CBCS SCHEME 22 2

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

18MCA351

Third Semester MCA Degree Examination, Dec.2019/Jan.2020
Software Testing

Time: 3 hrs. Max. Marks: 100

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

Module-1

1 a. Briefly explain errors, faults and failures with neat diagram. **(10 Marks)**
b. With a neat diagram, explain testing and debugging. **(10 Marks)**

OR

2 a. Discuss the various types of defect management. **(10 Marks)**
b. Discuss the various test generation strategies in brief. **(10 Marks)**

Module-2

3 a. Define the following :
i) Error ii) Fault iii) Failure iv) Incident v) Test vi) Test case. **(08 Marks)**
b. With a neat diagram, explain the SATM (Simple Automated Teller Machine System). **(12 Marks)**

OR

4 a. Write a program to implement triangle problem. **(10 Marks)**
b. Explain briefly the two testing approaches used to identify test cases. **(10 Marks)**

Module-3

5 a. Explain BVA test case for two variables functions and limitations of BVA. **(10 Marks)**
b. What are different forms of equivalence class testing? Explain each of them with suitable pictorial representation. **(10 Marks)**

OR

6 a. Write test cases for next date function using equivalence class approach. **(10 Marks)**
b. Write test cases for the triangle problem using decision table approach. **(10 Marks)**

Module-4

7 a. Draw a program graph and DD path graph for a triangle problem. **(12 Marks)**
b. Explain McCabe's basis path method with an example. **(08 Marks)**

OR

8 a. Explain Rapps – Weyukar dataflow coverage metrics with a neat diagram. **(12 Marks)**
b. Describe top down and bottom up integration strategies. **(08 Marks)**

Module-5

9 a. Explain mutation analysis and fault based adequacy criteria. **(12 Marks)**
b. Differentiate between generic and specific scaffolding. **(08 Marks)**

OR

10 a. What is the role of risk management in the quality process? **(10 Marks)**
b. Explain documenting analysis and report. **(10 Marks)**

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