

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

**Autumn Examinations 2013**

**Module Title: Nutrition and Health CA**

**Module Code:** BIOL 7026

**School:** Biological Science

**Programme Title:** Bachelor of Science (Honours) in Nutrition & Health Science – Year 4  
Bachelor of Science in Food Science and Technology – Year 3  
Bachelor of Science in Agricultural Science – Year 4  
Bachelor of Science in Horticulture – Year 4

**Programme Code:** SNHSC\_8\_Y4  
SFSTE\_7\_Y3  
BAGRI\_8\_Y4  
BHORT\_8\_Y4

**External Examiner(s):** Prof Torres Sweeney

**Internal Examiner(s):** Dr. Helena Stack

**Instructions:** Answer question 1 and two other questions.  
All questions carry equal marks.

**Duration:** 2 Hours

**Sitting:** Autumn 2013

**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.

Answer question 1 and two other questions.

**Q1.** Write short notes on the following:

- |       |                                |           |
|-------|--------------------------------|-----------|
| (i)   | Assessment of body composition | (6 marks) |
| (ii)  | Nutrient density               | (3 marks) |
| (iii) | Demi-span                      | (3 marks) |
| (iv)  | Tolerable upper intake level   | (3 marks) |
| (v)   | Fiber threshold (EFSA)         | (2 marks) |
| (vi)  | Steatorrhea                    | (3 marks) |

**Q2.** Different lifecycle groups have widely differing nutrient needs. Critically evaluate the following:

- |      |                              |            |
|------|------------------------------|------------|
| (i)  | Nutrition prior to pregnancy | (10 marks) |
| (ii) | Nutrition during lactation   | (10 marks) |

**Q3.** Diabetes is an emerging epidemic. Discuss under the following headings:

- |       |   |           |
|-------|---|-----------|
| (i)   | Glucose homeostasis                       | (6 marks) |
| (ii)  | Dietary treatment of Type 2 diabetes      | (8 marks) |
| (iii) | Hypoglycaemia                             | (3 marks) |
| (iv)  | Role of exercise in treatment of diabetes | (3 marks) |

**Q4.** Write short notes on the following:

- |       |                          |           |
|-------|--------------------------|-----------|
| (i)   | Malnutrition             | (4 marks) |
| (ii)  | Cancer cachexia          | (4 marks) |
| (iii) | Body mass index          | (4 marks) |
| (iv)  | High density lipoprotein | (4 marks) |
| (v)   | Lactose intolerance      | (4 marks) |