TED (15)-6136
(REVISION-2015)

Register Number.....
Signature .....

FIFTH SEMESTER DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY

SOFTWARE TESTING
(CT)

[Time: 3 Hours]

(Maximum marks: 100)

PART – A

I Answer all questions. (Each question carries two marks.)

1. State the short-term/immediate goals of software testing.
2. Interpret the term FSM.
3. List two dynamic testing techniques.
4. List any four challenges in testing for web-based software.
5. Name four types of debuggers.

PART – B

II Answer any five questions. Each question carries six marks

1. Explain the model for software testing.
2. Differentiate between unit verification testing and validation testing.
3. State what is basis path testing and write the guidelines for effective path testing.
4. Explain alpha testing and outline the entry and exit criteria of this testing method.
5. Explain the open source testing tools- CUT and Emma
6. Elaborate on how to ensure the functioning of correct sequence of navigations in a web application.
7. Explain how to correct bugs in a debugging process.

PART – C

MODULE - I

III. a. Explain the following validation activities :
1. Validation test plan 2. Validation test execution. (8 marks)

b. Discuss the critical activities involved in the test design phase of STLC. (7 marks)

OR

IV. Explain software testing methodology. (15 marks)

MODULE – II

V. a. Describe the method of error guessing. (5 marks)

b. Explain the significance of cyclomatic complexity in path testing with a suitable example. Devise three methods for finding cyclomatic complexity number. (10 marks)

OR

VI **a.** Differentiate between progressive and regression testing. (7 marks)

b. Explain different logic coverage criteria. (8 marks)

MODULE – III

VII. a. List the issues in Object Oriented Testing (5 marks)

b. Explain any five commercial testing tools. (10 marks)

OR

VIII. Discuss the guidelines to be followed while selecting a testing tool. (15marks)

MODULE – IV

IX.. Explain different debugging techniques. (15 marks)

OR

X. a. Explain the methods of bug tracking. (8 marks)

b. Explain different debugging tools and different types of debuggers. (7 marks)