COURSE OUTLINE:
This is the first part of the two part course (TQM-I, TQM-II) and will cover topics ranging from TQM, Kaizen, Elementary concepts related to quality assurance, Basic Statistical Concepts and Control of Accuracy and Precision, Process Capability, SPC, Acceptance Sampling and Quality Management Systems, ISO 9000, etc.

ABOUT INSTRUCTOR:
Prof. Raghu Nandan Sengupta completed his bachelors in engineering in Mechanical Engineering from Birla Institute of Technology Mesra, Ranchi INDIA and his FPM (PhD) from Indian Institute of Management Calcutta, INDIA with specialization in Operations Management. His research interests are in Sequential Analysis, Statistical & Mathematical Reliability, Optimization and its use in Financial Optimization. His research work has been published in journals like Metrika, European Journal of Operational Research, Sequential Analysis, Computational Statistics & Data Analysis, Communications in Statistics: Simulation & Computation, Quantitative Finance, etc. At Indian Institute of Technology Kanpur, INDIA he is a Professor in the Industrial & Management Engineering department and teaches courses like Probability & Statistics, Stochastic Processes & their Applications, Management Decision Analysis, Financial Risk Management, etc.

COURSE PLAN:
Week 01: Introduction to Total Quality Management
Week 02: Introduction to Total Quality Management - II
Week 03: Tools for Quality Assurance
Week 04: Acceptance Sampling and Brief Introduction to R
Week 05: Control Charts for Variables
Week 06: Control Charts for Attributes
Week 07: Process Capability Analysis and ISO 9000 basics
Week 08: Basic of ISO 9000, CUSUM and EWMA charts