

07/05/2016

8E 8061

Roll No. _____

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8E 8061

B.Tech. VIII Semester (Main) Examination, April/May 2016

Information Technology

8IT1A Software Testing & Validation

Time : 3 Hours

Maximum Marks : 80

Min. Passing Marks : 24

Instructions to Candidates:

Attempt any five questions, selecting one question from each unit. All questions carry equal marks. (Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly. Units of quantities used/calculated must be stated clearly.

Unit - I

1. a) Explain verification & validation in detail what are the differences between the two. What are the advantages & disadvantages of verification & validation (8)
- b) Differentiate between white box & black box testing in detail (8)

OR

1. a) What is testing? Explain the need of software testing (8)
- b) Explain structural testing in detail with suitable examples (8)

Unit - II

2. a) Explain integration testing in detail. Describe its various approaches (8)
- b) Differentiate between scenario testing & system testing (8)

OR

2. Write short notes on (any two) (8×2=16)
 - a) Functional testing
 - b) Non-functional testing
 - c) Acceptance testing

Unit - III

3. a) What is regression testing? What is the need of regression testing (8)
b) Explain enabling testing in detail (8)

OR

3. Explain following types of testing (any two) (8x2=16)
a) Ad-hoc testing
b) Agile & extreme testing
c) Buddy testing

Unit - IV

4. a) Explain the tools for testing of OO softwares (8)
b) What is OOP & how it differs from procedural programming (8)

OR

4. Explain usability testing in detail. What are the ways to achieve usability how does one achieve usability. What are the quality factors for usability (16)

Unit - V

5. a) What is a test plan? What is its purpose (8)
b) What are the various types of matrices. Explain in detail (8)

OR

5. What is test automation. What is the need of automation in software testing? What are the key factors required for a successful test automation? What are the various components of a test automation frame work (16)
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