

**GUJARAT TECHNOLOGICAL UNIVERSITY****MBA - SEMESTER– III EXAMINATION – WINTER 2019****Subject Code: 3539275****Date: 07-12-2019****Subject Name: Total Quality Management and World****Class Manufacturing Excellence****Time: 10:30 AM TO 1.30 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** Answer the following questions. **14**

- (a) Differentiate between Quality Control Vs. Quality Assurance
- (b) Differentiate between Designed Quality Vs. Actual Quality
- (c) Define Appraisal cost in quality
- (d) Global competitiveness Vs. Local Competitiveness
- (e) Statistical Quality Control
- (f) Cross Functional Teams
- (g) Rapid Prototyping

**Q.2 (a)** Write a note on Cost on quality over Cost of quality **07****(b)** Write a note on Deming's 14 point quality management structure **07****OR****(b)** "Quality control department is a foundation of marketing department and policemen for production department" – Critically evaluate the statement **07****Q.3 (a)** What is the difference among Kaizen , Pokka Yoke , and Pareto Analysis ? Explain with suitable examples. **07****(b)** Differentiate between Juran's Philosophy of quality management Vs. Crosby's thinking on quality management **07****OR****Q.3 (a)** Define and explain six sigma concepts in quality management with appropriate example. **07****(b)** Write a note on Balance Score Card approach and role of leadership in achieving World Class Manufacturing. **07****Q.4 (a)** Write a note on "What do we mean by World Class Manufacturing"? , Explain briefly Hall's framework on World Class Manufacturing **07****(b)** M/s HDPC Ltd. is being suggested to invest Rs. 3.0 Crore in to making manufacturing plant with Information Technology (IT) enhanced to achieve their dream of being "World Class Manufacturing company " in their respective product category? How IT will help the organization in achieving their Goal of being one among the world class manufacturing company ? **07****OR****Q.4 (a)** ABL Limited is a medium sized manufacturing firm with a turn over of Rs. 110 Crore. Their third party consultant has reported that their cost of manufacturing is high in comparison with the competition which is nearly same sized organization in turnover. How lean manufacturing concepts will help them in reduction of the cost? **07**

**Q.5 CASE STUDY: M/s Blue Moon Ltd. (BML)**

Ms. Sonya Singh has taken over as new plant manufacturing head of M/s Blue Moon Ltd (BML) which is in to the business of manufacturing of machines and machine parts. Earlier to this role Ms. Singh had been working as Quality Control Head in leading MNC company engaged in to the same business.

While recruiting Ms. Singh company had a clear vision to improve the quality of the products, manufactured under their name and they wanted to elevated their manufacturing to "World Class Level". They did start getting business through overseas and their dream was to be the 'best' while serving global client.

Today Ms. Singh has been heading steering committee meeting which is being represented by Mr. Kamth who is Head Production , Mr. Sachin , QC head and Mr. Raj who is responsible for plant supply chain division. Asst.V.P finance Mr. Roy and company IT head Mr. Ravi were also the part of the meeting.

First , Ms. Singh explained how much she was concerned about the low productivity of the plant and how she was disappointed with below average client rating on their product quality. Finance head Mr. Roy explained his concerns about very high production cost and bad debts company had due to quality issues with certain clients.

Ms. Singh emphasized a need of the implementation of professional Quality control tools and Lean Manufacturing Tools to over come these challenges. She opinioned that these are only the less investment and highly recommended long term sustainable solutions. However , Mr.Kamath and Mr. Sachin strongly opposed that changes , She proposed - as they believe that people working in the plant have spent average of 20 years life and it will be impossible to change them now. Changes in the production and operations practice may affect adverse.

However Ms. Singh kept on demanding a frame work from the concerned Production and Quality heads to implement Operation Research Management concepts. Arguments kept on taking fire on whether it will be correct decision or not , Meeting ended with lots of hot debates and discussion.

However, Ms. Soniya Singh found a need of "Quality Policy" ,and "Environment Health and Safety" policy statement in the organization and She started working on the same.

- (a) Critically evaluate views of Ms. Sonya Singh's views , who thinks to implement Lean Manufacturing Concept will help in productivity improvement , Do you really believe it ? Which concept may be the most useful to the company? 07
- (b) Help Ms. Sonya Singh in Preparing a "Quality Policy Statement" and and "EHS Mission" for the organization. 07

**OR**

- (a) How Ms. Soniya Singh will over come the issues and challenges raised by the Production Head , Mr. Kamath and Mr. Sachin – that it will be difficult to change people's practices ? 07
- (b) What are 7 Qc tools for quality improvement? Do you think that can help the organization? Which few among them could be the most effective in companies present situation? 07

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