18IS62

USN

Sixth Semester B.E. Degree Examination, Dec.2023/Jan.2024
Software Testing

Time: 3 hrs.　　　　　　　　　　　　　　　　　　　　　Max. Marks: 100

Note: *Answer any FIVE full questions, choosing ONE full question from each module.*

Module-1

1　a.　Define the following : i) Error　ii) Fault　iii) Failure　iv) Incident　v) Test care. **(05 Marks)**
　　b.　List and explain important error and fault taxonomic. **(05 Marks)**
　　c.　Explain Testing and Debugging Life Cycle, with a neat diagram. **(10 Marks)**

OR

2　a.　Write a pseudo code for structured programming version of triangle programme. **(10 Marks)**
　　b.　Explain different types of Software test metrics in detail. **(10 Marks)**

Module-2

3　a.　Explain Boundary value analysis, with any one suitable example. **(10 Marks)**
　　b.　Explain the following Equivalence testing types :
　　　　i) Weak Normal　ii) Strong Normal　iii) Weak Robust　iv) Strong Robust. **(10 Marks)**

OR

4　a.　Explain the Decision Table – Based Testing with any one suitable example. **(10 Marks)**
　　b.　Explain Fault Based Adequacy Criteria. **(05 Marks)**
　　c.　Explain Mutation Analysis Terminologies. **(05 Marks)**

Module-3

5　a.　Write a triangle program. Draw the program graph and find the DD paths, DD path graph. **(10 Marks)**
　　b.　Explain Mc Cabe's basis path testing method with an example. **(10 Marks)**

OR

6　a.　Define Scaffolding. Explain Generic versus Specific Scaffolding. **(10 Marks)**
　　b.　Define Test Oracle. Explain with a neat diagram the concept of test harness. **(10 Marks)**

Module-4

7　a.　Explain the following principles : i) Sensitivity　ii) Redundancy
　　　　iii) Partition　iv) Visibility　v) Feedback. **(10 Marks)**
　　b.　List and explain dependability properties with examples. **(10 Marks)**

OR

8　a.　Explain the following :
　　　　i) Risk Planning　ii) Monitoring the process. **(10 Marks)**
　　b.　Write a short note on :
　　　　i) Organizing documents　ii) Test design specification document. **(10 Marks)**

Module-5

9 a. What is System Acceptance and Regressing Testing? Explain briefly. (10 Marks)
  b. Write context diagram and Level 1 dataflow diagram of SATM system. (10 Marks)

OR

10 a. What is Call – Graph based integration testing? Explain the strategies under call based integration testing. (10 Marks)
  b. Explain the path based integration testing. (10 Marks)

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