

Code: CS8T2B

IV B.Tech - II Semester – Regular Examinations – April 2016

**SOFTWARE TESTING METHODOLOGIES
(COMPUTER SCIENCE & ENGINEERING)**

Duration: 3 hours

Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. a) What are the goals for testing? 7 M
b) Differentiate between testing and debugging. 7 M
2. a) Define path Testing. Explain three different path testing criteria. 6 M
b) Write the definition and examples of a Predicates. 8 M
3. Discuss the advantages and disadvantages of path selection in Transaction Flow. 14 M
4. a) How to test the two dimensional Domains? 7 M
b) Explain the Nice domain with a diagram. 7 M
5. a) Write short notes on **(a)** Path sums **(b)** Loops. 6 M
b) Explain about Lower path count arithmetic. 8 M

6. a) What is decision table and how is a decision table useful in testing? 7 M

b) Use a Karnaugh map to minimize

$$F = AB'C'D' + A'B'C'D' + ABC'D + A'BCD + ABD + B'CD' + A'BC'D$$

7 M

7. a) Differentiate between good state graphs and bad state graphs. 7 M

b) What are principles of state testing? Explain its advantages and disadvantages. 7 M

8. a) Explain the basic principle of the Graph matrix. 7 M

b) Write about equivalence relation and partial ordering relation. 7 M