

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

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

**APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY**  
**FIRST/THIRD SEMESTER MCA DEGREE EXAMINATION, JULY 2018**

**Course Code: RLMCA203**

**Course Name: SOFTWARE ENGINEERING**

Max. Marks: 60

Duration: 3 Hours

**PART A**

*Answer all questions, each carries 3 marks*

Marks

- |   |   |     |
|---|---|-----|
| 1 | What is software maintenance? Mention different types of software maintenance.      | (3) |
| 2 | What is meant by Software development life cycle? Mention different phases of SDLC. | (3) |
| 3 | Distinguish between Sashimi and incremental waterfall model.                        | (3) |
| 4 | Define Liskov substitution principle (LSP).   | (3) |
| 5 | What is acceptance testing?   | (3) |
| 6 | List out various roles in SCRUM.  | (3) |
| 7 | What is meant by assertive programming?   | (3) |
| 8 | Explain continuous integration (CI).  | (3) |

**PART B**

*Answer six questions, one full question from each module and carries 6 marks*

**Module I**

- |   |  |     |
|---|--|-----|
| 9 | a) What is MOSCOW method?  | (2) |
|   | b) Compute the function point value for a project value for a project with the following information domain characteristics. | (4) |
|   | Number of external inputs : 30   |     |
|   | Number of external outputs: 62   |     |
|   | Number of external inquires: 20  |     |
|   | Number of external interface files: 2  |     |
|   | Number of internal logical files: 8  |     |
|   | Assume that all complexity adjustment values are average.  |     |

**OR**

- |    |   |     |
|----|---|-----|
| 10 | a) What is cutover? Mention different types of cutover. | (2) |
|    | b) What is COCOMO model and where it is used?           | (4) |

**Module II**

- |    |   |     |
|----|---|-----|
| 11 | a) Differentiate between iterative and predictive models highlighting their advantages and disadvantages. | (2) |
|    | b) What is meant by risk management? Discuss the essential activities involved in risk management.        | (4) |

**OR**

- |    |   |     |
|----|---|-----|
| 12 | a) Mention different phases of rapid application development (RAD).   | (2) |
|    | b) With a neat diagram explain spiral model. What are the advantages and disadvantages of using spiral model? | (4) |

**Module III**

- 13 a) Differentiate between traditional testing and agile testing. (2)  
b) Explain feature driven development (FDD) and Lean software development(LSD). (4)

**OR**

- 14 a) Explain test driven development (TDD). (2)  
b) Explain extreme programming and its practices. (4)

**Module IV**

- 15 a) Write a note on user story. (2)  
b) What is meant by agile estimation? Explain any one estimation technique for agile project. (4)

**OR**

- 16 a) Write note on burn down chart. (2)  
b) With a neat diagram explain SCRUM. (4)

**Module V**

- 17 a) Differentiate between verification and validation. (2)  
b) What is meant by pragmatic? What are the characteristics of a pragmatic programmer? (4)

**OR**

- 18 a) Distinguish between load testing and spike testing. (2)  
b) List out six principles for writing maintainable code. (4)

**Module VI**

- 19 a) State the benefits of release monitoring. (2)  
b) What is meant by software configuration management? Mention its importance. (4)

**OR**

- 20 a) Distinguish between version control and change control. (2)  
b) Write notes on release management and its benefits. (4)

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