

Roll No

MSE - 202**M.E./M.Tech., II Semester**

Examination, July 2015

Software Quality Assurance**Time : Three Hours****Maximum Marks : 70**

Note : Attempt any five questions. All questions carry equal marks.

1. a) Discuss about various components of software quality assurance. 7
b) Compare ISO 9000 model and CMM model in detail. 7
2. a) What is quality goal methodology? Give an example for quality planning. 7
b) Discuss about software quality metrics analysis. 7
3. a) Compare functional Vs structural testing. 7.
b) What are the advantages and disadvantages of early test automation that is for the first release of a product? 7
4. a) Briefly explain McCall's categorization of quality factors into three quality criteria. 7
b) What different coverages can be offered during validation? 7
5. a) What do you mean by software reliability? Identify the reliability metrics which can be used to quality the reliability of software product. 7

- b) What are technical issues inducing the project management risks? 7
6. a) Explain the concept of software Quality Assurance and discuss its various activities. 7
b) Explain the various techniques of defect prevention. 7
7. a) Explain why statistical analysis method is required for software quality metrics result. 7
b) Explain two testing method for software quality Assurance program. 7
8. Write short notes on 14
a) Tree based reliability model
b) Software reliability growth model
c) Fault Tolerance
d) Six-sigma
