Code: 9A05702

R09

B.Tech IV Year II Semester (R09) Advanced Supplementary Examinations, July 2013
SOFTWARE TESTING
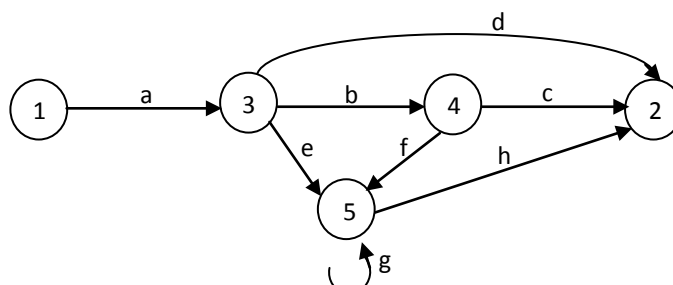(Computer Science and Systems Engineering)

Time: 3 hours   Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks
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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) ll (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.
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