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10IS65

Sixth Semester B.E. Degree Examination, Aug./Sept.2020
Software Testing

Time: 3 hrs.

Max. Marks:100

Note: Answer any FIVE full questions, selecting atleast TWO questions from each part.

PART – A

- 1 a. Define followings :
(i) Error (ii) Fault (iii) Failure (iv) Incident (v) Test (vi) Test cases. (06 Marks)
b. Develop a problem statement and implementation of Nextdate function. (10 Marks)
c. Develop simple venn diagram that clarifies program behaviour. (04 Marks)
- 2 a. Develop a formula for number of worst case test cases for function of two variables? What are the limitations of boundary value analysis? (06 Marks)
b. Define following :
(i) Weak normal equivalence class testing
(ii) Strong normal equivalence class testing
(iii) Weak robust equivalence class testing
(iv) Strong robust equivalence class testing (08 Marks)
c. Explain decision table based testing by taking an example of triangle problem. (06 Marks)
- 3 a. Define Test Coverage Metrics. (06 Marks)
b. Considering an example of commission problem. Write a statement pseudocode and DD paths and program graph of commission problem. (14 Marks)
- 4 a. With neat diagram explain various SATM screens? (06 Marks)
b. Write in brief about decomposition based integration? (06 Marks)
c. Explain comparison of Integration Testing Strategies. (08 Marks)

PART – B

- 5 a. Explain basic concepts for requirement specification. (10 Marks)
b. What are the taxonomy of interaction? Explain any two in brief. (10 Marks)
- 6 a. Briefly discuss:
(i) Degree of freedom (ii) Restriction
(iii) Sensitivity (iv) Redundancy (10 Marks)
b. Describe the dependability properties in detail. Draw relations among dependability properties. (10 Marks)
- 7 a. List Mutation Analysis Terminologies. (05 Marks)
b. What is scaffolding? Describe generic and specific scaffolding. (06 Marks)
c. Explain terms (i) Test oracles (ii) Self-check as oracles (iii) Capture and Replay. (09 Marks)
- 8 Write short note on:
a. Quality Team
b. Organizing Documents
c. Test and Analysis Report
d. Risk Planning. (20 Marks)

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and/or equations written eg. 42+8 = 50, will be treated as malpractice.