## **Indian Statistical Institute, Bangalore**

## M.S (QMS) First Year First Semester - Total Quality Management

Final Exam Time: 3 hours Date: 04 November, 2015

Answer as many questions as you can. The maximum marks you can score is 100.

- 1. State whether the following statements are true or false. Give brief justification of your statement.  $[8 \times 5 = 40]$ 
  - a. Quality Policy is Top management's expression of its intentions, direction, and aims related to making profits.
  - b. Taguchi Loss Function is used to calculate the loss to society if the quality of the product is not good.
  - c. TPM is the tool used to perform the maintenance of equipments when the equipment fail to function properly.
  - d. Quality improvement of the Supply Chain does not include the Vendor performance monitoring.
  - e. QFD tool is used to design new products.
  - f. If a company is certified for ISO 9001 Quality Management Standard then it is assured that all the products manufactured by the company meet the customer requirements.
  - g. Continual improvement means to continuously reduce Rejections and Rework.
  - h. If there are no complaints from the customer regarding the quality of the products supplied it can be concluded that all the requirements of the customers are met.
- 2. Explain briefly about the following

 $[15 \times 4 = 60]$ 

- (a) Controls to ensure availability of proper documents to the users.
- (b) Controls to ensure non conforming products are not used unintended.
- (c) Steps needed to use Bench Marking tool for improvement.
- (d) Use of PDCA for improvement in the TQM context.

3. Match the following:

 $[5 \times 2 = 10]$ 

i) Quality House
ii) Fish Bone Diagram
iii) Documented Quality Manual
a) Root Causes
b) ISO -9001
c) Quality Policy

iv) Quality Objectives d) QFD

v) Corrective actions e) Problem Solving