QP Code : 720901

(3 Hours)   [Total Marks :80

N.B. : (1) Question no. **1** is **compulsory**
      (2) **Attempt** any **three** questions out of remaining **five** questions.

1. (a) With example explain Failure, Defect and Error   5
   (b) Explain STLC   5
   (c) Explain software quality metrics   5
   (d) Issues in Object Oriented Testing   5

2. (a) What is Verification and Validation? What is it's need ?   10
   (b) A program reads three numbers n1, n2, n3, in the range -100 to 100 and prints the   10
       smallest number. Design test cases for this program using equivalence class testing
       technique.

3. (a) Draw control flow graph and find cyclomatic complexity for the following PDL   10
       if(c1 or c2 and c3) s1;
       else s2;
       while(c4) s3;
       s4;
       do s5; while (c5);
       s6
   (b) Design test cases to find maximum of 4 nos.   10

4. (a) Explain static Data Flow Testing with example   10
   (b) Explain different types of Incremental Integration Testing Methods   10

5. (a) Explain entry and exit criteria for Alpha and Beta Testing. How Alpha testing differs   10
       from Beta testing.
   (b) T contains 90 tests of which 20 are modification-revealing for P and P' and M selects   10
       12 of these 20 tests, then calculate the inclusiveness of M relative to P,
       P', and T.

6. (a) Explain structure of Testing Group   5
   (b) Explain different size metrics   5
   (c) What is test suite? Why it grows.   5
   (d) Elaborate on SQA Models in brief   5