

Question Paper Code: 21499

B.E./B.Tech. DEGREE EXAMINATION, MAY/JUNE 2013.

Seventh Semester

Computer Science and Engineering

IT 2032/IT 702 – SOFTWARE TESTING

(Common to Information Technology)

(Regulation 2008)

Time: Three hours

Maximum: 100 marks

Answer ALL questions.

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

- 1. Define Test oracle, Text Bed.
- 2. Why we do debugging?
- 3. Differentiate Black box and white box testing strategy
- 4. Define program prime.
- 5. Write the levels of testing.
- 6. Define Test Harness.
- 7. What is the purpose of the test transmittal report, the test log?
- 8. Write the steps in forming a test group.
- 9: What is SCM? Write it's activities.
- 10. Define the following terms with respect to software quality evaluation
 - (a) Compatibility
 - (b) Interoperability

PART B - (5 × 16 = 80 marks)

11.	(a)	Explain the software testing principles. (16)
		\mathbf{Or}
	(b)	Write the origin of defect, also explain the examples of defect with the coin problem. (16)
12.	(a)	Explain the Boundary value Analysis and Equivalence class partitioning with example. (16)
		\mathbf{Or}
	(b)	How can we evaluate Test Adequacy criteria? Explain the various axioms/Properties described during the evaluation. (16)
13.	(a)	Explain the different types of system tests. (16)
	•	\mathbf{Or}
	(b)	(i) What is the need for preparation of Unit test? (6)
	•	(ii) Explain the phases involved in Unit test planning and how will you design it. (10)
14.	(a)	Explain about the role of the three critical groups in Testing planning and Test policy development. (16)
•		\mathbf{Or}
	(b)	Write the various approaches used to test cost estimation. (16)
15 .	(a)	Define Review. Write the role of reviews in testing software deliverables. How will you develop a review program? (16)
		\mathbf{Or}
	(b)	(i) Explain the five steps in software quality metrics methodology adapted from IEEE standard. (12)
		(ii) Write the need for a Testing Maturity model. (4)