. | (3) |
| 6 | Write a short note on creating a release strategy. | (3) |
| 7 | Differentiate orthogonality and reversibility in the pragmatic approach. | (3) |
| 8 | What is refactoring? Explain. | (3) |

PART B*Answer any one question from each module. Each question carries 6 marks.***Module I**

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| 9 | Explain the principles of software delivery in detail. | (6) |
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OR

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| 10 | Describe the concept of continuous integration with the help of an application development example. | (6) |
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Module II

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| 11 | Explain the following with respect to Git. | (6) |
| | i) Creating and switching branches | |
| | ii) Viewing branches | |
| | iii) Merging commits between branches | |
| | iv) Rewriting history by rebasing | |
| | v) Deleting branches | |
| | vi) Tagging milestones | |

OR

- 12 a) Explain how to add remotes, remove remotes and sending changes to remotes in Git. (3)
- b) Discuss retrieving remote changes in Git. (3)

Module III

- 13 Discuss the concept of deployment scripting in detail with the help of an example. (6)

OR

- 14 Explain in detail about the commit stage with a neat diagram. (6)

Module IV

- 15 What do you mean by capacity testing environment? Explain about automating capacity testing. (6)

OR

- 16 Discuss about deploying and promoting an application. (6)

Module V

- 17 Explain the basic tools used by the pragmatic programmers in software development. (6)

OR

- 18 Explain Design by Contract in detail. (6)

Module VI

- 19 Explain the following in detail. (6)
- i) Decoupling and the Law of Demeter
 - ii) Temporal coupling
 - iii) Blackboards

OR

- 20 Describe ruthless testing in detail. (6)
