



Code: 9F00502

MCA V Semester Supplementary Examinations July 2015

**SOFTWARE TESTING**

(For students admitted in 2009, 2010, 2011 and 2012 only)

Time: 3 hours

Max Marks: 60

Answer any FIVE questions

All questions carry equal marks

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- 1 (a) Define testing. Explain the goals of testing.  
(b) Differentiate testing and debugging.
- 2 (a) What are the different notations used in the control flow graph? Explain.  
(b) What are the applications of path testing? Explain.
- 3 (a) Discuss about sensitization and instrumentation based on transaction flows.  
(b) What is the motivation of dataflow testing? Explain.
- 4 (a) What are the advantages of domain testing? Explain.  
(b) Explain simple domain boundaries and compound predicates.
- 5 (a) What is meant by path products? Explain with example.  
(b) What are the techniques used to find the minimum number of paths in a graph? Explain with example.
- 6 (a) "Decision tables as a basis for test case design" explain.  
(b) Minimize the following function using KV map:  
$$F(A, B, C, D) = \Sigma(3, 4, 5, 6, 8, 9, 10, 11, 14) + d(7, 5)$$
- 7 Write short note on following:  
(a) Dead state.  
(b) Unreachable state.  
(c) Transition bugs.
- 8 (a) Write node reduction algorithm.  
(b) What are relations? Give the properties of relations.

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