

# END TERM EXAMINATION

FIFTH SEMESTER [MCA] DECEMBER 2012

- Q1. Attempt **any ten** of the following: (2 X 10 = 20)
- (a) What are the objectives of software testing? Can this objective be achieved 100%?
  - (b) What are Test Matrices?
  - (c) Why we use Decision Tables?
  - (d) How do you measure Test effectiveness?
  - (e) What is Localization Testing?
  - (f) Explain case effect graphing.
  - (g) Explain recovery testing with examples.
  - (h) Explain Eng-to-End Testing.
  - (i) What is the difference between re-testing and regression testing?
  - (j) Why are static testing and dynamic testing described as complementary?
  - (k) Explain object-oriented testing.
  - (l) Explain the method of testing classes.

## UNIT - I

- Q2. (a) Explain the limitations of testing. Why is it so hard? (10)  
(b) Explain the V shaped software Life Cycle Model of testing. (10)
- Q3. (a) Will exhaustive testing guarantee that the program is 100% correct? (10)  
(b) Explain the role of software testing during software life cycle and why is it so difficult. (10)

## UNIT -II

- Q4. (a) Write a C program for finding the minimum and maximum out of three numbers and compute its cyclomatic complexity using all possible methods. (10)  
(b) Explain cause-effect graphing technique. Why is it different from other functional techniques? (10)
- Q5. (a) What is the difference between weak normal and strong normal equivalence class testing? (10)  
(b) Write a program to calculate average of 10 numbers. Using data flow testing design all du-paths in this program. (10)

## UNIT - III

- Q6. (a) What sort of test may be carried out during database testing? (10)  
(b) List and explain prioritization guidelines. (10)
- Q7. (a) Explain with the help of an algorithm, the test first approach used to test an RDBMS. (10)  
(b) What is the importance of stubs? Explain through an example. (10)

## UNIT - IV

- Q8. (a) Explain how object oriented testing is different from procedural testing? Explain with example. (10)  
(b) Explain function oriented metrics and compare with size oriented metrics with examples. (10)

- Q9. (a) Explain the testing process for object-oriented programs. (10)
- (b) Write a C program for calculation of roots of a quadratic equation. Find out its all software science metrics. (10)

\*\*\*\*\*