AMSW22 SOFTWARE QUALITY MANAGEMENT

UNIT-1 INTRODUCTION

1.1 Software Quality Challenge- Software Quality Factors- Components of the Software Quality Assurance System.

1.2 Pre-Project Software Quality Components Contract Review- Development and Quality Plans

UNIT-2 SQA COMPONENTS IN THE PROJECT LIFE CYCLE

2.1 Integrating Quality Activities in the Project Life Cycle- Reviews- Software Testing- Strategies- Software Testing

2.2 Implementation- Assuring the Quality of Software Maintenance

2.3 Assuring The Quality of External Participants' Parts - Case Tools and their Affect on Software Quality.

UNIT-3 SOFTWARE QUALITY INFRASTRUCTURE COMPONENTS

3.1 Procedures and Work Instructions- Supporting Quality Device- Staff Training Instructing and Certification

3.2 Preventive and Corrective Actions- Configuration Management- Documentation and Quality Records Controls.

UNIT-4 SOFTWARE QUALITY MANAGEMENT COMPONENTS

5.1 Project Progress Control- components of project progress control- Progress control of internal projects and external participants- Implementation of project progress control.

5.2 Software Quality Metrics- Objectives of quality measurement Process metrics- Product metrics.

5.3 Software Quality Costs- Objectives of cost of software quality metrics- classic model of cost of software quality.

UNIT-5 STANDARDS- CERTIFICATION AND ASSESSMENT

5.1 SQA Standards - ISO 9001 Certification - Software Process Assessment.

5.2 Organizing for Quality Assurance -Management and its Role in Quality Assurance

5.3 The Software Quality Assurance Unit - SQA Trustees and Committees

References Books:

1. Stephen H.Kan - "Metrics and models in software quality Engineering" Addison – Wesley, 1955.
2. Roger S. Pressman - "Software Engineering-A Practitioner's Approach" McGraw Hill pub, 2001.
3. Humphrey Watts - "Managing the Software process", Addison Wesley, 1986.