



P.E.S. College of Engineering, Mandya - 571 401

(An Autonomous Institution affiliated to VTU, Belagavi)

Third Semester, Master of Computer Applications (MCA)

Semester End Examination; Dec - 2017/Jan - 2018

Software Engineering

Time: 3 hrs

Max. Marks: 100

Note: Answer FIVE full questions, selecting ONE full question from each unit.

UNIT - I

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|------|--|----|
| 1 a. | Briefly discuss the essential attributes of a good software. | 5 |
| | b. List and briefly describe phases of waterfall model. | 5 |
| | c. Explain the principles of agile methods. | 10 |
| 2 a. | What is RUP? With a neat figure, explain different phases of RUP. | 10 |
| | b. Discuss the problems with agile methods and also discuss the practices of agile method. | 10 |

UNIT - II

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|------|---|----|
| 3 a. | Explain the structure of a requirement document. | 10 |
| | b. Explain the principal properties of dependability. | 10 |
| 4 a. | List and explain the generic activities of requirement engineering processes. | 10 |
| | b. List and explain the terms of safety. | 10 |

UNIT - III

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|------|---|----|
| 5 a. | Explain different types of UML diagrams. | 5 |
| | b. Briefly describe the advantages of architectural design. | 5 |
| | c. Explain the issues in implementation of software. | 10 |
| 6 a. | Discuss state-machine-model with an example. | 10 |
| | b. Explain with an example interaction model. | 10 |

UNIT - IV

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|------|---|----|
| 7 a. | List and explain the essentials of Component Based Software Engineering (CBSE). | 10 |
| | b. Explain the design issues of distributed systems. | 10 |
| 8 a. | Explain risk management process. | 10 |
| | b. Explain different factors influencing team work and managing people. | 10 |

UNIT - V

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| 9 a. | With a neat diagram, explain the project scheduling process. | 10 |
| | b. Explain different stages of project planning process. | 10 |
| 10 a. | Explain estimation techniques. | 10 |
| | b. Discuss system testing. | 10 |