



# SNS COLLEGE OF TECHNOLOGY

(An Autonomous Institution)

Approved by AICTE, New Delhi, Affiliated to Anna University, Chennai

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COIMBATORE, 641 035, TAMIL NADU



## DEPARTMENT OF AEROSPACE ENGINEERING

### 19MEE304 Total Quality Management

#### IAE 1 Question bank

##### 2-mark questions

1. Define quality.
2. What is the need for quality in an organization?
3. List any two dimensions of product quality.
4. What are the basic concepts of Total Quality Management (TQM)?
5. Mention any two key contributions of W. Edwards Deming to quality management.
6. What are the major barriers to implementing TQM?
7. Give an example of a quality statement from an industry.
8. What is meant by customer orientation?
9. Define customer satisfaction in quality management.
10. What are the four types of quality costs?
11. Define strategic quality planning.
12. What is the role of leadership in TQM?
13. Mention two employee engagement initiatives used in industries.
14. What is meant by employee empowerment?
15. Define motivation in the context of TQM.
16. What is teamwork, and why is it important in quality management?
17. What are quality circles?
18. Mention any two benefits of recognition and reward in an organization.
19. What is the purpose of a performance appraisal?
20. List two methods of performance appraisal.

##### 16-mark questions

21. Explain the need for quality in an organization. Discuss the evolution of quality with different definitions provided by various quality experts.
22. Describe the dimensions of product and service quality. How do these dimensions impact customer satisfaction and business success?
23. Explain the basic concepts of Total Quality Management (TQM) and illustrate the TQM framework with a suitable diagram.
24. Discuss the contributions of Deming, Juran, and Crosby to quality management. Compare their approaches and explain their significance in modern industries.
25. What are the major barriers to implementing TQM in an organization? Suggest possible solutions to overcome these barriers.
26. Provide industrial examples of quality statements. How do quality statements influence an organization's quality culture and customer perception?
27. Explain the concepts of customer focus and customer orientation. How do these factors contribute to customer satisfaction, customer complaints handling, and customer retention?

28. Discuss the different types of quality costs in detail. How can organizations minimize these costs to improve overall performance?
29. 16-mark questions based on the given topics:
30. Explain the need for quality in an organization. Discuss the evolution of quality with different definitions provided by various quality experts.
31. Describe the dimensions of product and service quality. How do these dimensions impact customer satisfaction and business success?
32. Explain the basic concepts of Total Quality Management (TQM) and illustrate the TQM framework with a suitable diagram.
33. Discuss the contributions of Deming, Juran, and Crosby to quality management. Compare their approaches and explain their significance in modern industries.
34. What are the major barriers to implementing TQM in an organization? Suggest possible solutions to overcome these barriers.
35. Provide industrial examples of quality statements. How do quality statements influence an organization's quality culture and customer perception?
36. Explain the concepts of customer focus and customer orientation. How do these factors contribute to customer satisfaction, customer complaints handling, and customer retention?
37. Discuss the different types of quality costs in detail. How can organizations minimize these costs to improve overall performance?

### Case Study 1: Implementation of TQM in a Manufacturing Industry

A leading automobile manufacturer was facing challenges in maintaining product quality, leading to increased customer complaints and warranty claims. The company decided to implement **Total Quality Management (TQM)** principles, focusing on **strategic quality planning, employee involvement, and customer satisfaction**. Leadership played a crucial role in driving the change by introducing **quality circles, recognition and reward systems**, and continuous performance appraisals.

As a result, product defects reduced by **30%**, customer complaints decreased by **40%**, and employee engagement improved significantly. The company also adopted **Deming's and Juran's principles** for continuous improvement.

#### Questions:

1. Analyze the role of leadership and strategic quality planning in implementing TQM in this case.
2. How did employee involvement and motivation contribute to improving quality in the organization?
3. What were the key barriers to TQM implementation, and how could they have been addressed?
4. Discuss how **customer satisfaction, customer retention, and cost of quality** were impacted by this initiative.

### Case Study 2: Quality Improvement in a Service Industry

A five-star hotel chain noticed a decline in customer satisfaction scores due to inconsistent service quality. Guests frequently complained about **delayed room service, lack of cleanliness, and unfriendly staff behavior**. The hotel management conducted a **customer satisfaction survey** and implemented a structured **quality improvement framework**.

To address the issues, they introduced:

- **Employee training programs** on customer orientation
- **Performance appraisals** to reward quality service
- **Quality circles** to gather employee feedback
- A **cost of quality analysis** to identify inefficiencies

Within a year, customer complaints reduced by **50%**, and guest retention increased by **25%**.

#### Questions:

1. Identify the key quality dimensions that were affecting customer satisfaction in this case.
2. How did employee empowerment and teamwork contribute to service quality improvement?
3. Explain the role of **performance appraisal, recognition, and rewards** in maintaining high service standards.
4. Discuss how the **cost of quality** analysis helped in reducing inefficiencies and improving customer retention.

### Case Study 3: Improving Product Quality in a Mobile Phone Company

A smartphone manufacturing company was receiving frequent **customer complaints** about battery life and screen durability. Many customers were unhappy and switched to other brands. The company realized that poor **quality control and lack of employee involvement** were the main issues.

To solve this, the company:

- Improved **quality checks** during production
- Trained employees to focus on **product quality**
- Collected customer feedback and made necessary improvements
- Introduced a **reward system** for employees suggesting quality improvements

After these changes, **customer complaints reduced by 40%**, and customer satisfaction increased.

#### Questions:

1. What were the key quality issues faced by the company?
2. How did employee involvement help in improving product quality?
3. Why is customer feedback important in quality management?
4. What role does recognition and reward play in motivating employees to improve quality?

### Case Study 4: Enhancing Customer Service in a Restaurant

A popular restaurant was facing **negative reviews** due to slow service and rude staff behavior. Many customers stopped visiting, and sales dropped. The owner realized that employees were **not motivated**, and there was no proper **training or teamwork**.

To fix this, the restaurant:

- Conducted **customer service training** for staff
- Introduced **teamwork activities** to improve coordination
- Started a **performance appraisal** system to reward good service
- Encouraged employees to form **quality circles** and suggest improvements

After six months, customer satisfaction improved, and **sales increased by 30%**.

#### Questions:

1. What were the main service quality issues in the restaurant?
2. How did teamwork and employee training help improve customer service?
3. Why is a performance appraisal system important for service-based businesses?
4. How can customer retention be improved through better service quality?

### Case Study 5: TQM Implementation in Toyota

Toyota, one of the leading automobile manufacturers, faced **quality issues** in the early 2000s, leading to vehicle recalls. The company realized that it needed to improve **product quality and customer satisfaction**.

To solve this, Toyota implemented **Total Quality Management (TQM)** by:

- Following **Deming's principles** of continuous improvement
- Encouraging **employee involvement** through quality circles
- Conducting **strategic quality planning** to prevent defects
- Strengthening **customer feedback and complaint handling**

As a result, Toyota improved vehicle reliability, reduced defects, and regained customer trust, making it one of the most respected automobile brands globally.

#### Questions:

1. What were the key quality challenges faced by Toyota?
2. How did **employee involvement** and quality circles contribute to solving quality issues?
3. Explain how **customer focus and feedback** helped Toyota regain customer trust.
4. What role did **strategic quality planning** play in Toyota's success?

### Case Study 6: Customer Satisfaction and Quality Management in Starbucks

Starbucks, a global coffee chain, noticed **customer complaints** about inconsistent coffee taste, slow service, and unfriendly staff at some locations. This was affecting customer retention and brand reputation.

To improve quality, Starbucks:

- Implemented **employee training programs** on customer service
- Launched a **performance appraisal and reward system** for employees
- Conducted a **cost of quality analysis** to reduce waste and improve efficiency
- Focused on **customer orientation**, ensuring consistent service across stores

After implementing these changes, Starbucks saw a **20% increase in customer retention**, and customer complaints significantly reduced.

**Questions:**

1. What were the major quality issues faced by Starbucks?
2. How did **employee training and motivation** help improve service quality?
3. Why is a **cost of quality analysis** important for a service-based company?
4. How does focusing on **customer satisfaction and retention** benefit Starbucks?