

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 2524

Roll No.

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B. Tech.

(SEM. VI) THEORY EXAMINATION 2011-12

SOFTWARE TESTING

Time : 3 Hours

Total Marks : 100

1. Attempt any two parts of the following :— (10×2=20)
 - (a) What is Software testing ? Explain why testing can only detect the presence of errors, not their absence.
 - (b) Quality and reliability are related concepts but are different in number of ways. Discuss.
 - (c) Discuss in brief :—
 - (i) Debugging approaches.
 - (ii) Verification and validation testing.

2. Attempt any two parts of the following :— (10×2=20)
 - (a) Compare equivalence partitioning and boundary value analysis testing methods. Discuss in detail.
 - (b) How can you compute the cyclomatic complexity of a program ? How is complexity useful in program testing ? Discuss.
 - (c) Explain the following :—
 - (i) Cause Effect Graphing Technique.
 - (ii) Difference between white box and black box testing.

3. Attempt any **two** parts of the following :— (10×2=20)

(a) Distinguish between Alpha, Beta and acceptance testing with suitable examples.

(b) What is integration testing ? Explain and also discuss the importance of integration testing.

(c) Discuss the following :—

(i) Unit testing.

(ii) Stress testing.

4. Attempt any **two** parts of the following :— (10×2=20)

(a) What is regression testing ? Why regression test is applied in each phase of software development ? Discuss.

(b) Discuss the test selection using execution trace in context of regression testing.

(c) Write a short note on ad hoc testing with examples.

5. Write notes on any **two** :— (10×2=20)

(a) Grey-box testing with respect to object oriented systems.

(b) Software test automation.

(c) Test Planning & Management.