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Reg. No.:		1					

Question Paper Code: 41163

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2013.

Seventh Semester

Computer Science and Engineering

080230049 — SOFTWARE TESTING

(Regulation 2008).

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

PART A — $(10 \times 2 = 20 \text{ marks})$

- 1. What are the different levels of testing?
- 2. What is test case? Write any sample test case.
- 3. Write the types of equivalence classes.
- 4. What is Slice-Based Testing?
- 5. Write the differences between verification and validation?
- 6. Define sink node.
- 7. Write the levels of Object Oriented Testing.
- 8. Define State Chart-Based System Testing.
- 9. Write any four software testing tools.
- 10. Write the differences between Testing and Debugging.

PART B — $(5 \times 16 = 80 \text{ marks})$

11. (a) (i) Write the major needs of testing and a model of testing in detail. (8)

(ii) Explain the various levels of testing in detail.

(8)

Or

(b) Write about various classification and taxonomy of bugs in detail.

(16)

12.	(a)	(i) Illustrate the concepts of equivalence classes in software testing. (8						
		(ii) Explain the boundary value analysis with suitable code an diagram.	d 3)					
		\mathbf{Or}						
	(b)	(i) Write briefly on structural coverage and why is it needed? (8	3)					
		(ii) Explain the data flow testing with real time application. (8	3)					
13.	(a)	(i) Explain the various phases of decomposition based integration. (8	3)					
	*	(ii) Describe the structural strategies for thread testing. (8	3)					
		\mathbf{Or}						
	(b)	(i) What is extreme testing? Explain the concepts of extreme testing.	3)					
		(ii) Explain the test case design of module testing. (8						
14.	(a)	(i) Explain in detail of the GUI testing with sample application. (8	3)					
		(ii) Describe the key points of class testing with hierarchies. (8	3)					
		Or						
	(b)	Describe the several issues in object oriented software testing. (16	()					
15.	(a)	(i) Explain in detail of the debugging by deduction. (8	()					
		(ii) Write the various technical skills needed by a software tester. (8).					
		Or						
	(b)	Write any two load testing software tools. Explain their performance or load with an example for each case. (16						