Code: 9A05702

R09

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013 **SOFTWARE TESTING**

(Computer Science and Systems Engineering)

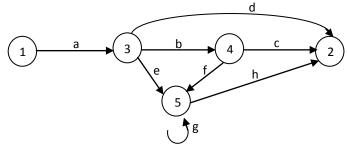
Time: 3 hours Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain the different phases of testing.
 - (b) Differentiate debugging from testing.
 - (c) List the structural bugs. Explain any one.
- 2 (a) Define path testing. Explain the different path selection criteria.
 - (b) What do you mean by test blindness? Explain with an example.
 - (c) Explain how the following compound predicate will be covered.

(A & B) II (C & D)

- 3 (a) Transaction flows are illstructured. Justify.
 - (b) What are the things to be discussed while conducting walk throughs?
 - (c) Discuss the different components of the data-flow model with an example.
- 4 (a) What is domain testing? Write a schematic representation of domain testing.
 - (b) Compare and contrast open and closed domains.
 - (c) List the domain bugs for 1-dimensional open domain boundary.
- 5 (a) Write the steps needed to convert a flowgraph into a path expression using reduction procedure.
 - (b) Explain how to find the maximum number of paths in a flowgraph with an example.
- 6 (a) What are the scenarios in which decision tables are used for test case design?
 - (b) Draw KV chart for the following Boolean expression $\overline{A} \ \overline{B} \ \overline{D} + BD + \overline{D} \ C$
 - (c) Explain the conditions when logic based testing is applicable to predicates.
- 7 (a) With a neat diagram explain improper state graphs.
 - (b) Differentiate between mergeable and unmergeable states.
 - (c) List the impact of bugs on the state testing.
- 8 (a) Construct the matrix for the following graphs.



(b) Explain non-reduction algorithm with example.
