

CMR ENGINEERING COLLEGE: : HYDERABAD

UGC AUTONOMOUS

III-B.TECH-II-Semester End Examinations (Regular) - June- 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.

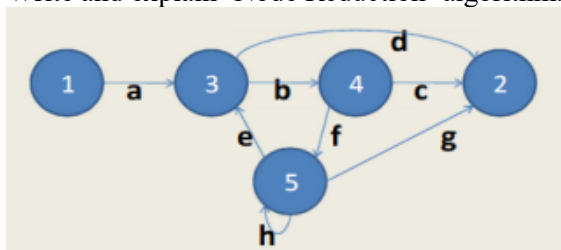
Part B consists of 5 Units. Answer any one full question from each unit. Each question carries 10 marks and may have a, b, c as sub questions.

PART-A**(10 Marks)**

1. a) Compare testing and debugging. [1M]
- b) What is a path predicate in software testing? [1M]
- c) Define domain testing? [1M]
- d) What is horrible loop? [1M]
- e) Define regular expression with example [1M]
- f) What is path product? [1M]
- g) What is state graph? [1M]
- h) Define continuous testing? [1M]
- i) Explain testability tips in software testing. [1M]
- j) Explain loop term step in the context of node reduction procedure. [1M]

PART-B**(50 Marks)**

2. Explain in detail about Taxonomy of Bugs. [10M]
- OR**
3. Discuss path sensitizing in software testing. [10M]
4. List the elements of flow graph and explain each element with suitable diagram. [10M]
- OR**
5. Define data flow testing? Explain data flow testing strategies. [10M]
6. Explain data flow anomalies with example. [10M]
- OR**
7. Discuss logic based testing in software testing. [10M]
8. What are the types of bugs that can cause state graphs? [10M]
- OR**
9. Discuss finite state machine and List out the advantages of state testing. [10M]
10. Write and explain 'Node Reduction' algorithm. [10M]

**OR**

11. Discuss Win-runner and JMeter. [10M]
