

Indian Statistical Institute, Bangalore
MS (QMS) First Year
Second Semester - Trouble Shooting and Problem Solving for Quality Improvement

Final Exam
Maximum marks: 60

Date: April 26, 2019
Duration: 3 hours

Q1. Say True or False with justification. [5 x 4 = 20]

- a) Data quality is critical in problem solving exercise.
- b) Simple problem solving tools can eliminate chronic quality issues.
- c) While preparing the business case for a problem on hand, only tangible benefits need to be captured.
- d) Implementation of control charts, promotes reduction of rejection/rework.
- e) Cause and effect diagram is a tool for identifying root causes.

Q2. Explain the role of Regression Analysis in problem solving process. [5]

Q3. Write short notes on any three. [5 x 3 = 15]

- a) Multivari Chart
- b) Scatter Plot
- c) Data Models
- d) Sampling Methods

Q4. [20 + 5 = 25]

- a) It has been found that the non conformmness are occurring in large quantity in a process. The brain storming on the possible reasons, led to the potential cause namely inadequate process capability. Outline the procedure for validations the same.
- b) What method would you suggest to monitor and control the improved process?
