U.S.N

P.E.S. College of Engineering, Mandya - 571 401
(An Autonomous Institution affiliated to VTU, Belagavi)
Fifth Semester, B.E. - Information Science and Engineering
Semester End Examination; Dec. - 2019
Software Testing

Time: 3 hrs   Max. Marks: 100

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

UNIT - I

1 a.	Explain Errors, Faults and Failures with the help of a diagram.	10
b.	Describe the following:	10
	i) Testing and verification ii) Defect Management	
2 a.	Explain correctness and reliability.	10
b.	Describe Model based testing and Model checking.	10

UNIT - II

3 a.	Explain the test selection problem.	10
b.	Explain Boundary value analysis.	10
4 a.	Describe equivalence classes for any five types of variables.	10
b.	List the steps in the category partition method. Explain first four steps in detail.	10

UNIT - III

5 a.	Explain path testing with example.	10
b.	Describe Inter procedural analysis.	10
6 a.	Explain condition testing with example.	10
b.	Describe data flow analysis with arrays and pointers.	10

UNIT - IV

7 a.	Explain adequacy criteria.	10
b.	Describe scaffolding.	10
8 a.	Explain the following:	10
	i) Test case ii) Test case specification iii) Test obligation	
	iv) Test suite v) Test or test execution	
b.	Describe test oracles with diagram.	10

UNIT - V

9 a.	Explain dependability properties and draw the diagram illustrating relation among them.	10
b.	Describe integration testing strategies.	10
10.	Explain the following:	20
	i) Acceptance testing ii) Usability	
	iii) Quality goals iv) Regression testing	

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