

Roll No. ....

**23073**

**M. Tech. 2nd Semester (Computer Engg.)  
Examination – December, 2013**

**SOFTWARE VERIFICATION VALIDATION AND  
TESTING**

Paper : MTCE - 608 - A

**Time : Three Hours]**

**[M.M. : 100**

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

**Note :** Attempt any *five* questions.

1. (a) Discuss different types of model for testing. How spiral model is better than waterfall model during testing of software modules ? 10
- (b) How quality of software testing is directly proportional to effective testing ? Justify this with example. 10
2. (a) How software testing effect quality of software testing ? Justify it with example. 10
- (b) Differentiate between verification of HL design and verification of LL design. 10

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3. (a) What are different types of test strategy during development of software modules. 10
- (b) Write short note on – Defect Life cycle and Bug life cycle on software testing. 10
4. (a) Differentiate between state table based testing and graph based testing. 10
- (b) What do you mean by error guessing based testing ? Why error guessing based testing is significant in software testing ?
5. (a) What do you mean by Mutation testing ? Also discuss application of it during software testing. 10
- (b) Differentiate between loop testing and data flow testing. 10
6. (a) Why inspection is required during software testing ? Also discuss objective of it. 10
- (b) Write short note on :
- (i) Technical review
  - (ii) Inspection
  - (iii) Structured walk through and walk through process.

7. (a) What do you mean by stub and drivers ? Why stub and drives are used for software testing ? Discuss with example.

(b) Write short note on :

(i) Security Testing

(ii) Performance Testing

(iii) Usability Testing

8. (a) Discuss different types of state and dynamic analysis tools. ? How these are useful for testing and debugging ? 10

(b) Write short note on :

(i) Reducing no. of test cases

(ii) Regression testing and test case management.