Code No: 45090

III B.Tech I Semester Regular Examinations, Nov/Dec 2009

R07 Set No - 4

Software Testing Methodologies Common to Information Technology, Computer Science And Engineering Time: 3 hours Max Marks: 80 Answer any FIVE Questions All Questions carry equal marks *****
1. Write the steps involved in Node Reduction Procedure. Illustrate all the steps with help of neat labeled diagrams. [16]
2. (a) Explain how concetenated loops can be tested?
(b) What are the 3 cases for single loop testing? $[10+6]$
3. (a) What are the Restrictions in domain testing?
(b) What are the possible domain bugs for a one-dimensional closed boundary? $[8+8]$
4. (a) Define relation and explain its different properties of relations.
(b) Explain about partial ordering relations. [8+8]
5. (a) Define du path and definition-clear path segment.
(b) Why All-du-Paths (ADUP) is the strongest data-flow testing strategy? $[6+10]$
6. (a) Define Software bug.
(b) Define Pesticide Paradox and Complexity barrier.
(c) Explain different phases of tester's mental life. $[2+6+8]$
7. (a) Show the representation of Minterm and Maxterm for three variables(D+M)
(b) Minimize the given expression using four variable k-map. $F(A,B,C,D) = \Sigma m(0,1,3,4,7,8,15).$ [8+8]
8. Explain State graphs with implementation. [16]
