Reg. No. : | | | | | | | | | | | | | | |

Question Paper Code : 60745

B.E./B.Tech. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2016.

Sixth/Seventh Semester

Information Technology

IT 2032/IT 702/10177 ITE 24 — SOFTWARE TESTING

(Common to Computer Science and Engineering)

(Regulations 2008/2010)

(Also common to PTIT 2032/10144 CSE 15 – Software Testing for B.E. (Part – Time)
Fifth/Sixth Semester – Computer Science and Engineering –
Regulations 2009/2010)

Time : Three hours   Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Differentiate verification and validation.

2. Write about any two defect classes.

3. List out the deliverables of requirement phase, which are considered for testing.

4. What is covering code Logic?

5. What is the need for levels of testing?

6. Define test harness.

7. Write down the skills needed by a technical level tester.

8. What is the purpose of Test Transmitted report and the test log?

9. What should be included in milestone report for testing.

10. Define SCM.

PART B — (5 × 16 = 80 marks)

11. (a) (i) Why is it necessary to develop test cases for both valid and invalid input condition. (8)

    (ii) How important is document for product? How will you test requirement and design document? (8)

    Or

    (b) (i) Define defect and write the various origins of defects. (8)

    (ii) Explain the concepts of defects with the coin problem. (8)

12. (a) (i) Using testing strategy and tactics, state how a testing methodology can be worked out. Explain. (10)

    (ii) State the various testing methodologies. (6)

    Or

    (b) (i) Explain the concepts of equivalence class partitioning and boundary value analysis. (8)

    (ii) Explain the various additional white box test design approaches. (8)

13. (a) (i) Write the importance of integration testing and what are the consequences of integration breaches, also write the various areas which has to be focused on during integration testing. (10)

    (ii) Differentiate Alfa and Beta testing in details. (6)

    Or

    (b) Develop a use case to describe a user purchase of a laptop with credit card from online vendor using web based software. With use case, design a set of tests you would use during system test (general). (16)

14. (a) (i) Explain the role of three groups in test planning an policy development. (10)

    (ii) Write the various technical skills needed by a test specialist. (6)

    Or

    (b) Explain the components of test plan. (16)

15. (a) Explain the following with suitable example?

    (i) Skills need for automation. (8)

    (ii) Test metrics and measurement. (8)

    Or

    (b) Discuss how to review the progress of the software system during maintenance? (16)

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