M.Sc. (Computer Science) - I (with Credits)-Regular-Semester 2012 Sem III

MSc23121 - Software Testing Tools and Methodology Paper-I

P. Pages : 2 **GUG/S/18/3446**

Time : Three Hours * 0 6 2 9 * Max. Marks : 80

Notes : 1. All questions carry equal marks.
2. Draw the neat & clean diagrams wherever necessary.

1. Either

a) State general principles of testing. Explain test metrics in details. **8**

b) Explain spiral model in detail. **8**

OR

c) Explain various test levels in detail. **8**

d) Explain **8**
i) Testing & Debugging.
ii) Requirement-Behaviour and Correctness.

2. Either

a) What is transaction flow? Explain transaction flow testing Techniques. **8**

b) Write a note on – **8**
i) Path Predicates.
ii) Achievable paths.

OR

c) What is data flow testing? Explain various applications of dataflow testing in detail. **8**

d) Explain – **8**
i) Domain & Paths.
ii) Nice & Ugly domain.

3. Either

a) Explain structured Group Examinations in detail. **8**

b) Write a note on- **8**
i) Static Analysis.
ii) Metrics.

OR

c) Explain Black Box testing & advance black box techniques. **8**

d) Explain – **8**
i) Gray Box testing.
ii) Path coverage.

4. Either

a) Define static testing & Dynamic testing state the difference between static testing & dynamic testing. **8**

b) Explain – **8**
   i) Non-functional testing.
   ii) Requirement Tracker.

OR

c) Define Test tool. Explain various types of test tools in detail. **8**

d) Write a note on **8**
   i) OO testing.
   ii) Test specification.

5. a) Explain software quality. **4**

b) Explain domain & interface testing. **4**

c) Explain Boundary value Analysis. **4**

d) Explain Cost effectiveness of tool. **4**

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