Reg. No._

Name:

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY FIRST SEMESTER LATERAL ENTRY MCA DEGREE EXAMINATION, DEC 2016

Course Code: RLMCA203 Course Name: Software Engineering

Max. Marks: 60

Duration: 3 Hours

PART A Answer All Questions. Each question carries 3 marks

- 1. Represent software engineering as a layered technology.
- 2. How does waterfall with feedback differ from sashimi?
- 3. Which approach (predictive, iterative, incremental, or agile) gets a working program to users the soonest? Latest? What can you say about the timing of the other two approaches?
- 4. Write advantage of open closed principle in agile software development.
- 5. Discuss need and significance of refactoring with example.
- 6. Is maximizing a Scrum project's velocity the most important goal? Why or why not?
- 7. How to write maintainable code.
- 8. Discuss role of release management in final production deployment.

PART B

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

MODULE I

9. a. Describe different phases in software engineering.

OR

b. Explain any one project size estimation technique and its effort calculation using COCOMO with example.

MODULE II

10. a. Discuss any two software development life cycle models in brief. What model is preferred when there is high risk?

OR

b. Discuss how one predictive model differ from other adaptive software engineering model using one example for each.

MODULE III

11. a. What is agility? Explain agile principles and any one agile model in Detail.

OR

b. Reusability and maintainability are the main aim of agile design principle. Justify the statement using any three agile design principles.

MODULE IV

12. a. Meetings play an important role in agile process. Explain various agile scrum phases and meetings.

OR

b. Explain one of the agile estimation techniques. Mention the role of moderator in planning poker. How he handles the situation when there is no convergence in estimation value.

MODULE V

13. a. DBC is a technique for dealing with abnormal cases, leading to a safe and effective language construct for exception handling.Explain DBC using the concept of precondition, postcondition and invariant.

OR

b. Discuss ruthless testing, mention its importance in software engineering.

MODULE VI

14. a. DevOps is an approach based on agile and lean principles in which business combines development, operations and quality assurance.Justify.

OR

b. Describe SCM process and its importance in software engineering.