

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA – SEMESTER III– • EXAMINATION – WINTER 2015

Subject Code: 2830008

Date: 02/12/2015

Subject Name: Quality Management

Time: 10.30 AM to 01.30 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q – 1 (A) Select the most appropriate answer for the following multiple choice questions:

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- (1) Quality Management is applicable to
 - a) Manufacturing organizations only
 - b) Service organizations only
 - c) Both Manufacturing and service organizations
 - d) None of the above
- (2) Cause and effect diagram was advocated by
 - a) Kaoru Ishikawa
 - b) Joseph Juran
 - c) Taguchi
 - d) Edward Deming
- (3) An organization that conducts audits through individual auditors is known as
 - a) Auditor
 - b) Registrar
 - c) Checker
 - d) None of the above
- (4) Edward Deming coined the concept of
 - a) Fishbone diagram
 - b) PDCA cycle
 - c) Quality Circle
 - d) All of above
- (5) OHSAS 18001 certificate is given to the organization for
 - a) Healthy and safety management
 - b) Quality management
 - c) Conservation of the environment
 - d) Time management
- (6) In Six-Sigma, project leaders capable of forming and facilitating terms from concept to completion are known as
 - a) Yellow Belt
 - b) Black Belt
 - c) Master Black belt
 - d) Green Belt

Q – 1 (B)	Briefly explain the following terms:	4
	1) ISO 14000	
	2) The Pareto Chart	
	3) Value Engineering	
	4) Benefits of TQM	
Q – 1 (C)	Briefly discuss “Cost of Quality”	4
Q – 2 (A)	Discuss various dimensions of service quality.	7
Q – 2 (B)	What do you understand by Creativity? Discuss stages of creative process for an idea.	7
	OR	
Q – 2 (B)	How Kaizen is different from Innovation?	7
Q – 3 (A)	What do you understand by “Gamba Kaizen?” Discuss five principles of Gamba.	7
Q – 3 (B)	“Quality Circle” is a way for improvement in processes. Discuss with Example.	7
	OR	
Q – 3 (A)	Explain DMADV approach for implementing Six-Sigma.	7
Q – 3 (B)	What is Benchmarking? Elaborate any two types of benchmarking.	7
Q – 4 (A)	How <i>Business Process Reengineering</i> is helpful as quality improvement tool?	7
Q – 4 (B)	What do you understand by <i>Quality Audit</i> ? What may be the objectives of it? Discuss.	7
	OR	
Q – 4 (A)	A Fan manufacturing firm wants ISO 9001:2008 certificate. As a management consultant, how can you help the firm?	7
Q – 4 (B)	Discuss fishbone diagram with example.	7
Q – 5	CASE: THE CASE OF QUALITY AT ABC COMPANY	14

ABC Company recently discovered that the costs due to shipment of defective items had risen to an alarming level. To correct the situation, they decided to implement a quality assurance program. Previously, all inspection was done by workers on their own work. Because of the lack of formal education in quality assurance for the present employees and managers, it was decided to form a team of recent college graduates for quality assurance programs. (QAP)

The team which was formed was given the responsibility of reducing the percentage of defective items being produced to half of the present level in one month.

Problems, however, began to crop up immediately. Conflicts arose between the inspectors of the QAP and the workers. Some of the older employees felt they were being insulted whenever a quality problem was traced to their work. This resentment often resulted in their work deteriorating further instead of improving. Other workers believed they were being insulted whenever a quality problem was traced to their work. This resentment often resulted in their work being wrongly accused of shoddy workmanship. Some even accused the inspectors of actually making defects in their work so that they could claim they had found a problem spot (defect) and hence, look good in the eyes of the QAP manager.

Monitoring reports after the first month showed that the quality level had actually worsened. Management felt that perhaps they had introduced the quality assurance program improperly.

Summarize the case and answer the following Questions:

- (a) What errors do you feel the ABC company made in the implementation of QAP?
- (b) What remedial actions would you take to improve the present situation?

OR

Q – 5

CASE: CHRYSLER'S TRANSMISSION PROBLEM

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Chrysler pioneered its immensely popular mini van in 1984, which quickly became the best selling product the company had ever built. Within five years, Chrysler held more than 50 percent of the market share for mini vans. In 1989 Chrysler offered a new automatic transmission as an option in some of its top models of mini vans and luxury automobiles. The new transmission immediately ran into trouble when many customers reported serious problems.

Claiming that it had made improvement to reduce the initial problem, Chrysler continued to use the transmission. Mean while the Centre for Auto Safety, a consumer group that monitors the auto industry charged that Chrysler had not tested the transmission before introducing it. The group's claim was supported by data on owner complaints and frequency of repairs. During the first years of ownership itself, about 20 percent of the owners were reporting problems with the new transmission

For the 1991 model, Chrysler extensively modified the design of the vehicle but continued to use the same problematic transmission as standard equipment, with most of the larger engines in high demand.

As a result, the Chrysler which was placed at the top in the magazine “Consumer Reports” for many years, dropped to the bottom of the list in 1991, citing the transmission in particular as well as other signs of deteriorating quality. A new Toyota model captured the top spot that year.

Summarize the case and answer the following Questions:

- 1. To what factors might you attribute Chrysler's failure to maintain market leadership?
- 2. What might Chrysler have done differently? How might a stronger focus on quality have helped?