

67242

MCA 5th Semester current scheme with new notes
maximum marks scheme 80 Examination,
December – 2015

SOFTWARE TESTING AND QUALITY ASSURANCE
Paper–MCA–502

Time allowed : 3 hours]

[Maximum marks : 80

Note : Attempt five questions in all. Question No. 1 is compulsory. Attempt four more questions, selecting one question from each unit. All questions carry equal marks.

1. (a) Describe the features of test cases.
(b) Define mutation testing
(c) What is meant by integration testing ?
(d) Define Quality Assurance.
(e) List out the objectives of FTR.
(f) Define software reliability.
(g) What are the key challenges of software testing ?
(h) What are the weaknesses of ISO 9000 ?

Unit-I

2. Compare the following functional testing techniques and give example of each :
(a) Boundary Value Analysis
(b) Cause Effect Graph
3. Define the following terms used in structural testing and give an example of illustration :
(a) Cyclomatic Complexity

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- (b) Deriving Test Cases
- (c) Graph Matrices

Unit-II

4. (a) Differentiate between alpha testing and beta testing.
- (b) What is the differences between load testing, performance testing and stress testing ?

5. What is software quality ? What are different factors used to measure software quality ?

Unit-III

6. What are various issues and different strategies used for Object Oriented Testing ?
7. Explain the concept of code walk throughs and code inspections. Also give their limitations.

Unit-IV

8. (a) What are the effective methods to ensure the success of SQA ?
- (b) Differentiate between software safety and software reliability.
9. (a) Compare the weaknesses and strengths of ISO 9000, SPICE and CMM.
- (b) Why are software reliability growth models required ?

