

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

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. (a) How domain testing can be used in both functional and structural testings?
(b) Explain the different domain errors. [8+8]
2. Define Path sensitization and write Heuristic the procedure used in path sensitization. [16]
3. Explain the following in the context of node reduction procedure:
(a) Cross term step
(b) Parallel term step
(c) Loop term step. [16]
4. Write short notes on:
(a) Transition bugs
(b) Dead states
(c) State bugs
(d) Encoding bugs. [16]
5. (a) What are the different data object states in data-flow graphs.
(b) List nine possible two-letter combinations of the object states of data flow anomalies. Classify them as buggy, suspicious and ok. [8+8]
6. (a) Define a connection Matrix.
(b) Discuss the algorithm for finding set of all paths. [4+12]
7. (a) Whether the predicates are restricted to Binary Truth value or not? Explain?
(b) Illustrate the applications of Decision Tables? [8+8]
8. (a) What are Test and test design bugs, explain.
(b) The importance of a bug type is calculated by multiplying the expected cost of the nightmare by the probability of the bug and summing across all the nightmares. How? [8+8]
