67212

MCA 5th Semester (New) for full subject candidates Examination– December, 2013

SOFTWARE TESTING AND QUALITY ASSURANCE

Paper MCA-502

Time : 3 hours   *Max. Marks : 80*

Before answering the questions, candidates should ensure that they have been supplied the correct and complete question paper. No complaint in this regard will be entertained after the examination.

Note : Attempt **five** questions in all, selecting at least **one** question from each Unit. All questions carry equal marks.

UNIT - I

1. (a) What are the parameters to be monitored for the system acceptance ? Explain how it could be done ?

   (b) Why is validation more difficult than verification ? Explain.

2. (a) Why is White box testing complementary to Black box testing ? Prove it with example.

(b) Discuss the following :

(i) Types of data flow testing

(ii) Symbolic testing.

UNIT - II

3. (a) What are different types of integration testing methods that can be used for testing of large software product ?

(b) What are design metrics ? Explain different high level and how level design metrics.

4. Discuss various metrics in different phases of SDLC with example.

UNIT - III

5. (a) Explain the complete process of OO testing with ATM cash withdrawl process.

(b) Discuss top management quality assurance activities.

6. (a) What are different components of costs for quality software ? Explain.

(b) Explain the testing methods applicable at class level.

UNIT - IV

7. (a) Explain capability maturity levels according to CMM.

(b) What is quality control ? Explain the method of measuring software reliability as a quality attribute.

8. (a) Explain various steps of six sigma methodology.

(b) What is hazard analysis ? Why is it useful ?