

TOTAL QUALITY MANAGEMENT

SEM VII ME

1. What is meant by quality?

Quality is an asset which may be offered to the potential customer of a product or service.

2. List a few characteristics of quality.

- Customer dependent
- Market attributed
- Fitness for use
- Degree of preference
- Dynamic and different

3. Explain the role of quality dimensions.

- Serves as an analytic tool
- Serves as a tool for evaluation or self assessment

4. Differentiate between service quality and product quality dimensions.

5. What is meant by customer perception of quality?

Perceived quality can be defined as the customer's perception of the overall quality.

- Actual or objective quality
- Product –based quality
- Manufacturing quality

6. Define customer satisfaction.

Customer satisfaction acts as an important performance indicator of a business and is also one of the four perspectives that together constitute a balanced scorecard.

Customer satisfaction = Delivery - expectations.

7. Enumerate three methods to build a strong customer satisfaction.

- Incorporating good business practices
- Creating and delivering value
- Customer relationship management.

8. Give any three benefits of customer satisfaction?

- Customer-oriented management
- Comparison over time
- Loyalty
- Leads and referrals

9. Explain customer retention.

Customer retention can be basically defined as the capability of the organization to make a customer's purchase the organizational product and services for a defined period of time.

10. What do you understand by cost of quality?

According to legendary quality guru Armand Feigenbaum, quality costs are the foundation for quality-systems economics.

Long question

1. Discuss the various dimensions of product quality in detail.
2. What are the types of quality? Discuss the vision, mission and policy statements in detail.
3. What are the various strategies for customer retention? Elucidate.
4. Illustrate and explain the steps to calculate cost of quality.
5. Explain the strategies to reduce cost of quality.

1. What is meant by PDSA model?

The PDSA cycle, is a model for continuous improvement of quality. It consists of logical sequence of four repetitive steps for continuous improvement and learning; plan, do, check and act.

2. How has Juran defined quality?

Juran defines quality as fitness for use, which demands quality of design, quality conformance, availability and adequate field service.

3. What are Juran's ten steps for quality improvements?

- Create awareness
- Continuous improvement
- Report progress
- Show recognition
- Communicate results
- Keep a record of successes

4. What is meant by Crosby's quality vaccine?

crosby's vaccination serum are based on integrity and dedication to customer satisfaction, and on a company-wide system of policies and operations designed to achieve and communicate quality improvements.

5. What are the crucial elements of total quality according to feigenbaun?

- Quality is the customers perception of what quality is, not what a company thinks it is.
- Quality and cost are the same, not different

6. Explain ishikawa's message-techniques.

Kaoru ishikawa has paid particular attention to making technical statistical techniques used in quality attainment accessible to those in industry.

7. What is mean by orthogonal arrays?

Orthogonal arrays assist and experimenter to study a large number of parameters in a limited number of experimental trials and thereby slash the experimental budget and resource.

8. Write a short note on tolerance design.

Tolerance design deals with the problem of how, and when, to specify tightened tolerance for a product or a process so that quality and performance/ productivity or enhanced.

9. What is meant by Japanese 5s principles?

- First s –seiri-organize-sort
- Second s- seiton-orderliness-straighten
- Third s-seisou-cleanliness-scrub
- Fourth s-seiketsu-standardize-stabilize
- Fifth s-shitsuki-discipline-sustain

10.Explain 8D methodology.

The biggest abuse in the implementation of the 8D methodology involves using it solely as one-page problem reporting effort. This misuse is often further exaggerated by requiring the report to be written within 24 hours.

Long question

1. What are deming's 14 points? Evaluate deming's approach on the basis of its strengths and weaknesses.
2. Write a detailed note on kaizen.
3. What is meant by industrial cycle? Discuss hidden plant in detail.

4. Discuss the concept of quality loss function given by taguchi in detail.
5. What are the components of 5s principle? explain the process of implementing 5s principles in detail.

1. What is meant by statistical process control?

- S(Statistical): by the help of statistical data and statistical analyzing methods
- P(Process): understanding the present process capability and quality specifications
- C(control): control the quality to meet specifications with minimum variations

2. Highlight the purpose of quality control chart.

- It helps in determining the quality understand of the products while in process.
- Control charts are simple to construct and easy to interpret.
- It ensures less inspection cost and time in the process control.

3. What is process capability?

The term process capability refers to the inherent variability of process output relative to the variation allowed by the design.

4. Highlight the features of 6 sigma.

- Structured approach
- Customer focus
- Financially driven
- Team based

5. Explain reliability.

Reliability is the accuracy and stability of measures as well as actual conditions under which observations are made.

6. What is meant by total productive maintenance? state its objectives.

The ultimate objective of Tpm is to develop an operational system, which is maintenance free. In other words, maintenance prevention is achieved through a combination of preventive maintenance and predictive maintenance action.

7. State the objectives equipment effectiveness.

- Increase productivity,

- Decrease cost'
 - Increase awareness of the need of machine productivity, and
 - Increase equipment life.
8. List the activities to be undertaken in terotechnology.
- Decision regarding design, production, and cost targets
 - Decision as regard requirement of physical resources, plant, and equipment.
 - Deciding on the specifications of equipment to be procured from outside or fabricated in- house
9. What does the term business process Improvement refer to?
- Business process improvement (BPI) is a set of disciplined approaches and tools that a managers use to enhance there company's performance. As the name suggests, bpi focuses on changing business process to improve their effectiveness.
10. What do you understand by business process re-engineering?
- Re-engineering is the fundamental rethinking and radical re-design of business to achieve dramatic and more improvement critical, contemporary measures of performance.

LONG QUESTION

1. What is an SPC system? Discuss the significance of statistical process control?
 2. What are control chart for attributes? Elucidate.
 3. Discuss the steps involved in the application of six sigma.
 4. Writ a detailed note on reliability in series and parallel.
 5. Write a detailed note on terotechnology.
1. Write a brief note on benefits of QFD.

QFD has many demonstrable benefits especially for firms interested in achieving competitiveness, increasing market share, improving productivity and improving the bottom line.
 2. What is meant by information organization?

Once customer needs are gathered, they then have to be organized. The mass of interview notes, requirements documents, markets research, and customer data needs to be distilled into a handful statements that express key customer needs.
 3. Highlight the requirement of reliability in FMEA.

- Not all problem are important
- Knowing the function
- Being prevention-oriented

4. Explain the failure rate.

Failure rate is the frequency with which an engineered system or component fails, expressed for example in failures per hours.

5. What is meant by design FMEA.

The focus of design FMEA is on how to prevent failure from occurring in the first place! It requires substantial technical input from design engineers.

6. Write a few lines on block diagram and its benefits.

A block diagram of the product/process should be developed. Established a coding to identify system elements. The block diagram should always be included with the FMEA form.

7. What are matrix data analysis diagrams.

The purpose is to arrive at the quantified product characteristics of new product, based on the data for the characteristics of several related product already in existence.

8. Throw light on the significance of benchmarking.

- Satisfy the customer needs
- Motivate employees
- Improve their competitive advantage
- Cost-efficient and time- efficient

9. What are the benefits of poke-yoke?

- Eliminate product defects
- Improve quality
- Improve productivity

LONG QUESTION

1. Write a detail note on the process of QFD.
2. Elaborate on the process of building a house of quality.
3. Discuss the various stages in FMEA.
4. What are the seven new quality tools? Elucidate.
5. What is benchmarking? Discuss its process in detail.

1. Write a short note on ISO.

ISO (International Organization for standardization) is a network of the national standards institutes of 163 countries one member per country, with a central secretariat in Geneva, Switzerland, that coordinate the system.

2. What are the needs for ISO 9000?

ISO 9000 is a set of five world-wide standards that established requirement for the management of quality. Unlike product standards, these standards are for quality management system.

3. Suggest a few guideline for performance improvement in QMS.

- Managing system and processes
- General documentation requirements
- Quality principles

4. Explain importance of quality audit.

Quality audit is an appraisal of the whole quality control. It is not so much concerned with the quality of the product, as the adequacy and effectiveness of the quality control system.

5. Write a note on quality council.

Quality council is mainly set-up to provide overall directions and guidance. Quality council consists of the Chief Executive Officer, senior managers of design, marketing, finance, production and quality departments, a labour union representative, and a coordinator.

6. What is meant by employee involvement?

Employee involvement involves the creation of an environment wherein people are involved in the decision-making processes that has an impact on the decisions and the actions that have a bearing on jobs.

LONG QUESTION

1. Explain the different purposes of quality audits? Discusses various types of quality audits.
2. What is TQM culture? Elucidate on the elements for developing such a culture.
3. Describe the characteristics of quality leaders in detail.

4. What is meant by motivation? Discuss various type of motivating people.
5. What are the benefits of TQM? Discuss the method to create awareness about TQM.