

TED (15) -6136  
(Revision- 2015)

**A21-04448**

Reg.No.....  
Signature. ....

DIPLOMA EXAMINATION IN ENGINEERING/TECHNOLOGY/MANAGEMENT/  
COMMERCIAL PRACTICE – APRIL -2021.

**SOFTWARE TESTING**

(Maximum Marks: 75)

[Time: 2.15 hours]

**PART-A**

Marks

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

1. List the long term goals of software testing.
2. Differentiate static testing and dynamic testing.
3. List any 4 Black-Box testing techniques.
4. List any two open source testing tools.
5. List any two debugging tools.

(3x2=6)

**PART - B**

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

1. Explain the model for software testing with the help of a diagram.
2. Explain test strategy matrix.
3. Explain the needs of White-Box testing.
4. Define cyclomatic complexity and explain the methods of finding the cyclomatic complexity.
5. Explain the advantages of test automation.
6. Explain debugging process with the help of a diagram.
7. Explain how to correct bugs.

[4x6 =24]

**PART - C**

(Answer **any of the three units** from the following. Each full question carries 15 marks)

**UNIT I**

- III** (a) Explain software testing life cycle with the help of a diagram. (9)
- (b) Explain software testing process. (6)

**OR**

- IV** (a) Explain testing methodology with the help of a diagram. (9)  
(b) Explain V testing model. (6)

**UNIT- II**

- V** (a) Explain mutation testing with the help of examples. (9)  
(b) Explain stubs and drivers in validation testing. (6)

**OR**

- VI** (a) Explain integration testing and its methods. (9)  
(b) Differentiate progressive and regression testing. (6)

**UNIT- III**

- VII** (a) Explain the guidelines to be followed while selecting a testing tool. (9)  
(b) Explain the issues on object oriented testing. (6)

**OR**

- VIII** (a) Explain the categories of testing tools. (9)  
(b) Explain the challenges in web based testing. (6)

**UNIT – IV**

- IX** (a) Explain the three debugging techniques. (9)  
(b) Explain kernel debugger and give an example. (6)

**OR**

- X** (a) Explain the different types of debuggers. (9)  
(b) Explain bug tracking. (6)

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