

Time: 3 hrs

P.E.S. College of Engineering, Mandya - 571 401 (An Autonomous Institution affiliated to VTU, Belagavi)

Eighth Semester, B.E. - Computer Science and Engineering
Semester End Examination; Aug. / Sep. - 2020 Software Testing Max. Marks: 100

	Note: i) Answer TWO full questions, selecting ONE full question from UNIT - I and UNIT - II. ii) Answer any THREE full questions, choosing from UNIT - III, UNIT - IV and UNIT - V.
	UNIT - I
	Describe Functional testing and Structural testing with a neat Venn diagram.
b.	Discuss in detail error and fault taxonomies and levels of testing considering levels of
	abstraction and testing in waterfall modal.
	\mathbf{OR}
a.	With a neat sketch, explain the features of the SATM system.
b.	Using a Pseudo-code, implement the simple version for the commission problem.
	UNIT - II
a.	With an example of test cases for the triangle problem, describe the decision table based testing.
b.	Discuss the DU-Paths for the total locks and sales.
	OR
a.	Discuss in detail Traditional view of testing levels, Alternative life cycle models and
	Waterfall Spin-Offs.
b.	Discuss in detail, Call graph based integration.
	UNIT - III
a.	Discuss the following terms with respect to the basic requirement specification to know how
	they support the tester's process of thread identification?
	i) Data
	ii) Events
	iii) Threads
b.	Briefly explain about functional strategies for the thread testing.
a.	Discuss the implications of composition and encapsulation and implications of inheritance in
	Object-oriented testing.
b.	Write the Pseudo-code and program graph for O-O calendar problem.
	UNIT - IV
a.	Describe Event and Message-Driven Petri Nets and Message-Induced dataflow.
b.	Explain unit testing and integration testing for currency conversion problem.