

Code: 9F00502

## MCA V Semester Supplementary Examinations May 2019

## SOFTWARE TESTING

(For 2009, 2010, 2011, 2012 (LC), 2013, 2014, 2015 & 2016 admitted batches only)

Time: 3 hours Max. Marks: 60

Answer any FIVE questions All questions carry equal marks

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- 1 (a) Differentiate between testing and debugging.
  - (b) Discuss in detail about various categories of bugs.
- 2 (a) What are the different criteria or strategies for path testing? Explain briefly.
  - (b) What is path instrumentation? Briefly explain the various types of path instrumentation methods.
- 3 (a) What are the different types of transaction flow junction points? Explain each in brief.
  - (b) Briefly explain about the various types of data flow testing strategies in decreasing order of their effectiveness.
- 4 (a) List out the different bugs that result in domain errors and also brief them.
  - (b) Briefly explain about domain and interface testing.
- 5 (a) Briefly discuss about the path products and the path sums with suitable examples.
  - (b) Explain briefly about the generic flow-anomaly detection problem.
- 6 (a) What are the different areas of decision tables? Define them and also give an example.
  - (b) Explain about Karnaugh-Veitch chart for Boolean functions of two and three variables.
- 7 (a) Define state graphs. Give an example. Also discuss how it is transformed into the form of state tables.
  - (b) Differentiate equivalent states, unreachable states and dead states in a state graph with suitable examples.
- 8 (a) Define cyclomatic complexity. How it is calculated for a graph? Give an example.
  - (b) Explain in detail about the node reduction algorithm for a graph.

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