Roll No. | | | | | | | | | | |

B.E / B.Tech (Full Time) DEGREE END SEMESTER EXAMINATIONS, APRIL / MAY 2013

INFORMATION TECHNOLOGY

Seventh Semester

IT 9401 SOFTWARE TESTING

(Regulation 2008)

Time: 3 Hours | Answer ALL Questions | Max. Marks 100

PART-A (10 x 2 = 20 Marks)

1. **Explain the basic principles on which testing are based?**
2. **Why do we have defects in software? What are the effects of defects in the user?**
3. **What is meant by equivalence partitioning?**
4. **What is the difference between static and structural testing?**
5. **Why acceptance testing is done? What are the characteristics of acceptance testing?**
6. **Define the terms: alpha, beta and gamma testing.**
7. **What are the advantages of test planning?**
8. **What are the roles and responsibilities of test planning?**
9. **Differentiate between process and product metrics.**
10. **Explain defect density metrics.**

Part – B (5 x 16 = 80 marks)

11. **What is meant by defect? Classify the defect classes and illustrate it with suitable examples.**

12. a) **What is meant by cause-effect graphing? Explain with an example?**

OR

b) **What is meant by white box approach for test design? Explain in detail with example.**

13. a) **What is meant by regression testing? Explain in detail about how integration tests are planned and applied?**

OR

b) **Explain the levels of testing? Explain briefly the different levels of testing with suitable examples.**

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14. a) **What is the role and responsibilities of a software tester? Explain the role of test planning.**

OR

b) **Explain in detail the organizational structures for testing teams. What are the skills required for a software specialist.**

15. a) **What is the role of automation in software testing? Explain briefly the components and architecture of automation.**

OR

b) **What are test metrics? Explain briefly the test metrics with suitable examples.**