

Cork Institute of Technology

Bachelor of Science in Applied Biosciences and Biotechnology - Award

(NFQ – Level 7)

Autumn 2007

Quality Management Systems

(Time: 3 Hours)

Answer a total of FIVE questions.

Answer TWO questions from Section A

Answer THREE questions from Section B

Examiners: Dr. T. Beresford

Ms. A. Murphy

Ms. A. Ward

Section A

- Q1. ISO9001:2000 is a quality management (QMS) standard that adopts a process approach and focuses on quality improvement in a quality management system. . Discuss this statement. (20 marks)
- Q2. Write short notes on TWO of the following:
(i) Benchmarking
(ii) Statistical Process Control (SPC)
(iii) Teamwork for quality
(iv) Quality Function Deployment (QFD) (20 marks)
- Q3. An important factor in successfully establishing a Quality Management System is understanding the business. Discuss this statement under the following headings:
(i) Functional Analysis
(ii) Customer requirements
(iii) Quality Costs (20 marks)

Section B

- Q4. (a) The following is a list of specifications for a computer currently available in the marketplace. Describe in detail **three** of the following specifications:
- (i) Intel Core 2 Duo Processor (2.13GHz, 1066Mhz FSB)
 - (ii) 320GB Hard Drive
 - (iii) DVD RW
 - (iv) 1024MB RAM (667 MHz) (6 marks)
- (b) Describe what is meant by a SWOT analysis in relation to marketing. (6 marks)
- (c) Discuss in detail, with the aid of a diagram, the relationship between demand and supply in the marketplace. Outline the main factors that can cause a fluctuation in this relationship. (8 marks)
- Q5. (a) Discuss the functions of an operating system in a computer and outline the main classifications of operating systems available on modern computers. (6 marks)
- (b) Discuss the merits and drawbacks of a limited company as a trading entity. (6 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) Minimum Wage Act 2000 (8 marks)

- Q6. (a) Discuss the role of a laboratory information management system (LIMS) in a research laboratory of a modern food or pharmaceutical company. (6 marks)
- (b) Distinguish between batch production and job production. Give examples of products produced by each method. (6 marks)
- (c) Describe briefly the main stages involved in the development of a new product in the market place. (8 marks)
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- Q7. (a) Discuss the main forms of protectionism that exist in world trade which inhibit the free movement of goods. (8 marks)
- (b) Outline the reasons why a number of small businesses succeed in Ireland's competitive marketplace today. (6 marks)
- (c) Discuss the main requirements for medium term sources of finance in a business. List the main sources of medium term finance for a business. (6 marks)