

Reg. No. _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

SECOND SEMESTER MCA (LATERAL ENTRY) DEGREE EXAMINATION, JULY 2017

Course Code: **RLMCA202**Course Name: **APPLICATION DEVELOPMENT AND MAINTENANCE**

Max. Marks: 60

Duration: 3 Hours

PART A*Answer all questions. Each Question carries 3 marks.*

1. Write a short note on release candidate.
2. What is the aim of a version control system? Give examples of version control systems.
3. Differentiate continuous delivery and continuous deployment.
4. How do you create a local copy of an existing repository in Git?
5. "The practice of continuous integration relies on certain prerequisites being in place". Justify the statement.
6. Which of the following are probably genuine requirements? Why? Restate those that are not to make them more useful (if possible).
 - a) The response time must be less than 500 ms.
 - b) The application will be organized as a number of front-end processes and a back-end server.
 - c) If a user enters non-numeric characters in a numeric field, the system will beep and not accept them.
7. What are the techniques used to maintain orthogonality in a system?
8. Compare and contrast blue green deployment and canary releasing.

PART B*Answer all questions. Each question carries 6 marks.*

9. a) Explain the principles of software delivery.

OR

- b) Discuss the process of implementing a testing strategy.
10. a) Explain how the following is done in Git.
 - i) Configure git

- ii) Create a new repository
- iii) See what has changed
- iv) Commit changes
- v) Stage changes to commit
- vi) Undo uncommitted changes

OR

b) How do you create, switch and view branches in Git? explain how to merge commits between branches.

11. a) Share your advices on how to make the most effective use of version control. How is Git useful for version control?

OR

b) What is a deployment pipeline? Explain the anatomy of a deployment pipeline with a neat diagram. Comment on the various stages of a deployment pipeline.

12. a) What are the principles and practices that make for an effective commit stage? Elaborate on the practices.

OR

b) Explain the role of automated acceptance testing in the deployment pipeline. How do you create and maintain effective automated acceptance tests?

13. a) Describe the approach to testing non functional requirements, with a specific focus on testing capacity, throughput, and performance.

OR

b) State and explain the tips and tricks in deploying and releasing applications.

14. a) What are the best practices for software development? Explain in detail.

b) There are a handful of critical areas that can make or break a pragmatic project. Comment on this statement by giving some real time examples.
