

(3 Hours)

[ Total Marks :80

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

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| 1. | (a) | Differentiate between effective and exhaustive software testing.   | 5  |
|    | (b) | Differentiate between verification and validation.   | 5  |
|    | (c) | Differentiate between white box and black box testing.   | 5  |
|    | (d) | Differentiate between top down and bottom up testing.  | 5  |
| 2. | (a) | Explain the Regression testing types.  | 10 |
|    | (b) | Explain the Software Testing Life cycle.   | 10 |
| 3. | (a) | Explain the process of test point analysis.  | 10 |
|    | (b) | A program reads three numbers A,B and C with a range [1,50] and print the largest number. Design test cases for this program using equivalence class testing techniques. | 10 |
| 4. | (a) | Explain Mutation testing with the help of example.   | 10 |
|    | (b) | Explain the need of software matrices.   | 10 |
| 5. | (a) | Explain the MC calls quality factors.  | 10 |
|    | (b) | Explain the guidelines for automated testing.  | 10 |
| 6. |     | Write notes on   | 20 |
|    | (a) | Test suite minimization problem  |    |
|    | (b) | Issues in Object Oriented testing  |    |
|    | (c) | Acceptance testing   |    |
|    | (d) | Challenges in testing data warehouse.  |    |

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