

Cork Institute of Technology

Bachelor of Science (Honours) in Applied BioSciences - Award

(NFQ Level 8)

Autumn 2007

Quality Management Systems

(Time: 3 Hours)

Answer one question from each of Section A, B, C and D. Each question carries equal marks.

Use separate answer books for each section and mark the question attempted

Examiners :Mr. B. Walsh

Ms. A Ward

Mr. S. McCarthy

Mr. S. O'Connell

Dr. T. Beresford

Section A

- Q1. Write brief notes on the methods available for hazard identification in the Food & Biopharmaceutical sectors. (25 marks)
- Q2. Write a concise essay on the risk assessment process (25 marks)

Section B

- Q3. (a) Outline the purpose of each of the following activities used in the financial control of an organisation.
- (i) Revenue Budgets
 - (ii) Capital Budgets (8 marks)
- (b) Explain the meaning of these terms used in Revenue Budgeting
- (i) Total Sales (ii) Cost of Sales (iii) Gross Profit (iv) Variable Costs (v) Contribution
 - (vi) Indirect costs (vii) Net Profit. (7 marks)
- (c) Calculate the Payback Period for each of the following three projects and adopting the Payback Period as the Capital Investment Appraisal Technique which of the three projects would you select stating the reasons for your choice.

Years	Project A		Project B		Project C	
	Annual Cash Flow	Cumulative Cash Flow	Annual Cash Flow	Cumulative Cash Flow	Annual Cash Flow	Cumulative Cash Flow
0	-2000	-2000	-2000	-2000	-2000	-2000
1	+800	-1200	+500	-1500	+600	-1400
2	+700	-500	+700	-800	+700	-700
3	+500	Nil	+800	Nil	+500	-200
4	-		-		+200	Nil
5	-		-		+300	+300
6	-		-		+500	+800

- Q4. Describe the role of each of the following Management Functions emphasising in particular their potential contribution to the financial performance of a company
- (i) Marketing (ii) Design (iii) Purchasing (iv) Operations (v) Sales (vi) Finance
 - (vii) Human Resource (HR). (25 marks)

Section C

- Q5. Discuss the necessary requirement for the effective leadership of a large food processing company. (25 marks)
- Q6. Write notes on the following
(a) International quality standards.
(b) Good company quality policies. (25 marks)

Section D

- Q7. Write an essay on current Good Manufacturing Practices (cGMP) as they apply to the pharmaceutical industry. Comment on the importance of method & process validation as essential regulatory requirements. (25 marks)
- Q8. Discuss current quality improvement initiatives under the following headings:
(i) Six Sigma systems
(ii) Failure Mode & Effect analysis
(iii) Statistical Process Control (25 marks)