



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

(An Autonomous Institution affiliated to VTU, Belgaum)

Third Semester - Master of Computer Applications (MCA)

Semester End Examination; Dec. - 2015

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. | What are the essential attributes of good software? Explain in detail. | 10 |
| | b. What is incremental software development? Explain with a neat diagram. | 10 |
| 2 a. | Explain the principles of agile methods. | 10 |
| | b. Explain the extreme programming release cycle with a neat diagram. | 10 |

UNIT - II

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|------|---|----|
| 3 a. | Explain the structure of a software requirement document. | 10 |
| | b. Explain the generic activities of requirement engineering process. | 10 |
| 4 a. | Explain the principle properties of dependability. | 10 |
| | b. Explain the different terms of safety terminology. | 10 |

UNIT - III

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|------|---|----|
| 5 a. | Explain different types of UML diagram types. | 10 |
| | b. What are the state machine models? Explain with the example of microwave oven. | 10 |
| 6 a. | What are the architecture and system characteristics? Explain. | 10 |
| | b. What are the common activities of objective oriented processes? Explain. | 10 |

UNIT - IV

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|------|---|----|
| 7 a. | What are the characteristics of a component? Explain in detail. | 10 |
| | b. List and explain the design issues of distributed systems. | 10 |
| 8 a. | Explain different project management activities in detail. | 10 |
| | b. Explain the risk management processing with a neat diagram. | 10 |

UNIT - V

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| 9 a. | Explain the factors which affect software pricing in detail. | 10 |
| | b. Explain project scheduling process with a neat diagram. | 10 |
| 10 a. | Explain the model of the software testing process with a neat diagram. | 10 |
| | b. Explain system testing in detail. | 10 |

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