

Total Quality Strategy

B.E. Sem. VIII [PROD]

EVALUATION SYSTEM

	Time	Marks
Theory Exam	3 Hrs.	100
Practical Exam	–	–
Oral Exam	–	25
Term Work	–	25

SYLLABUS

1. Introduction

Basic concepts and definitions, fitness for use & conformance to specification, historical review of quality & its awareness, quality task/ functions, productivity & quality relationship. Cost of quality as prevention, appraisal and failure costs, Hidden cost of quality.

2. Strategic planning for Quality

Need for quality policies & objectives, examples of quality policies & objectives with statements, leadership concepts, role of senior management, quality council, strategic planning.
Quality improvement: Juran trilogy, management controllable defects, operator controllable defects, sporadic and chronic problems of quality. Bench Marking: Introduction definition and signification, collection of data for bench marking and its use.

3. Customer Relation and Satisfaction

Origin of consumerism. Product knowledge, who is customer? Customer perception of quality; concept of value engineering & analysis, complaints and redressal, product safety and reliability (conceptual treatment only), service quality.

4. Supplier Relations

By development; assessment rating; quality of bought out components, managing supplier as partner, appraisal & certification, basic concept of supply chain management.

5. Quality Systems

Historical review with focus on current status of ISO 9000&14000, QS 9000, TS16949 & their elements, policy, manual, procedures and documentation, internal audit, surveillance audit, maintaining of certification.

6. Quality / Productivity Improvement Tools

QFD, Customer's/Supplier's voice, Productivity improvement techniques as 5S, POKAYOKE, SMED, Kaizen, concurrent engineering, Continuous process improvement through: Control Charts X bar & R, P, nP, C. Process capability, OC curve, acceptance sampling AQL, LTPD, AOQL, producers and consumers risk (Single & Double sampling plan only), PDCA cycle, Problem solving tools (old & new), JIT, 6sigma, approach to world class manufacturing (Toyota production system, Lean manufacturing, Zero defect supply concept)

References Books :

1. Quality planning and analysis (*J M Juran, FM Gryana*) TMH
2. Total Quality Management (*D.H.BesterField et al.*) prentice hall.
3. Quality is free (*Philip B Crossbly, Mentor*) new American library 1979
4. What is Total Quality Control? The japnese way (*Ishikawa k*) PH1985
5. Total Quality Control (*Armand V*) Feigenbaum
6. TQM in new product manufacturing (*HG Menon*) TMH2992
7. Managing for total quality (*N.Logothesis*) prentice hall
8. Total quality management (*Dr.Uday K.Haldar*) Dhanpatrai & co.
9. Total quality management (*Dr.K.C.Aurora*) S.K.Kataria & sons.

