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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 - 2016/Jan - 2017
Software Engineering

Time: 3 hrs   *Max. Marks: 100*

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

UNIT - I

1 a.	What is a software engineering? Explain attributes of good software.	5
b.	Explain the professional responsibility of software engineering ethics.	5
c.	With a neat diagram, explain software specification and software design phases of software process activities.	10
2 a.	With a neat diagram, explain Boehm's spiral model of the software process.	10
b.	What is agile software development? Explain good programming practices of XP.	10

UNIT - II

3 a.	Explain the IEEE standard for requirement document.	10
b.	With the neat diagram, explain the different types of non-functional requirement and functional requirement.	10
4 a.	Explain requirement Elicitation and Analysis process with figure.	10
b.	Discuss the different security terminology.	5
c.	With a neat diagram, explain the principal properties of dependability.	5

UNIT - III

5 a.	With a neat diagram, explain event-driven model process for microwave oven state diagram.	10
b.	Explain with an example interaction model.	10
6 a.	Discuss the different patterns used in architectural design process.	10
b.	Discuss the detail design process involved in object oriented design process.	10

UNIT - IV

7 a.	Why it is important that all component interactions are defined through 'requires' and 'providers' interfaces? Explain.	10
b.	Bring out the differences between a fat-client and a thin-client approach to client-server system architecture with suitable example.	10
8 a.	Explain different factors influencing team work and managing people.	10
b.	Explain the process involved in risk management process.	10

UNIT - V

9 a. With a neat diagram, explain the project scheduling process. 10

   b. Explain different sections involved in project planning process. 10

10 a. Explain the different types of interfaces that are involved in component testing. 10

   b. Explain the fundamental process involved in TDD. 10

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