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 **Reg. No. :**

**Question Paper Code: 49086**

B.E. / B.Tech. DEGREE EXAMINATION, NOV 2017

Elective

Information Technology

14UIT912- PRINCIPLES OF SOFTWARE TESTING

(Regulation 2014)

Duration: Three hours Maximum: 100 Marks

Answer ALL Questions.

PART A - (10 x 1 = 10 Marks)

1. Can you say which Specialist has knowledge of test related principles, processes,

 measurements, standards, plans, tools and methods

 (a) Tester (b) Coder (c) Designer (d) Maintenance Engineer

2. When customers can say that the quality of the software product is too good?

 (a) Software meets its defined specification (b) Software is technically excellent
 (c) Software has few bugs (d) Software fulfills expectations of customer

3. In which testing approach, tester has no knowledge of the inner structure i.e how the

 software works.

 (a) White Box testing (b) Red Box testing

 (c) Black Box testing (d) None of these

4. Which testing is also called glass box testing approach.

 (a) White Box testing (b) Black Box testing

 (c) Red Box testing (d) None of these

5. In which Test, a single component alone is tested.

 (a) Integration test (b) System test (c) Regression test (d) Unit test

6. When should Regression Testing be performed?

 (a) When the project manager says (b) After the software has changed

 (c) Whenever software testing team get the time (d) None of the above

7. One of the below, is a document that provides a framework or approach for achieving a set

 of goals

 (a) Plan (b) Testing (c) Unit Testing (d) None of these

8. Testing Process comprised of

 (a) Test Plan and Test Cases (b) Coding (c) Design (d) Requirements

9. Which of the below is Open Source Automation Tool

 (a) Selenium tool (b) Weka tool (c) R tool (d) Statistica Tool

10. When should company stop the testing of particular software?

 (a) After system testing done (b) It depends on the risks for the system being tested

 (c) After smoke testing done (d) None of the above

PART - B (5 x 2 = 10 Marks)

11. List the members in a testing process.

12. Tell how path testing helps in testing the Software.

13. Can you list the different levels of Testing or Phases of testing?

14. What are the skills needed by a test specialist?

15. Mention the criteria for selecting a test tool.

PART - C (5 x 16 = 80 Marks)

16. (a) Discuss in detail about the Software testing principles. (16) Or

 (b) Explain in detail about the tester’s role in a software development organization. (16)

17. (a) Explain in detail about block box testing approach with example. (16)

 Or

 (b) Explain detail about white box testing approach with example. (16)

18. (a) Discuss about Unit test, Integration Test & system Test. (16)

Or

 (b) Can you mention the importance of Testing OO Systems and also discuss about Alpha

 & beta tests. (16)

19. (a) Summarize Test planning & Test Plan Components. (16)

 Or

 (b) Elaborate the role of the 3 groups in Test Planning and Policy Development. (16)

20. (a) Explain the design and architecture for automation and outline the challenges in

 automation. (16)

Or

 (b) Explain the metrics given below: (16)

 (i) Test metrics and measurements

 (ii) Project, progress and productivity metrics.