

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, NOVEMBER – 2025**

SOFTWARE TESTING

[Maximum Marks: 75]

[Time: 3 Hours]

PART-A

I. Answer ‘all’ the following questions in one word or one sentence. Each question carries ‘one’ mark.

(9 x 1 = 9 Marks)

		Module Outcome	Cognitive level
1.	Define fault.	M1.02	R
2.	-----is a record of testing events that take place during the test.	M1.03	R
3.	Test strategy matrix is prepared using-----	M1.04	R
4.	State the number of test cases designed for a module of n variables in boundary value checking method.	M2.01	U
5.	The flow graph in basic path testing is also known as-----	M2.04	R
6.	Define stub.	M3.02	R
7.	The total number of test sessions in a decomposition-based integration is computed as-----	M3.03	U
8.	List any two commercial testing tools.	M4.03	R
9.	List any two challenges in testing web based software.	M4.05	R

PART-B

II. Answer any ‘eight’ questions from the following. Each question carries ‘three’ marks.

(8 x 3 = 24 Marks)

		Module Outcome	Cognitive level
1.	Explain any two post-implementation goals of software testing.	M1.01	U
2.	Discuss the bug classification based on criticality.	M1.02	U
3.	List the testing activities in validation test execution.	M1.04	R
4.	List the basic forms of logic coverage in white box testing.	M2.04	R
5.	Compare inspection and structured walkthrough.	M3.01	U
6.	Describe the three types of reliability testing.	M3.04	R
7.	Explain the types of regression testing.	M3.06	U
8.	Explain the use of static testing tools.	M4.01	U
9.	Distinguish load testing and stress testing in web based systems.	M4.04	U
10.	Describe the four levels in bottom-up testing of object oriented software.	M4.05	U

PART-C

Answer 'all' questions from the following. Each question carries 'seven' marks.

(6 x 7 = 42 Marks)

		Module Outcome	Cognitive level
III.	Explain the model for software testing. OR	M1.01	U
IV.	Draw Software Testing Life Cycle and explain the phases.	M1.03	U
V.	Describe boundary value checking method with an example. OR	M2.01	U
VI.	Describe the components of decision table.	M2.03	U
VII.	A program reads an integer number within the range [1,100] and determines whether it is prime number or not. Develop test cases for this program using robust testing method. OR	M2.05	A
VIII.	A program determines the next date in the calendar. Its input is entered in the form of <ddmmyyyy> with the following range: 1<=mm<=12 <=dd<=31 1900<=yyyy<=2025 Its output would be the next date or an error message 'invalid date'. Develop test cases using equivalence class partitioning method.	M2.05	A
IX.	Explain any seven benefits of inspection process. OR	M3.01	U
X.	Explain function testing.	M3.04	U
XI.	Compare two types of acceptance testing. OR	M3.05	U
XII.	State the objectives of regression testing. Explain when regression testing is carried out.	M3.06	U
XIII.	Explain the guidelines for selecting a testing tool. OR	M4.01	U
XIV.	State the issues in object oriented testing.	M4.04	U
