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DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/ COMMERCIAL PRACTICE, APRIL-2022

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. State the post-implementation goals of Software Testing

2. List the different methods to design test cases using Boundary Value Analysis.

3. State the objectives of regression testing.

4. Name any four testing tools.

5. Mention the purpose of debugging process.   (5 x 2 = 10)

PART – B
Maximum marks : 30

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

1. Explain Software testing model used in testing process with diagram.

2. Briefly explain software testing process.

3. Describe equivalence class testing.

4. Write short note on integration testing methods.

5. State the advantages of test automation.

6. List and explain different categories of testing tools.

7. Explain the backtracking process in debugging a problem.   (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 different phases in Software Testing Life Cycle.   (8)

(b) Explain briefly verification and validation with complete V&V diagram.   (7)

<div align="center">OR</div>

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

<div align="center">**UNIT-II**</div>

V. (a) Explain Decision table based testing. (8)

(b) Describe about Function testing. (7)

<div align="center">**OR**</div>

VI. (a) Explain the logic coverage criteria in white-box testing. (8)

(b) Describe the stages in inspection process in static testing. (7)

<div align="center">**UNIT-III**</div>

VII. (a) Explain the criteria to select a testing tool. (8)

(b) Describe the strategy for testing Object oriented software. (7)

<div align="center">**OR**</div>

VIII.(a) Explain the guidelines for automated testing. (8)

(b) Describe the challenges in testing web based software. (7)

<div align="center">**UNIT-IV**</div>

IX. (a) Describe the debugging process with diagram. (8)

(b) Explain the guidelines for debugging bugs. (7)

<div align="center">**OR**</div>

X. (a) Explain the different debugging techniques. (8)

(b) Write short note on debuggers and discuss various types of debuggers. (7)

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