

**DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/
MANAGEMENT/COMMERCIAL PRACTICE, APRIL – 2024**

SOFTWARE TESTING

[Maximum Marks: **100**]

[Time: **3 Hours**]

PART-A

[Maximum Marks: **10**]

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

1. Distinguish between verification and validation.
2. Define regression testing.
3. How does Test-director tool simplifies test management?
4. What is the use of kernel debugger?
5. List the types of debuggers.

(5 x 2 = 10)

PART-B

[Maximum Marks: **30**]

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

1. Why software testing is considered as a separate process rather than a phase in software development life cycle?
2. What are the goals of software testing?
3. Write the objectives of reliability testing ? Briefly explain types of reliability tests.
4. Describe the process of structured walkthrough.
5. What are the advantages of test automation?
6. Explain guidelines for automated testing.
7. Describe the debugging with memory dump and list its drawbacks.

(5 x 6 = 30)

PART-C

[Maximum Marks: **60**]

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

UNIT – I

III. Describe Software Testing Life Cycle with all its phases with a neat diagram. (15)

OR

- IV. Describe the model for software testing with a neat diagram and explain related elements. (15)

UNIT – II

- V. Explain generating test cases using Boundary Value Analysis with a suitable example. (15)

OR

- VI. a. What is acceptance testing? Explain different types of acceptance testing. (9)
b. What are the advantages and disadvantages of white box testing. (6)

UNIT- III

- VII. Explain the categorization of testing tools. (15)

OR

- VIII. a. Discuss the navigation testing of web based software. (8)
b. Describe the tool Test Director and its various phases. (7)

UNIT - IV

- IX. a. Describe the debugging technique : Debugging with watch points. (9)
b. List and explain any 3 types of debuggers. (6)

OR

- X. With a neat diagram explain debugging Process. (15)
