## Indian Statistical Institute, Bangalore

## MS (QMS) First Year

## First Semester - Total Quality Management

Back Paper Exam Date: January 03, 2020 Maximum marks: 45 Duration: 3 hours

Answer as many Questions as you can. The maximum marks you can score is 45.

- 1. State whether the following statements are true or False. Give brief justification of your statement.  $[8 \times 2 = 16]$ 
  - 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 for performing Preventive Maintenance of equipments.
  - d. Quality improvement of the Supply Chain does not include the Vendor performance monitoring.
  - e. QFD tool is used to prioritise the critical product and process characteristics.
  - f. If a company is not certified for ISO 9001 Quality Management Standard then it is assured that the company will be making losses and will be out of business.
  - 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

 $[5 \times 4 = 20]$ 

- (a) Controls to ensure purchased products meet the requirements.
- (b) Controls to ensure non conforming products are not used unintended.
- (c) Steps needed to use Bench Marking tool for improvement.
- (d) Requirements related to the QMS Processes as per ISO-9001:2015.

3. Explain how Quality Management System implementation supports any organisation in improving its Profits and Growth? [10]

4. Match the following:

 $[5 \times 1 = 5]$ 

i) Quality House

a) Root Causes

ii) Calibration

b) TPM

iii) OEE

c) Quality Policy

iv) Quality Objectives

d) QFD

v) Corrective actions

e) Measuring Instruments