



**B.Tech VIII Semester Regular/Supplementary Examinations, April 2023**

**Software Testing Methodologies**  
(Computer Science and Engineering)

**Maximum Marks: 70**

Date:05.05.2023 Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
  2. Part A is compulsory which carries 20 marks. Answer all questions in Part A.
  3. Part B consists of 5 Units. Answer any one full question from each unit which carries 10M.
  4. Each question carries 10 marks and may have a, b, c, d as sub questions.

**Part-A**

All the following questions carry equal marks

(10x2M=20 Marks)

- 1 What is assignment blindness?
- 2 Distinguish between builder and buyer.
- 3 What is All - du Paths (ADUP)
- 4 Is complete testing possible ? Justify.
- 5 Define nice domains
- 6 What is domain span?
- 7 What is path expression?
- 8 Explain Regular Expressions
- 9 How can the graph be represented in Matrix form?
- 10 Mention testability tips

**Part-B**

Answer All the following questions.

(5X10M=50Marks)

- 11 State and explain various dichotomies in software testing. [10]  
OR
- 12 A. Explain heuristics procedures for sensitizing paths. [5]  
B. Explain about life cycle of Bug. [5]
- 13 A. Explain the terms Dicing, Data-flow and Debugging. [5]  
B. Explain transaction-flow graph implementation with example. [5]  
OR
- 14 A. What are the structural test strategies based on the program's control flow graph? Explain. [5]  
B. Discuss in detail data - flow testing strategies. [5]
- 15 Discuss the domains and interface testing in detail. [10]  
OR
- 16 A. How to test one-dimensional domains? Explain in detail. [5]  
B. What are the properties of nice domains? Explain. [5]
- 17 What is meant by data-flow anomalies? How data flow testing will explore them. [10]

OR

- 18 A. Explain path expression with examples. [5]  
B. Write the procedure for specification validation. [5]

- 19 A. Write testers comments about state graphs. [5]  
B. Discuss about matrix representation software. [5]

OR

- 20 A. Categorize various testing tools necessary for testing. [5]  
B. Explain about node reduction algorithm [5]