IT6004-SOFTWARE TESTING

Question Bank

Unit-I
Introduction
Part A

1) Define Software Engineering..

2) Define software Testing.

3) List the elements of the engineering disciplines.

4) Differentiate between verification and validation?(U.Q Nov/Dec 2009)

5) Define the term Testing.

6) Differentiate between testing and debugging. (U.Q Nov/Dec 2008)

7) Define process in the context of software quality. (U.Q Nov/Dec 2009)

8) Define the term Debugging or fault localization.

9) List the levels of TMM.

10) List the members of the critical groups in a testing process (U.Q Nov/Dec 2008)

11) Define Error.

12) Define Faults (Defects).

13) Define failures.

14) Distinguish between fault and failure. (U.Q May/June 2009)

15) Define Test Cases.

16) Write short notes on Test, Test Set, and Test Suite.

17) Define Test Oracle.

18) Define Test Bed.

19) Define Software Quality.

20) List the Quality Attributes.

21) Define SQA group.

22) Explain the work of SQA group.

23) Define reviews.

24) List the sources of Defects or Origins of defects. Or list the classification of defect (U.Q May/June 2009)

Part B

1. Discuss in detail Testing Maturity Model (TMM)

2. Discuss in detail Software testing principles.

3. Explain in detail the tester's role in a software development organization

4. Explain in detail defect classes, the defect repository and test design

5. Explain in detail about defect analysis in coin problem

Unit-II

Test Case Design

Part A

1. Define Smart Tester.

2. Compare black box and white box testing.

3. Draw the tester's view of black box and white box testing.

4. Write short notes on Random testing and Equivalence class portioning.

5. List the Knowledge Sources & Methods of black box and white box testing.

7. Define State.

8. Define Finite-State machine.

9. Define Error Guessing.

10. Define COTS Components.

11. Define usage profiles and Certification.

12. Write the application scope of adequacy criteria?

13. What are the factors affecting less than 100% degree of coverage?

14. What are the basic primes for all structured program.

15. Define path.

16. Write the formula for cyclomatic complexity?

17. List the various iterations of Loop testing.

18. Define test set.

19. What are the errors uncovered by black box testing?

Part B

1. Explain in detail block box testing approach with example

2. Explain detail white box testing approach with example

3. Briefly explain about Requirement based testing?

4. Explain about Positive and Negative testing?

5. Explain about Boundary value analysis:

6. Briefly explain about Equivalence class partitioning?

Unit-III
Levels of Testing
Part A

1. List the levels of Testing or Phases of testing.
2. Define Unit Test and characterized the unit test.
3. List the phases of unit test planning.
4. List the work of test planner.
5. Define integration Test.
6. Define System test.
7. Define Alpha and Beta Test
8. What are the approaches are used to develop the software?
9. List the issues of class testing.
10. Define test Harness.
11. Define Test incident report.
12. Define Summary report.
13. Goals of Integration test.
14. What are the Integration strategies?
15. What is Cluster?
16. List the different types of system testing.
16. Define load generator and Load.
18. Define functional Testing.
19. What are the two major requiremnts in the Performance testing.
20. Define stress Testing.
22. What are the steps for top down integration?
23. What is meant by regression testing?

Part B

1. Explain testing and debugging goals and policies

2. Explain test plan components

3. Explain test plan attachments

4. Explain reporting test result formats

5. Explain how to build a testing group

6. Explain structure of the testing group

7. Explain careers paths for tester with example

Unit-IV

Test Management

Part A

1) Write the different types of goals?

2) Define Goal and Policy

3) Define Plan.

4) Define the hierarchy of test paln

5) List the Test plan components.

6) Define a Work Breakdown Structure.(WBS)

7) Write the approaches to test cost Estimation?

8) Write short notes on Cost driver.

9) Write the WBS elements for testing.

10) What is the function of Test Item Transmittal Report or Locating Test Items

11) What is the information present in the Test Item Transmittal Report or Locating Test Items

12) Define Test incident Report

13) Define Test Log.

14) What are the Three critical groups in testing planning and test plan policy ?

15) Define Procedure.

16) What are the skills needed by a test specialist?

17) Write the test term hierarchy?

Part B

1. Write short notes on Testing and Debugging goals and Policy

2. Write short notes on Test planning

3. Explain in detail about Test Plan Components

4. Give the deliverables in Test Plan Attachments

5. How the tester Reports Test Results

6. Illustrate the role of the 3 critical groups

Unit-V
Test Automation
Part A

1. Define Project monitoring or tracking.

2. Define Project Controlling.

3. Define Milestone.

4. Define SCM (Software Configuration management).

5. Define Base line.

6. Differentiate version control and change control.

7. What is Testing?

8. Define Review

9. What are the benefits of a Review program?

10. What are the Various types of Reviews?

11. What is Inspections?

13. What is WalkThroughs?

14. List out the members present in the Review Team.

15. List the components of review plans.

16. What are the goals of Reviewers?

Part B

1. Explain the measurements and milestones for monitoring and controlling

2. What are criteria to be considered for test completion

3. Explain in detail about software configuration management

4. Explain in detail the types of reviews

5. List the components of review plans