

SW9121 SOFTWARE QUALITY ASSURANCE

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UNIT I	9
Introduction to software quality - challenges – objectives – quality factors – components of SQA – contract review – development and quality plans – SQA components in project life cycle – SQA defect removal policies – Reviews	
UNIT II	9
Basics of software testing – test generation from requirements – finite state models – combinatorial designs - test selection, minimization and prioritization for regression testing – test adequacy, assessment and enhancement	
UNIT III	9
Testing strategies – white box and black box approach – integration testing – system and acceptance testing – performance testing – regression testing - internationalization testing – ad-hoc testing – website testing – usability testing – accessibility testing Test plan – management – execution and reporting – software test automation – automated testing tools	
UNIT IV	9
Hierarchical models of software quality – software quality metrics –function points - Software product quality – software maintenance quality – effect of case tools – software quality infrastructure – procedures – certifications – configuration management – documentation control.	
UNIT V	9
Project progress control – costs – quality management standards – project process standards – management and its role in SQA – SQA unit	

TOTAL = 45

REFERENCES

1. Daniel Galin, Software quality assurance – from theory to implementation , Pearson education, 2009.
2. Aditya Mathur, Foundations of software testing, Pearson Education, 2008
3. Srinivasan Desikan and Gopaldaswamy Ramesh, Software testing – principles and practices , Pearson education, 2006
4. Ron Patton, Software testing , second edition, Pearson education, 2007
5. Alan C Gillies, “Software Quality Theory and Management”, Cengage Learning, Second edition, 2003