

## Code No: C5806, C0506 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD M.TECH I - SEMESTER EXAMINATIONS, APRIL/MAY-2012 SOFTWARE QUALITY ASSURANCE AND TESTING (COMMON TO COMPUTER SCIENCE AND ENGINEERING, COMPUTER SCIENCE)

**Time: 3hours** 

Max. Marks: 60

## Answer any five questions All questions carry equal marks

- 1.a) What are components of SQA? Explain in detail.
  - b) Explain about PCMM and Malcom Balridge.
  - 2.a) What are metrics for Software Maintenance? Explain.
  - b) Explain in detail about software quality indicators.
  - 3.a) What is the structured approach to testing? Explain in detail.
  - b) Explain verification, validation, functional testing and structural testing.
  - 4.a) Explain Random Testing, Risk-based Testing and Regression Testing.
  - b) Discuss in detail about Silk test with suitable examples.
  - 5.a) What are Testing off the Shelf Components? Explain.
  - b) How to test software installation? Explain with examples.
  - 6.a) What is quality? Explain CMM.
  - b) Explain in detail about Cause-Effect graphing and CRUD.
  - 7.a) Discuss about Testing Client/Server Web applications.
  - b) How to analyze software metrics results? Explain in detail.
  - 8. Explain the following:
    - a) Pareto Analysis
    - b) Acceptance Test
    - c) Product Quality metrics.

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