



R20 Regulation

Subject code: 3E7HF

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

(Autonomous, Accredited by NAAC with 'A+' Grade)

B.Tech VII Semester Supplementary Examinations, April 2024

SOFTWARE TESTING METHODOLOGIES

(CSE(DS))

Maximum Marks: 70

Date: 30.04.2024 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.
 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 meant by testing? Why we need it.
- 2 Define a model for software testing.
- 3 Explain about data flow anomaly graph with example.
- 4 What is petri net?
- 5 Define domain testing with example.
- 6 Define nice and ugly domains.
- 7 Write the limitations of path testing.
- 8 Define cross and parallel term in path testing.
- 9 How can the graph be represented in matrix form?
- 10 Define good state and bad state graphs.

Part-B

Answer All the following questions.

(5X10M=50Marks)

- 11 What is meant by testing? Why we need it? List the goals of software testing. [10]

OR

- 12 What is meant by program's control flow? How is it useful for path testing? [10]

- 13 Discuss about the data flow model. [10]

OR

- 14 Discuss about complication in transaction - flow testing. [10]

- 15 Explain the schematic representation of domain testing. [10]

OR

- 16 State and explain various restrictions at domain testing processes. [10]

- 17 Explain about regular expressions and flow-anomaly detection. [10]

OR

- 18 Explain path expression with examples. [10]

- 19 Discuss about matrix representation software. [10]

OR

- 20 What are graph matrices and their applications? Explain in detail. [10]