

CORK INSTITUTE OF TECHNOLOGY
INSTITIÚID TEICNEOLAÍOCHTA CHORCAÍ

Autumn Examinations 2015

Module Title: Introduction to Quality Systems (CA)

Module Code: BIOT6005

School: Science & Informatics

Programme Title: BSc (Hons) Herbal Science Year 2
BSc Hons Nutrition & Health Science Year 2
BSc Hons Pharmaceutical Biotechnology Year 2
BSc Applied Biosciences Year 2
BSc in Agriculture Year 3
BSc in Horticulture Year 3

Programme Code: SHERB_8_Y2
SNHSC_8_Y2
SPHBI_8_Y2
SBIOS_7_Y2
BAGRI_7_Y3
BHORT_7_Y3

External Examiner(s): Dr Tom O'Connor

Internal Examiner(s): Anne Ward

Instructions: Answer **FOUR** questions only. All questions carry equal marks.

Duration: 2 hours

Sitting: Autumn 2015

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.

Q1.(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 example of COC and CONC (5 marks)

(c) Explain both the traditional and modern economic models of quality costs. (10 marks)

Q2. (a) Define what is meant by a quality audit (5 marks)

(b) Write a brief overview of:

- (i) an audit plan (5 marks)
- (ii) performance of an audit (5 marks)

(c) Define FOUR of the following terms:

- (i) Quality Characteristics
- (ii) Specification
- (iii) Quality Assurance
- (iv) Standard
- (v) Attribute
- (vi) Non-conforming product (10 marks)

Q3. (a) Give a brief outline of the content of the quality manual under the following headings:

- (i) Quality policy
- (ii) Systems Elements
- (iii) Procedures Index (15 marks)

(b) Write a brief note on each of the following:

- (i) Batch Manufacturing Records (5 marks)
- (ii) Standard Operating Procedures (5 marks)

- Q4. (a) Explain and show an example of each of the seven Quality Control Problem Solving Tools (21 marks)
- (b) List the main stages in a typical problem solving process (4 marks)

Q5. (a) Discuss the importance of quality circles for quality improvement under the following headings:

- (i) Quality circle components (5 marks)
 - (ii) Operation of quality circles (5 marks)
 - (iii) Benefits of quality circles (5 marks)
- (b) List two other types of quality improvement team (5 marks)
- (c) Write a brief note on training in quality (5 marks)

Q6. Write short notes on product liability legislation. Comment on the importance of product liability prevention programs in industry. (25 marks)