CBCS SCHEME

USN | | | | | | | | | | |

15IS63

Sixth Semester B.E. Degree Examination, July/August 2021
Software Testing

Time: 3 hrs. Max. Marks: 80

Note: ***Answer any FIVE full questions.***

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.

1 a. Explain Software Testing Life Cycle, with a neat diagram. **(08 Marks)**
b. Explain the SATM system. **(08 Marks)**

2 a. Explain different Software Quality attributes in detail. **(08 Marks)**
b. Explain Functional and Structural testing. **(08 Marks)**

3 a. Explain Boundary Value Analysis. Mention its limitations. Derive BVA test cases for triangle problem. **(08 Marks)**
b. Explain different equivalence class testing with an example. **(08 Marks)**

4 a. Define Fault Based Testing. What are the assumptions in Fault Based Testing? **(08 Marks)**
b. Design , develop a program in C language to implement the Next Date function. Analyse it from the Perspective boundary value testing. Derive different test cases. Explain these test cases and discuss the test results. **(08 Marks)**

5 a. Explain about slice based testing in a data flow testing by taking commission problem. **(08 Marks)**
b. Write a note on : i) Statement testing ii) Branch testing.
Also explain Scaffolding and Test oracles in brief. **(08 Marks)**

6 a. What is Basis Testing? Explain McCabe's basis path testing with a neat diagram. **(08 Marks)**
b. Design and develop C language program to solve the Commission problem. Assumption price for lock = 45.0 , stock = 30.0 and barrels = 25.0 production limit could sell in a month 70 locks , 80stocks and 90 barrels , Commission on sales = 10% < = 1000 and 15% on 1000 to 1800 and 20% on above 1800. Write all the possible DD Paths , du – Paths along with data flow diagram. **(08 Marks)**

7 a. Explain the following :
i) Sensitivity ii) Redundancy iii) Visibility iv) Partition. **(08 Marks)**
b. List and explain different types of Risk Planning. **(08 Marks)**

8 a. Briefly explain Test design Specification documents. **(08 Marks)**
b. Discuss the Dependability properties. **(08 Marks)**

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9 a. Explain about Client / Server testing, with respect to Interacting testing. **(08 Marks)**
b. Draw the display screens of both Simple Automatic Teller Machine (SATM) Terminal and built with fifteen screens for the SATM system with respect to context diagram. **(08 Marks)**

10 a. Explain Decomposition based Integration testing. **(08 Marks)**
b. Compare System , Acceptance and Regression testing. **(08 Marks)**

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