Code No.: R22AI621PE

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CMR ENGINEERING COLLEGE: : HYDERABAD
UGC AUTONOMOUS
III–B.TECH–II–Semester End Examinations (Supply) - December- 2025
SOFTWARE TESTING METHODOLOGIES
(CSM)

[Time: 3 Hours] **[Max. Marks: 60]**

Note: This question paper contains two parts A and B.
Part A is compulsory which carries 10 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 **(10 Marks)**

1. a)	Difference between dynamic data and static data.	[1M]
b)	Define testing.	[1M]
c)	Why is interface testing important?	[1M]
d)	What is path predicate? Give example.	[1M]
e)	List applications of regular expression.	[1M]
f)	What is data flow anamoly?	[1M]
g)	Define modularity.	[1M]
h)	List uses of early testing.	[1M]]
i)	Write about matrix of graph.	[1M]
j)	What is the use of WinRunner (Testing Tool)?	[1M]

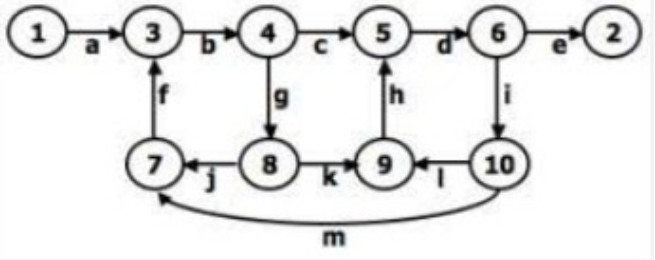
PART-B **(50 Marks)**

2. Discuss the model for testing. [10M]

OR

3. Elaborate on applications of path testing with examples. [10M]

4. Consider the following flow – graph. Explain the reduction procedure algorithm.



[10M]

OR

5. What is transaction flow testing? Explain with example. [10M]

6. Explain KV charts in detail with given example. [10M]

$$F(A,B,C,D) = \sum(0,2,4,7,9,12,14)$$

OR

7. What are decision tables? Illustrate the applications of decision tables. How is a decision table useful in testing? Explain with an example. [10M]

8. What are the principles of state testing. Discuss advantages and disadvantages. [10M]

OR

9. Differentiate between good state graphs and bad state graphs? [10M]

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

OR

11. Discuss about matrix representation software and its building tools. [10M]

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