#### VPM's DR VN BRIMS, Thane Programme: PGDM (2014-16) Fifth Trimester Examination Jan 2016

Subject	Quality Management		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages	2	Date	14.01.2016

### Note: Q1 is compulsory and solve any FOUR from the remaining SIX questions.

## Q1) 20 Marks (Compulsory)

## a) Case study : Implementation of TQM technique to reduce accidents

The organization is a mini steel plant and well known for its commitment to the implementation of the TQM principles and practices. The organization has been able to sustain its profits and performance in the face of intense completion in the global and the Indian steel industry. The objective was to take up a focused project using continuous quality improvement methodology for reduction in burn injuries due to splashes in the steel casting section of the organization.

The project was selected by the quality control council to learn the root cause of the accidents and take preventive actions to eliminate the same the team appointed by the council was from across all functions in the company which did the detailed study of all the past data and after pareto analysis reached the consensus that the main problem of accident was burn injuries on account of the splashes in the steel casting section. To solve the problem, the team put forward various theories through Ishikawa diagram and also interviewed those involved in the accident. Apart from this, various related equipments were standardized which were directly used by the concerned people and the dos and don'ts were mentioned in Hindi and Marathi whenever this work was conducted. To follow up the project, audit of process at regular intervals was institutionalized.

- a) Explain the learning points of the case.
- b) Explain the critical success factor of the organization.

#### b) Match the following:

- 1. Inspection
- 2. Assurance
- 3. Quality is fitness for use
- 4. Quality is conforming to specifications
- 5. Serviceability
- c) Fill in the blanks:
- i) \_\_\_\_\_ principles to produce only the units in the right quantities, at the right time, and with the right resources.
- ii) The principle of \_\_\_\_\_\_ is to prevent errors in the processes and making them human independent .
- iii) \_\_\_\_\_\_organize the work of Six Sigma Black Belts and provide Black Belts with the necessary backing at the executive level

### (10 marks)

## (5 marks)

- a) Phillip. B. Crosby Quality
- b) Joseph Juran
- c) Prevention
- d) Quality features of a Product
  - Detection

e)

## (5 marks)

# iv) Variation due to Differences among machines is an example of

causes

v) \_\_\_\_\_ are useful for monitoring quality and giving early warnings that a process may be going "Out of Control"

## Attempt Any FOUR from the Remaining SIX Questions

# Q2) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) Explain why employee empowerment is important?
- **b)** Discuss gap model of Quality in services
- c) What is Quality circle and what are the benefits of it to the organizations

## Q3) Write short note on any two from (a) or (b) or (c) ------ (5x2) = 10 Marks

- a) DMAIC
- b) 5S for Workplace improvement
- c) Quality Guru: Contribution of Taichi Ohno

## Q4) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) Explain different elements of TQM in detail.
- b) Explain how Deming's philosophy serves as guidelines for quality management
- c) Explain the cost of quality as prevention cost.

## Q5) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) Explain what is PCMM?
- b) What are 8D of problem solving process?
- c) What is variability? Explain its two types in detail

# Q6) Write short note on Any two from (a) or (b) or (c) -------(5x2) = 10 Marks

- a) Poka yoke
- **b)** Process capability
- c) Design of experience

# Q7) Any two from (a) or (b) or (c) — (5x2) = 10 Marks

- a) Explain Total Quality Management.
- b) What are the features of quality in service?
- c) What is the contribution of Kaoru Ishikawa in quality management?