

Roll No. .... Total Pages : 2

47244

BT-7/J-25

**SOFTWARE VERIFICATION & VALIDATION & TESTING**

Paper-PE-CS-D-403A

Time : 3 Hours]

[Maximum Marks : 75

**Note :** Attempt five questions in all, selecting at least one question from each unit. All questions carry equal marks.

**UNIT-I**

1. (a) What is software testing and why it is so hard? (6)  
(b) Why is it impossible for a tester to find all the bugs in a system? Why might necessary for a program to be completely free of defects before it is deliver customers? (9)
2. (a) Explain the principles of software testing. (7)  
(b) With neat diagram, explain validation and Verification activities. (8)

**UNIT-II**

3. (a) What are decision tables? Draw the decision table for triangle problem. (6)  
(b) Discuss various path-testing techniques with example. (9)

4. (a) Explain the significance of control flow graph and cyclomatic complexity in white box testing technique with a pseudo code of sum and average of n numbers. (8)
- (b) Discuss in detail about the code coverage techniques with example. (7)

### UNIT-III

5. (a) Explain call graph-based integration with a suitable example. (7)
- (b) What are the different Regression Testing techniques? Discuss. (8)
6. (a) Explain path based integration testing. (8)
- (b) What's the difference between System testing and Acceptance testing? (7)

### UNIT-IV

7. (a) Explain the three categories belonging to McCall's factor model with examples. (9)
- (b) List out the weaknesses of ISO-9000. (6)
8. (a) Give any two software quality models and explain with neat diagram. (9)
- (b) Explain briefly about :
- (i) Buddy Testing.
- (ii) Extreme testing. (6)