CBCS SCHEME

USN ☐☐☐☐☐☐☐☐☐☐   **15IS63**

Sixth Semester B.E. Degree Examination, Dec.2018/Jan.2019
Software Testing

Time: 3 hrs.   Max. Marks: 80

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

Module-1

1 a. Define Software quality. Explain the different measures of software quality. **(06 Marks)**
   b. Explain the perspective testing definitions of the following : i) Errors   ii) Fault
       iii) Failure   iv) Incident   v) Test   vi) Test case.
       Draw the flow diagram of a testing life cycle. **(08 Marks)**
   c. Consider the following :
       Requirement 1 : It is required to write a program that inputs two integers and outputs the
                        maximum of these.
       Comment on its completeness. **(02 Marks)**

OR

2 a. With the help of a test and debug cycle diagram, explain testing and debugging process.
       (08 Marks)
   b. Write pseudo-code for NextDate problem (simple version). **(04 Marks)**
   c. Explain the elements walk through and inspection of static testing. **(04 Marks)**

Module-2

3 a. With example, explain about boundary value analysis and mention its limitations.
       (04 Marks)
   b. Write Equivalence class test cases for the commission problem. **(06 Marks)**
   c. Explain the fault – based adequacy criteria. **(06 Marks)**

OR

4 a. Explain test cases for the triangle problem with respect to decision table based testing.
       (08 Marks)
   b. With a neat diagram, explain about i) Robustness testing   ii) Worst case testing.
       (04 Marks)
   c. Explain Mutation analysis terminologies. **(04 Marks)**

Module-3

5 a. Explain about du – path test coverage metrices with dataflow diagram. **(08 Marks)**
   b. Explain in brief about : Scaffolding and Test Oracles. **(08 Marks)**

OR

6 a. Explain McCabe's basis Path method. **(08 Marks)**
   b. Explain about slice based testing in a dataflow testing by taking commission problem.
       (08 Marks)

Module-4

7 a. Explain the following :
       i) Sensitivity   ii) Redundancy   iii) Visibility   iv) Partition. **(08 Marks)**
   b. Briefly explain test design specification documents. **(08 Marks)**

OR

8 a. Discuss the dependability properties.   (08 Marks)
   b. List and explain the different types of Risk planning.   (08 Marks)

Module-5

9 a. Explain about client / server testing with respect to interacting testing. (08 Marks)
   b. Explain about decomposition based integration with respect to integration testing. (08 Marks)

OR

10 a. Compare System , Acceptance and Regression 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. (08 Marks)

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