

**CORK INSTITUTE OF TECHNOLOGY**  
**INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ**

**Autumn Examinations 2010/2011**

**Module Title:      Quality Management Systems I: (CA)**

**Module Code:        BIOT6005**

**School:                Biological Science**

**Programme Title:**    Bachelor of Science in Applied Bioscience & Biotechnology – Year 2  
                              Bachelor of Science in Agriculture – Year 3  
                              Bachelor of Science (Honours) in Pharmaceutical Biotechnology – Year 2  
                              Bachelor of Science (Honours) in Nutrition & Health Science – Year 2

**Programme Code:**    **SBIOS\_7\_Y2**  
                              **BAGRI\_7\_Y3**  
                              **SPHBI\_8\_Y2**  
                              **SNHSC\_8\_Y2**

**External Examiner(s):      Dr Alison Gallagher, Dr Jerry Bird, Dr Anne Nelson**

**Internal Examiner(s):      Ms Anne Ward**

**Instructions:**                **Answer TWO questions from SECTION A and TWO questions from SECTION B only.**

**Duration:**                2 Hours

**Sitting:**                    Autumn 2011

**Requirements for this examination:**

**Note to Candidates:** Please check the Programme Title and the Module Title to ensure that you have received the correct examination paper.  
If in doubt please contact an Invigilator.

## SECTION A

- Q1. (a) List the seven basic stages of the design process. (6 marks)
- (b) Define each of the following:
- (i) Quality of Design (5 marks)
  - (ii) Quality of Conformance (5 marks)
- (c) What is a design review (3 marks)
- (d) Define each of the following:
- (i) Internal Design Review (3 marks)
  - (ii) External Design Review (3 marks)
- (25 Marks)
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- Q2. (a) What is benchmarking? (5 marks)
- (b) What are the benefits of benchmarking in a quality organisation? (5 marks)
- (c) List three areas of an organisation that can be benchmarked (5 marks)
- (d) Write a brief overview of the operation of quality circles in quality improvement. (10 marks)
- (25 Marks)
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- Q3. (a) What is a process? (5 marks)
- (b) Distinguish between external and internal customers (5 marks)
- (c) Outline the application of functional analysis to any key department in an organisation. (10 marks)
- (d) List any TWO types of Quality Improvement Teams (5 marks)
- (25 Marks)

## SECTION B

- Q4. (a) Define each of the following quality cost categories:
- (i) Cost of Conformance (COC) (5 marks)
  - (ii) Cost of Non-Conformance (CONC) (5 marks)
- (b) List TWO examples of COC and CONC (5 marks)
- (c) Explain both the traditional and modern economic models of quality of conformance. (10 marks)
- (25 Marks)
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- Q5. (a) Write a brief summary of the main characteristics of a recall procedure (10 marks)
- (b) Outline the main elements of a typical customer complaints system. (15 marks)
- (25 Marks)
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- Q6. Write a short essay on product liability legislation. Comment on the importance of product liability prevention programs in industry. (25 marks)