

Cork Institute of Technology
Bachelor of Science in Cell & Molecular Biology – Award
Bachelor of Science in Food Science & Technology - Award

(NFQ Level 7)

Spring 2006

Quality Management Systems

(Time: 3 Hours)

Instructions

Answer a total of FIVE questions.

Answer TWO questions from Section A.

Answer THREE questions from Section B.

Examiners: Prof. R. Fitzgerald

Ms. A. Ward

Ms. A. Murphy

Section A

- Q1. Write a short essay on the ISO9001:2000 Quality Management System standard.
Comment on the benefits to an organisation of implementing this international standard.
(20 marks)
- Q2. (a) Outline briefly the general requirements for current Good Manufacturing Practice (GMP) regulations.
(10 marks)
- (b) Write a brief note on the use of benchmarking as an important quality improvement tool.
(10 marks)
- Q3. Write short notes on TWO of the following:
- (i) Quality Costs
 - (ii) Statistical Process Control
 - (iii) Teamwork for quality
 - (iv) Quality function deployment
- (20 marks)

Section B

- Q4. (a) Describe in detail four of the following hardware components of a computer:
- (i) Pentium 4 Processor (2.4GHz)
 - (ii) 160GB Hard Drive (7200 RPM)
 - (iii) SVGA Monitor
 - (iv) DVD RW Drive
 - (v) Motherboard (8 marks)
- (b) Discuss the merits and drawbacks of a private limited company as a trading entity. Outline briefly the legal requirements involved in setting up a limited company. (6 marks)
- (c) Define the term Economies of Scale. List the main internal economies of scale in a business. (6 marks)
- Q5. (a) Discuss the functions of the Operating System in a computer and outline the main classifications of operating systems available on modern computers. (6 marks)
- (b) Discuss the benefits of developing a prototype in the new product development process. (4 marks)
- (c) Write a brief note on two of the following in relation to consumer protection in the marketplace.
- (i) Consumer Information Act 1978
 - (ii) Sale of Goods and Supply of Services Act 1980
 - (iii) General Product Safety Directive 95/2001 (10 marks)

- Q6. (a) Discuss the role of a laboratory information management system (LIMS) in a research laboratory. (8 marks)
- (b) Discuss the role of the World Trade Organisation (WTO) and its effect on the export of goods out of Ireland. (6 marks)
- (c) A high proportion of new products fail in the marketplace today. List the main reasons why. (6 marks)

- Q7. (a) Discuss the role of a laboratory information management system LIMS in Quality Control Laboratory. (8 marks)
- (b) Discuss briefly, using examples the main promotional techniques used by businesses in today's competitive marketplace. (6 marks)
- (c) Discuss in detail the relationship between total revenue and elasticity of demand. (6 marks)