**PVP 12**

Code: CS8T2B

**IV B.Tech-II Semester–Regular/Supplementary Examinations–April 2017**

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

Duration: 3 hours Max. Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. Elaborate Bugs taxonomy by describing different types of bugs. 14 M

2. a) Explain the elements of a flow graph with neat diagrams. 8 M

   b) Explain coincidental correctness with an example. 6 M

3. a) Define a transaction, and mention the steps of a typical online transaction. 6 M

   b) Draw and explain the two different types of data flow anomaly state graphs. 8 M

4. a) Explain domain testing along with its schematic representation. 6 M

   b) Write notes on domains and interface testing along with different cases of span compatibility. 8 M

5. a) Explain the cross term step of reduction algorithm, by considering an example. 4 M

b) Illustrate Reduction procedure, by considering a flow graph containing at least 7 nodes,12 edges and 3 loops… 10 M

6. a) What are the four areas of a decision table. Explain them with an example. 8 M

b) Draw and explain the KV Charts for Functions of Two variables. 6 M

7. a) Draw and explain state graph of a program that detects the character sequence "ZCZC". 7 M

b) Mention the steps involved in finding the number of states in a state graph. 7 M

8. a) How can a node reduction optimization be done. Explain using graph matrices. 7 M

b) Discuss Testing theory with the basic algorithms. 7 M