1509230272

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, NOVEMBER - 2023

SOFTWARE TESTING

[Maximum marks: 100]   [Time: 3 Hours]

PART – A
Maximum marks: 10

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

1. Define software testing.

2. List two long term goals of software testing.

3. Define mutant.

4. Name two commercial testing tools.

5. Define debugging.   (5 x 2 = 10)

PART – B
Maximum marks: 30

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

1. Explain the model of software testing.

2. Explain software testing goals.

3. Explain boundary value analysis with example.

4. Explain data flow testing.

5. Describe the advantages of test automation.

6. Explain CUT and Cgreen testing tools.

7. Explain about debugging guidelines.   (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. (a) Explain software testing life cycle with a diagram.   (9)

     (b) Explain verification and validation.   (6)

OR

IV. Explain software testing methodology with a diagram. (15)

UNIT-II

V. (a) Explain code inspection, code walkthrough and technical review methods of Static testing. (9)

    (b) Explain the need of white box testing. (6)

OR

VI. (a) Explain three regression testing techniques. (9)

    (b) Explain equivalence class partitioning. (6)

UNIT-III

VII. (a) Explain WinRunner, SilkTest and LoadRunner testing tools. (9)

    (b) Explain guidelines for automated testing. (6)

OR

VIII.(a) Explain challenges in web based system testing. (9)

    (b) Explain about selection of testing tools. (6)

UNIT-IV

IX. (a) Explain the process of debugging with a neat diagram. (9)

    (b) Explain different types of debuggers. (6)

OR

X. Explain different types of debugging techniques. (15)