R20 Regulation *Subject code:3E7HF*

TKR COLLEGE OF ENGINEERING AND TECHNOLOGY

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

B.Tech VII Semester Supplementary Examinations, May 2026

SOFTWARE TESTING METHODOLOGIES
(CSE(DS))

Maximum Marks: 70 Date: 15.05.2026 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)		Marks	CO	BTL
1	What are feature bugs?	2M	1	L1
2	Distinguish between builder and buyer.	2M	1	L1
3	Write various loops.	2M	2	L1
4	Write the applications of data flow testing.	2M	2	L1
5	What is loop free software?	2M	3	L1
6	Write about linear vector space.	2M	3	L1
7	What is regular expression?	2M	4	L1
8	What is logic based testing?	2M	4	L1
9	What is impossible state?	2M	5	L1
10	Distinguish between manual testing and automated testing.	2M	5	L1

Part-B

Answer All the following questions. (5X10M=50Marks)		Marks	CO	BTL
11	List the elements of flow graph and explain each Element with Suitable diagram.	10M	1	L2
	OR			
12	Explain various dichotomies in software testing.	10M	1	L2
13	Explain data-flow testing with generalizations and limitations.	10M	2	L2
	OR			
14	What is transaction flow testing? Explain with example.	10M	2	L2
15	Explain domains, path and testability.	10M	3	L2
	OR			
16	Compare domain and interface testing.	10M	3	L2
17	a) Write the procedure for specification validation b) Describe the mean processing time of a routine with example.	5M 5M	4	L2
	OR			
18	Explain path expression with examples.	10M	4	L2
19	What are graph matrices and their applications? Explain in detail.	10M	5	L2
	OR			
20	a) Explain about good state and bad state graphs. b) What are properties of relations? Explain.	5M 5M	5	L2