	<i>U.S.N</i>	
P.E.S. College of Engineering, Mandya - 571 401 (An Autonomous Institution affiliated to VTU, Belgaum) Fifth Semester, Master of Computer Applications (MCA) Semester End Examination; Dec - 2016/Jan - 2017 Software Testing and Practices		
Time: 3 hrsMax. Marks: 100Note: Answer FIVE full questions, selecting ONE full question from each unit.		
UNIT - I		
1 a.	Explain the test and debug cycle with a neat diagram.	10
b.	List and explain different test metrics used in software testing.	10
2 a.	Demonstrate Test generation strategies.	10
b.	List and explain software quality attributes.	10
UNIT - II		
3 a.	Compare and contrast functional testing versus structural testing.	5
b.	Describe levels of testing with a suitable diagram.	5
c.	What are the different forms of equivalence class testing? Explain each of them with suitable	10
	pictorial representation.	10
4 a.	Write short notes on: i) Boundary value testing ii) Robustness testing.	10
b.	Explain the decision table based testing technique and draw the decision table for triangle	10
	problem.	10
UNIT - III		
5 a.	What is a DD path? Draw the program graph for triangle problem and list out the DD paths.	10
b.	Explain alternative life cycle models with a neat diagram.	10
6 a.	Describe the Macabe's basis path method.	10
b.	List the du-paths for the commission problem.	10
UNIT - IV		
7 a.	Explain mutation analysis.	10
b.	What is a test oracle? Explain comparison-based oracle.	10
8 a.	Explain any five basis analysis and testing principles.	10
b.	Discuss various types of scaffolding.	10
	UNIT - V	
9 a.	Describe any five major activities in a planning and monitoring the process.	10
	List the main categories of documents. Explain these categories with the type of documents.	10
10 a.	Explain the following with respect to planning and monitoring the process :	10
	i) Quality and Process ii) Test and Analysis Strategies.	
b.	Explain organizing documents and Test Strategy Document.	10
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