CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐

Fourth Semester MCA Degree Examination, Aug./Sept.2020
Software Testing and Practices

Time: 3 hrs.   Max. Marks: 80

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

Module-1

1   a.   What is Software Testing? Define the terms Error, Fault and Failure.   (08 Marks)
    b.   Briefly explain Software Quality Attributes.   (08 Marks)

OR

2   a.   Describe Test and Debug Life cycle with diagram.   (08 Marks)
    b.   List out and explain basic principles of software testing.   (08 Marks)

Module-2

3   a.   How Errors and Fault Taxonomies are classified in Software Testing?   (08 Marks)
    b.   With the statement of triangle problem, demonstrate the implementation of triangle program through flow chart.   (08 Marks)

OR

4   a.   How logical complexity is addressed in the example The Next Date Function?   (08 Marks)
    b.   Discuss the issues of Integration and system testing with the example of the SATM system.   (08 Marks)

Module-3

5   a.   Explain BVA for two variables and limitations of BVA.   (08 Marks)
    b.   Define ECT and various type of ECT.   (08 Marks)

OR

6   a.   How BVA for three variables is applied to solve triangle problem?   (08 Marks)
    b.   What are Decision Tables? Demonstrate the technique for triangle problem.   (08 Marks)

Module-4

7   a.   Define DD-paths and how DD-paths exist in triangle program.   (08 Marks)
    b.   What is Basis Path testing? Compute McCabe's Cyclomatic number, paths for the following graph.   (08 Marks)
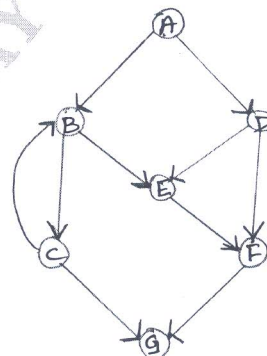

Fig.Q7(b)

OR

8 a. Explain traditional view of testing levels.   (08 Marks)
  b. Briefly discuss waterfall spin offs and specification based life cycle models.   (08 Marks)

Module-5

9 a. Define the assumptions of fault based testing.   (08 Marks)
  b. Write short note on: i) Scaffolding   ii) Test oracles.   (08 Marks)

OR

10 a. Explain the terminologies Quality and Process briefly.   (08 Marks)
   b. Differentiate between Risk planning, Monitoring the process, Quality team and organizing documents.   (08 Marks)

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