ELECTIVE COURSE 3 – (ii) SOFTWARE TESTING

Unit I: Software Quality

Quality Concepts - Quality Movement – Software Quality Assurance – Software Reviews – Formal Technical Reviews – Formal Approaches to SQA – Statistical Software Quality Assurance - Software Reliability – The ISO 9000 Quality Standards – The SQA Plan

Unit II: Testing Fundamentals

Testing Fundamentals – Types of Testing – White box testing – Black box testing -
Integration testing – System and acceptance testing – Performance testing – Regression testing

Unit III: Specialized Testing

Testing of Object Oriented Systems – Usability and Accessibility testing – Testing Web applications

Unit IV:

Testing Web applications - Testing the Documentation – Test Planning, Management, Execution and Reporting

Unit V:

Software Test Automation - Test Metrics and Measurements

Text Books:

1. Software Engineering Concepts and Practices - Roger S Pressman, TMG, Sixth Edition (For Unit I and Testing Web Apps)
2. Software Testing (Units II, III, IV, V) – Srinivasan Desikan, Gopalaswamy Ramesh - Pearson Education 2006

Reference Books:

1. Introducing Software Testing – Louis Tamres, Addison Wesley Publications, First Edition.
2. Software Testing, Ron Patton, SAMS Techmedia, Indian Edition 2001
3. Software Quality – Producing Practical, Consistent Software – Mordechai Ben – Menachem, Gary s. Marliss, Thomson Learning, 2003.