SOFTWAREW TESTING METHODOLOGIES

SYLLABUS

UNIT – I

Introduction: Purpose of testing, Dichotomies, model for testing, consequences of bugs, taxonomy of
Bugs

UNIT – II

Flow graphs and Path testing: Basics concepts of path testing, predicates, path predicates and
achievable paths, path sensitizing, path instrumentation, application of path testing.

UNIT – III

Transaction Flow Testing: Transaction flows, transaction flow testing techniques.
Dataflow testing:-Basics of dataflow testing, strategies in dataflow testing, application of dataflow testing.

UNIT – IV

Domain Testing:-domains and paths, Nice & ugly domains, domain testing, domains and interfaces
testing, domain and interface testing, domains and testability.

UNIT - V

Paths, Path products and Regular expressions: Path products & path expression, reduction procedure,
applications, regular expressions & flow anomaly detection.

UNIT - VI

Logic Based Testing: Overview, decision tables, path expressions, kv charts, specifications.

UNIT - VII

State, State Graphs and Transition testing: State graphs, good & bad state graphs, state testing,
Testability tips.

UNIT - VIII

Graph Matrices and Application: Motivational overview, matrix of graph, relations, power of a matrix,
node reduction algorithm, building tools. (Student should be given an exposure to a tool like JMeter or Winrunner).

TEXT BOOKS:

1. Software Testing techniques - Baris Beizer, Dreamtech, second edition.
2. Software Testing Tools – Dr.K.V.K.K.Prasad, Dreamtech.

REFERENCES:

1. The craft of software testing - Brian Marick, Pearson Education.
2. Software Testing Techniques – SPD(Oreille)
3. Software Testing in the Real World – Edward Kit, Pearson.
4. Effective methods of Software Testing, Perry, John Wiley.
5. Art of Software Testing – Meyers, John Wiley.