

SOFTWARE TESTING

(Professional Elective-II) / (Common to CSE & IT)

Course Code: 15CT1120

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Course Outcomes :

At the end of the Course, the Student will be able to:

- CO 1** Build the software testing process.
- CO 2** Analyze the seven step software testing process.
- CO 3** Design a test plan.
- CO 4** Analyze and report test results.
- CO 5** Test acceptance and operational testing.

UNIT-I

(10 Lectures)

CREATING AN ENVIRONMENT SUPPORTIVE OF SOFTWARE TESTING:

Minimizing Risks, Writing a Policy for Software Testing, Economics of Testing, Building a structured Approach to Software Testing and Developing a Test Strategy.

BUILDING THE SOFTWARE TESTING PROCESS:

Software Testing Guidelines, Workbench Concept, Customizing the Software Testing process, Process Preparation Checklist.

UNIT-II

(10 Lectures)

OVERVIEW OF THE SOFTWARE TESTING PROCESS:

Advantages of Following Process, The Cost of Computer testing, The Seven-Step Software Testing Process, Workbench Skills.

STEP 1:

ORGANIZING FOR TESTING: Objective, Workbench, Input, Do Procedures (Task 1-5), Check Procedures, Output.

UNIT-III**(10 Lectures)****STEP 2:****DEVELOPING THE TEST PLAN:**

Overview, Objective, Concerns, Workbench, Input, Do Procedures (Task 1-6), Check Procedures, Output, and Guidelines.

STEP 3: VERIFICATION TESTING:

Overview, Objective, Concerns, Workbench, Input, Do Procedures (Task 1-3), check Procedures, Output, and Guidelines.

UNIT-IV**(10 Lectures)****STEP 4: VALIDATION TESTING:**

Overview, Objective, Concerns, Workbench, Input, Do procedures (Task 1-3), Check Procedures, Output, Guidelines.

STEP5:**ANALYZING AND REPORTING TEST RESULTS:**

Overview, Concerns, Workbench, Input, Do Procedures (Task 1-3), Check Procedures, Output, and Guidelines.

UNIT-V**(10 Lectures)****STEP 6:****ACCEPTANCE AND OPERATIONAL TESTING:**

Overview, Objective, Concerns, Workbench, Input, DO Procedures (Task 1-3), Check Procedures, Output, and Guidelines.

STEP 7:**POST IMPLEMENTATION ANALYSIS:**

Overview, Concerns, Workbench, Input, DO Procedures (Task 1-7), Check Procedures, Output, and Guidelines

TEXT BOOK:

William E.Perry, "Effective Methods for Software Testing", 3rd Edition, WILEY, 2010.

REFERENCES:

1. Elfriede Dustin, "Effective Software testing (50 specific ways to improve Your Testing)", 1st Edition, Pearson Education, 2006.

2. Boris Beizer, “Software Testing Technique”, 2nd Edition, Dream Tech. press, 2009.
3. K.V.K.K. Prasad, “Software Testing Tools”, 1stEdition, Dream Tech Press, 2007.