

Code: IT7T1

**IV B.Tech - I Semester – Regular / Supplementary Examinations
November 2016**

**SOFTWARE TESTING METHODOLOGIES
(INFORMATION TECHNOLOGY)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) Write and draw the model for testing. 7 M

b) Classify various types of bugs. 7 M

2. a) State and explain various kinds of predicate blindness with suitable examples. 7 M

b) What are link counters? Discuss their use in path testing. 7 M

3. Discuss in detail the data- flow testing strategies. 14 M

4. a) Discuss about Random Testing. 7 M

b) Explain about Linearizing Transformation. 7 M

5. Write the steps involved in Node Reduction Procedure.
Illustrate all the steps with help of neat labeled diagrams. 14 M
6. Reduce the following functions using Karnaugh Map method:
 $F(A, B, C, D) = (1, 2, 3, 8, 9, 10, 11, 14) + d(7, 15)$. 14 M
7. a) What are principles of state testing? Explain its advantages and disadvantages. 7 M
- b) Write the design guide lines for building the finite state machine into code. 7 M
8. a) Write about matrix powers and products. 7 M
- b) Explain Equivalence relations and Partial ordering relations. 7 M