

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE — OCTOBER, 2018

SOFTWARE TESTING

[Time : 3 hours

(Maximum marks : 100)

PART — A

(Maximum marks : 10)

Marks

I Answer *all* questions in one or two sentences. Each question carries 2 marks.

1. State the short-term/immediate goals of software testing.
2. List the two steps of equivalence class partitioning.
3. State any two objectives of regression testing.
4. State the purpose of the testing tool : Load runner.
5. Define the term Debugging.

(5 × 2 = 10)

PART — B

(Maximum marks : 30)

II Answer any *five* of the following questions. Each question carries 6 marks.

1. Describe the model for software testing with a neat figure and a brief explanation of the related elements.
2. Explain the steps in the preparation of test strategy matrix while developing the test strategy.
3. State why white box testing is called glass box testing. List the needs of white box testing.
4. Illustrate — “Regression testing produces quality software” with a figure.
5. State the guidelines for automated testing.
6. Discuss Navigation Testing of Web based software.
7. Explain the role of debugging tools in the debugging process. List the different types of debugging tools.

(5 × 6 = 30)

PART — C

(Maximum marks : 60)

(Answer *one* full question from each unit. Each full question carries 15 marks)

UNIT — I

III Explain software testing methodology with a figure and describe all the terms related to it. 15

OR

IV (a) Describe STLC bringing out the significance of each phase. 9

(b) Explain how to verify the code. 6

UNIT — II

V Explain state table testing. Demonstrate state table based testing by designing test cases for a task in an operating system. 15

OR

VI (a) Describe the different types of acceptance testing. 9

(b) Differentiate between progressive testing and regressive testing. 6

UNIT — III

VII Explain the categorization of testing tools. 15

OR

VIII (a) Describe the advantages of test automation. 9

(b) State the issues in Object Oriented testing. 6

UNIT — IV

IX (a) Discuss the methods of bug tracking. 10

(b) Explain how to correct the bugs. 5

OR

X (a) Explain the different debugging techniques. 9

(b) Describe the process of debugging. 6