

Hall Ticket Number:

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Code No. : 235

VASAVI COLLEGE OF ENGINEERING (Autonomous), HYDERABAD
M.C.A. II Year I-Semester (Main & Backlog) Examinations, Nov./Dec.-2016

Software Testing

Time: 3 hours

Max. Marks: 70

Note: Answer ALL questions in Part-A and any FIVE from Part-B

Part-A (10 × 2 = 20 Marks)

1. Depict the levels of testing in the waterfall model.
2. Illustrate decision table based testing with an example.
3. Draw a program graph for If-Then-Else construct.
4. Design a test method pendulum.
5. Differentiate between a driver and stub used in integration testing.
6. Illustrate the three levels of threats.
7. Illustrate the implications of Encapsulation in object-oriented testing.
8. Write about the levels of object-oriented testing.
9. Analyze the term- system of systems.
10. Write any three requirements for a testing tool.

Part-B (5 × 10 = 50 Marks)
(All bits carry equal marks)

11. a) Robust boundary value testing is an extension of normal boundary value testing. Justify with an example.
b) Draw a Decision table for Triangle problem and explain.
12. a) Analyze the process of basis path testing. Explain with an illustration.
b) Write about the test coverage metrics of path testing.
13. a) Compare top-down integration with bottom-up integration with relevant examples.
b) Explain how use cases can be converted into petri nets for a simple ATM system.
14. a) Explain object-oriented unit testing with an example.
b) Discuss object-oriented system testing for the currency converter program.
15. a) Write a detailed note on exploratory testing.
b) Define test automation. Enumerate skills required for it. Discuss the pros and cons.
16. a) Define slice based testing. Explain.
b) Define a fault. Give the fault taxonomy with examples.
17. Answer any *two* of the following:
 - a) Write briefly about the three mathematical approaches used in non-functional system testing.
 - b) Draw a sequence diagram for PrintDate.
 - c) Explain All Pairs testing technique.
