

**INDIAN INSTITUTE OF MATERIALS MANAGEMENT**  
**Post Graduate Diploma in Materials Management**  
**Paper – 18.e-Common**  
**TOTAL QUALITY MANAGEMENT**

Date: 16.06.2009  
Time: 2.00pm To 5.00pm

Max Marks: 100  
Duration: 3 hours

**Instructions:**

1. The question paper is in three parts.
  2. Part A is compulsory. Each question carries one mark
  3. In part B answers 3 questions out of 5. Each question carries 16 marks.
  4. Part C is a case study with sub questions and it is compulsory.
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**PART A**

**Q.1. State true or false.**

**Marks: 08**

- a) Employee involvement is optimized by the use of team.
- b) Production reliability as measured by the number of breakdowns per month.
- c) Quality is not a critical factor in strategic performance.
- d) Cost and price are same the terms.
- e) The cause and effect diagram was introduced by Demming.
- f) Just in time manufacturing techniques requires just in time purchasing.
- g) The basic purpose of supply chain management is to control inventory.
- h) Quality consists of those product features that meet customer need.

**Q.2 Fill in the blanks.**

**Marks: 08**

- i. Modern quality management means adopting a total approach to .....
- ii. .... is an enhancement to the traditional way of doing business.
- iii. Employee involvement is optimized by the use of .....
- iv. The quality is nothing but ..... for use.
- v. .... helps people uncover hidden quality issues and generally facilitates creativity within the total quality management process.
- vi. Quality is not just the responsibility of one person in the .....
- vii. An assessment of quality based on the .... of the firm.
- viii. Effective communication and keeping ..... is very essential.

**Q.3 Expand the following:**

**Marks:08**

- |         |         |        |        |
|---------|---------|--------|--------|
| 1) DFM  | 2) FMEA | 3) ISO | 4) LCA |
| 5) TEQA | 6) TQP  | 7) SQC | 8) JIT |

**Q.4 Match A and B**

**Marks:08**

- | <b>A</b>                               | <b>B</b>                          |
|--|-----------------------------------|
| 1) W.Shewhart                          | quality imperatives               |
| 2) Philip Crosby                       | theory Z                          |
| 3) Demings                             | deadly diseases and sins          |
| 4) Juran                               | Bureau of Indian standards        |
| 5) Taguchi                             | statically control charts         |
| 6) W.G.Ouchi                           | Zero-defects                      |
| 7) ISO 14000                           | organization evaluation standards |
| 8) Rajiv Gandhi National Quality Award | six stage methodology             |

## PART B

- Q.5** Describe in brief various TQM model. Which one of these model do you think is more suited to Indian situation. **Marks: 16**
- Q.6** What is Jurans quality trilogy? How do you compare and contrast Juran's approach with W.Edwards Demings approach to total quality? **Marks: 16**
- Q.7** What are 7 basic QC tools? How these tools are used in solving Quality Control problem in organizations? **Marks: 16**
- Q.8** Explain the different types of sampling methods with example. **Marks: 16**
- Q.9 Write short notes.** **Marks: 4 x 4 =16**
- 1) Quality and reliability
  - 2) Just in time
  - 3) ISO 9001 requirements
  - 4) Quality control
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## PART C Case study

**Q.10** While companies concerned about quality try to minimize problems that cause customer dissatisfaction, all companies occasionally receive complaints from customers. Often the response to such a complaint can make the difference between keeping and losing a loyal customer. The coca cola Company's industry & customer Affair department is responsible for all consumer contacts with the company's headquarters in Atlanta. The mission of the department is "to protect and enhance Coca-Cola's trademarks and image by providing ac communications link between consumers and company management." The department's 60 employees handle over 500,00 contacts each year, both by mail and via the company's toll-free hotline (800 GET COKE), Most of the contacts are inquiries about the product.

If a customer does call with a complaint, Coca-Cola sends the customer a letter apologizing for the problem, as well as coupons the allow the customer to replace the unacceptable product. As Roger Nunley, director of industry & Consumer Affairs puts it. "We strive to exceed customer expectations every time. We want our customer to be excited and pleased with our response." In certain circumstances, the local Coca-Cola bottler may also follow up with the customer.

A service quality survey is mailed to the customer 2 weeks after the initial contact. The survey ask the customer to rate the quality of response, as well as the quality if the phone agent or letter writer. The servey also asks whether the customer will continue to purchase products of the Coca-cola company. According to the company's most recent data, 90 % of customers were satisfied with how their complaints was handled, but in the spirit of continuous improvement ,the company aspires to 100% satisfaction.

**Questions :**

**Marks: 4 x 5 = 20**

- Q.1** Explain the role of industry and customer affair department is important in the industry.
- Q.2** Describe the efficient medium to contact with customer for improvment in quality program.
- Q.3** Explain the term 'service quality survey.'
- Q.4** Explain the term, "Satisfaction of customer is nothing but quality."