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10IS65

Sixth Semester B.E. Degree Examination, Dec.2017/Jan.2018
Software Testing

Time: 3 hrs. Max. Marks:100

Note: ***Answer FIVE full questions, selecting at least TWO questions from each part.***

PART – A

1 a. Explain basic definitions in perspective on testing. **(10 Marks)**

b. Define two fundamental approaches that are used to identify the test cases. **(10 Marks)**

2 a. Define the following:
- (i) Boundary value analysis.
- (ii) Generalizing Boundary value analysis.
- (iii) Limitations of boundary value analysis.
- (iv) Robustness testing. **(10 Marks)**

b. Develop a decision table for "second try" at the NextDate function. At the end of a 31-day month, the day is always reset to 1. For all non-December month, the month is incremented; for December, the month is reset to January and the year is incremented. **(10 Marks)**

3 a. Explain metric based testing. **(10 Marks)**

b. Define Use testing. **(05 Marks)**

c. Define slice-based testing. **(05 Marks)**

4 a. Explain alternative life-cycle models. **(10 Marks)**

b. Explain decomposition-based integration. **(10 Marks)**

PART – B

5 a. Explain basic concepts for requirements specification. **(10 Marks)**

b. Explain different functional strategies for thread testing. **(10 Marks)**

6 a. With neat diagram, explain the validation and verification in software testing. **(10 Marks)**

b. Explain the following:
- (i) Redundancy.
- (ii) Restriction.
- (iii) Partition.
- (iv) Visibility. **(10 Marks)**

7 a. Explain fault based adequacy criteria. **(05 Marks)**

b. Explain self-checks as oracles? **(05 Marks)**

c. Explain the following:
- (i) From test case specification to test cases.
- (ii) Scaffolding. **(10 Marks)**

8 Write a short note:

a. Quality and process.

b. Test and analysis plans.

c. Risk planning.

d. Test and analysis reports. **(20 Marks)**

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