

**R13**

Code No: 126ER

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**

**B. Tech III Year II Semester Examinations, May - 2019**

**SOFTWARE TESTING METHODOLOGIES**

(Common to CSE, IT)

Time: 3 hours

Max. Marks: 75

**Note:** This question paper contains two parts A and B.  
Part A is compulsory which carries 25 marks. Answer all questions in Part A. Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

**PART - A**

(25 Marks)

- |      |  |     |
|------|--|-----|
| 1.a) | List the goals of software testing.  | [2] |
| b)   | What is path sensitization?  | [3] |
| c)   | Explain various loops with an example.   | [2] |
| d)   | What is meant by testing? Write about any two application of data flow testing | [3] |
| e)   | Define nice and ugly domains.  | [2] |
| f)   | Define domain testing with example.  | [3] |
| g)   | What is regular expression?  | [2] |
| h)   | What is logic based testing?   | [3] |
| i)   | What are testability tips?   | [2] |
| j)   | List the different types of tools required for test planning.                  | [3] |

**PART - B**

(50 Marks)

- |           |  |       |
|-----------|--|-------|
| 2.a)      | Discuss about Myths related software testing and its facts.            |       |
| b)        | Explain about life cycle of Bug.                                       | [5+5] |
| <b>OR</b> |  |       |
| 3.a)      | What is meant by integration testing and what are the goals of it.     |       |
| b)        | What are control and sequence bugs? How they can be caught?            | [5+5] |
| 4.        | Discuss in detail data - flow testing strategies.                      | [10]  |
| <b>OR</b> |  |       |
| 5.a)      | Compare data flow and path flow testing strategies.                    |       |
| b)        | Distinguish between Control Flow and Transaction flow.                 | [5+5] |
| 6.a)      | Discuss with example the equal - span range/ Domain compatibility bugs |       |
| b)        | Discuss  |       |
|           | i) Non linear domain boundaries  |       |
|           | ii) Complete domain boundaries.  | [5+5] |
| <b>OR</b> |  |       |
| 7.        | State and explain various restrictions at domain testing processes.    | [10]  |

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8. Explain Regular Expressions and Flow Anomaly detection. [10]

OR

9. Explain path expression with examples. [10]

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10.a) Categorize various testing tools necessary for testing.

b) What are the using of win-runner?

[5+5]

OR

11.a) What are the principles of state testing. Discuss advantages and disadvantages.

b) Explain about node reduction algorithm.

[5+5]

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