

VPM's
Programme: PGP (2014-15)
Second Semester Examination June 2015 (Operations)

Subject	Quality Management		
Roll No.		Marks	60 Marks
Total No. of Questions	7	Duration	3 Hours
Total No. of printed pages		Date	11-07-2015

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

Q1) 20 Marks (Compulsory)

A company selling a hand held mobile equipment decided to conduct a survey to find out why product failed when used by the customer. A questionnaire was provided to the respondents and their replies were asked to tick the appropriate box
A total of 200 respondents were covered and the data was tabulated as below:

Description	Yes	No	Total
i. Users were using the product for the first time.	50	150	200
ii. Battery of the equipment failed as contact was intermittent	75	125	200
iii. Equipment was given without a protective carry case:	15	185	200
iv. Equipment failed on switching on:	100	100	200
v. Customers mixed batteries of different make.	40	160	200
vi. Customers were not trained in handling and care	85	115	200
vii. Charging outlet was not available/ incompatible on the field	45	155	200
viii Dirt and dust accumulated on the equipment	40	160	200
ix No local repair facility	125	75	200
x. User handbook was not read or explained:	75	125	200

Q1 Draw a neat Bar chart to illustrate the data.

Q2 Using a Pareto chart identify which of these causes have to be removed on priority.

Attempt Any FOUR from the Remaining SIX Questions

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

Briefly explain the important contribution of the following Gurus of the Quality Movement

- a) Shewhart
- b) Juran
- c) Deming

Q3) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

Explain the importance following Pillars of Quality.

- a) Employee Empowerment
- b) Supplier Partnerships
- c) Customer Focus

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

- a) Provide a suitable definition of Quality and explain how it can be applied for quality control
- b) What do you understand by 'the dimensions of Quality? Give two examples
- c) Describe the important processes of the Quality Management System followed in ISO

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

- a) Provide at least two differences between Managers and Leaders
- b) Describe two important roles played by Quality Leaders
- c) Describe what activities will show top management commitment to the Quality Program

Q6) Any two from (a) or (b) or (c) ————— (5x2) = 10 Marks

- a) Explain the difference between Quality Assurance and Quality control
- b) What are the important tools of Statistical Process Control?
- c) Provide two examples of important Performance Measures used in a Quality Program

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

- a) What is a Control Chart? Where do we use an X chart and a P chart
- b) Explain your understanding of Process Capability with a suitable example
- c) List and describe the components of the Cost of Quality