

**JYOTI NIVAS COLLEGE AUTONOMOUS**

**Programme: B.Com LSM**

**Semester: V**

**QUALITY MANAGEMENT**

**No.of Credits:4**

**No. of Hours: 60**

**Course Objectives:**

- Understand the importance of quality in organisations.
- Comprehend the different quality management systems and tools.
- Understand the importance of quality control in supply chains.
- Evaluate the vendor quality and supplier certifications.
- Have an overall understanding of the quality movement.

**Learning Outcomes:**

- Understand the evolution of quality management, and modern approaches to quality improvement.
- Understand Quality Management Systems, quality tools, concept and cost of quality in organizations.
- Understand quality control and Six Sigma methods to improve quality in supply chain management.
- Analyze vendor quality management and assess supplier performance for continuous improvement.
- Understand quality movements, benchmarking practices, quality standards, and ISO 9001:2015 requirements.

**Unit- 1: Evolution of Quality Management**

**12 Hours**

Concept of Quality, Quality movement, Philosophies of the gurus - Edward Deming, Joseph Juran, Genichi Taguchi, Masaaki Imai, Philip Crosby (concept only), Difference between product and service quality.

Management approaches to quality improvement - Total Quality Management (TQM- general model), Continuous improvement, Zero defects, Just-In-Time (JIT), Lean management, Benchmarking, Quality Management 4.4

**Unit-2: Quality Management Systems, Tools and Cost**

**12 Hours**

Management: Meaning, Importance, Elements, principles and benefits of Quality Management,

QMS: Quality management system- Meaning and benefits of QMS in organisations,

Quality Management tools: Pareto Charts, Cause-and-effect diagrams, Process flow charts, Run diagrams, frequency histograms, scatter diagrams, control charts (Mean & Range)-concept only.

Cost of Quality: Meaning and types- Preventive, Appraisal and Internal and External failure costs; COPQ.

**Unit- 3: Quality Control in Supply Chain Management**

**12 Hours**

Quality Control: Meaning of Quality control, Aspects of Quality Control, Six Sigma – Principles, Benefits and Steps of Six Sigma; Methods (DMAIC, DMADV), Applications of six

sigma for quality improvement in organizations; Management Action for Quality Assurance, Activities under Quality Assurance. Quality control of purchased materials and products in an supply chain.

**Unit- 4: Vendor Quality Management** **12**

**Hours** Meaning of supplier quality, Role of Purchasing in managing supplier quality - Vendor quality analysis process, supplier performance measurement, supplier certifications, general problems of vendor quality, Supplier/Vendor Quality Survey, Model for evaluation of Supplier Quality. Supplier Quality improvement: A case study on ALCOA.

**Unit- 5: Quality Movement and Bench Marking** **12**

**Hours** Organisations supporting the quality movement, Quality Standards comparison, and awards (Malcolm Baldrige National Quality Award)- case studies  
Benchmarking: Meaning, Concepts, Benefits, elements, Reasons for benchmarking, process of benchmarking, Deming's 14 Points, FMEA, Quality Function Deployment (QFD) – House of Quality, QFD Process, Benefits. ISO-9001:2015 for QMS. Autonomous Quality Systems.

**Skill Development Activities:**

- Briefly highlight the service quality dimensions as compared to product quality.
- Prepare a cause-and-effect diagram for a defective product of a company.
- List out the criteria for evaluating vendor quality.
- Briefly Highlight the uses of Six sigma.

**\*Case study on ALCOA to be covered under skill**

**development. Books for References:**

- Suganthi. L and Anand Samuel, "Total Quality Management", Prentice Hall (India) Pvt. Ltd., 2006. ISO9001-2015 standards.
- Essentials of Supply Chain Management – Dr. R.P. Mohanty &Dr. S.G. Deshmukh, Jaico Publishing House.
- Janakiraman. B and Gopal .R.K., "Total Quality Management - Text and Cases", Prentice Hall (India) Pvt. Ltd., 2006.
- Rahul V Altekhar, “Supply Chain Management- Concepts and Cases”, PHI. Pvt. Ltd.
- David N, Burt, Donald W. Dobler, Stephen L. Starling, “World Class Supply Management- A Key to Supply Chain Management”, Tata McGraw Hill Publishing Company Ltd., New Delhi.
- Robert Monczka, Robert Trent, Robert Handfield, “Purchasing and Supply Chain Management, 2nd Edition, Thomson South Western.
- David Simchi-Levi, Philip Kaminsky, Edith Simchi Levi, “Designing & Managing the Supply Chain”, Tata McGraw Hill
- Production Management – L.C. Jhamb, EPH.
- James R. Evans and William M. Lindsay, "The Management and Control of Quality", 8th Edition, First Indian Edition, Cengage Learning, 2012.

**Note: Latest edition of text books may be used.**