

NATIONAL UNIVERSITY OF IRELAND
GALWAY

SUMMER
EXAMINATIONS
2000

**Master of Applied Science
(Operations and Quality Management)**

Quality Management & Practice

Examiners: Dr. E.J. Wright
Professor M. E. J. O'Kelly
Mr. John Cunningham

Instructions: Time allowed: two hours
Attempt four out of five questions
All questions carry equal marks

Q1.

Discuss Dr. Deming's contribution to the science of Quality Management and in particular, focus on the role that his concept of the Deming Cycle of Quality and his 'Fourteen Obligations of Top Management' (The 14 Points), have played in the evolution of the quality movement in industry.

Q2.

Outline the steps that you would take to develop a 'Cost of Quality' program in a company of around 300 – 500 people with annual sales of circa 100M Punt IR. Pay particular attention to how you would gain top management support and motivate people to participate in such a program. Give examples of the typical types of costs that would be measured in one such program.

Q3.

Using a wholly integrated strategic planning system which is linked to Customers and deploys policy and strategy down to the individual level, has been instrumental in using quality as a competitive weapon in business.

Discuss the main elements and principles behind such a management system.

Q4.

Discuss the main features of how to structure, establish and manage Quality Improvement Teams in Business. Give particular examples of how such a team might be used to improve the Process Capability Cp of a critical business process and outline using examples, the kinds of data this team would need to measure and display, to control the performance of the process.

Q5.

Describe the key elements in a closed loop Customer Satisfaction Measurement System, and give examples of the kinds of management tools that one can use to gather Customer inputs and competitive data inputs to such a system.