

(Please write your Exam Roll No.)

Exam Roll No.....

END TERM EXAMINATION
FIFTH SEMESTER [MCA] DECEMBER-2009

Paper Code : MCA317

Subject : Software Testing

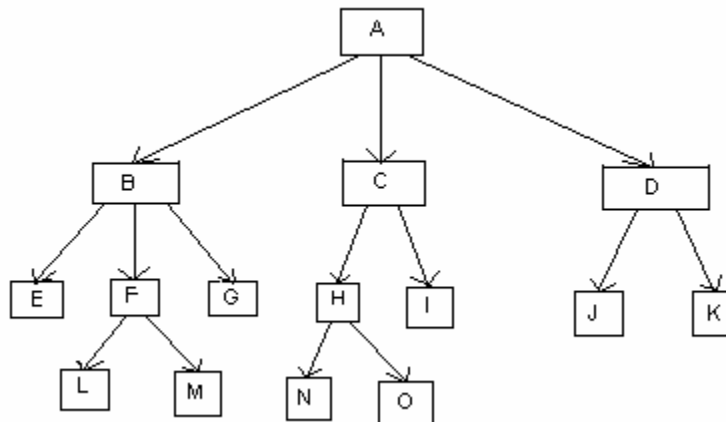
Paper ID – 44317

Time : 3 Hours

Maximum Marks : 60

Note : Attempt any five questions

- Q1 (a) Explain the difference between a mistake, fault, failure and error by taking suitable example. (2)
(b) Explain the difference between the testing and debugging. (2)
(c) What do you mean by verification? Explain in detail the verification techniques used during testing. (8)
- Q2 (a) How can overall cost of testing be reduced? (2)
(b) Define a test case. It consists of what information? Describe briefly. (2)
(c) What is the difference between black box and white box testing? List the techniques used for black box and white box testing. (3)
(d) Explain in detail equivalence technique used for black box testing. (5)
- Q3 (a) Write a program to input the marks of 5 subjects of 25 students and output average marks and the pass/fail message. For this program draw the flow graph and compute the cyclomatic complexity of the program. (8)
(b) Distinguish between statement coverage and branch coverage. (2)
(c) What is the robustness testing ? List three advantages of robustness testing. (2)
- Q4 (a) What is the difference between unit testing and integration testing? Explain the different strategies used for integration testing. (4)
(b) Consider the modular structure shown in fig. 1 (5)



Illustrate the steps involved while doing integration testing using the strategies explained in part(a).

- (c) Write a short note on mutation testing. (3)
- Q5 (a) What do you mean by system testing? Explain in detail. (5)
(b) Explain the cause-effect graph technique using suitable example. (4)
(c) Write a short note on software testing process. (3)
- Q6 (a) What are the different object oriented testing technique? Briefly explain them. (8)
(b) What do you mean by slice bared testing? Describe briefly. (4)
- Q7 Write short notes on the **any three** of the following: - (4+4+4)
(a) Software testing models.
(b) Software testing tools (dynamic).
(c) Performance testing.
(d) Prioritization of test cases.
