



**The Open University of Sri Lanka**  
**Bachelor of Medical Laboratory Sciences (B.M.L.S)**

**MLU3143 – Application to Nutrition**  
**Semester 01- Academic year 2015/2016**

**No Book Test 01**

*Return your question paper with the answer sheet*

**Date: 01.09.2015**

**Duration – 1 1/2 hours**

**Time: 10.00 a m - 11.30 a m**

**Registration No.....**

Please read the following instructions carefully before you answer the paper.

(100 marks)

This question paper consists of three (4) parts; part A, part B, part C and part D

**Part A– (20 Marks)**

1. There are 10 Multiple Choice Questions in this paper and below each question or statement contains **five** responses. Select the **correct response** to each question.
2. On the answer sheet there are five cages opposite of each question number labeled as “a” to “e”
  - Indicate your answer by making (x) over the appropriate letter in the cage

**Part B – (10 Marks)**

You are given 10 matching questions. Match the answers given in the column B with the descriptions given in the column A. Write the correct letter in the given space.

**Part C – (40 Marks)**

There are given **two (2)** short answer questions. Each question contains 3 parts. Answer **all** questions.

**Part D – (30 Marks)**

There are two Structured Essay questions. Each question contains six parts. Answer all the questions.

**Good Luck!**

**Part B**

Match the statement in column A with the most suitable answer listed in column B

	Column A		Column B
1	Prevents xerophthalmia	A	Ascorbic acid
2	A trisaccharide in food	B	Dihomogammalinolenic acid (DGLA)
3	Used for the treatment and prevention of scurvy	C	Isoflavones
4	Synthesized on the human skin when exposed to UV-B rays	D	Vitamin D3
5	An Eicosonoid product series	E	Raffinose
6	Phytochemicals having antioxidant properties present in soya bean	F	Ribose
7	A component of ATP	G	Pantothenic acid
8	Another name for Vitamin B5	H	Docosahexaenoic acid (DHA)
9	A $\omega$ 6 20:3 fatty acid	I	Retinol
10	May help in the treatment of bipolar disorder	J	Prostaglandins (PG)

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Registration No:.....

**Part C**

**Question 1**

- 1.1 Define the term "Basal Metabolic Rate" (4 marks)
- 1.2 List the factors that decrease the Basal Metabolic Rate (5 marks)
- 1.3 What is meant by (i) Catabolism and (ii) Anabolism? (6 marks)
- 1.4 List five (05) functions, of the hypothalamus (5 marks)

**Question 2**

- 2.1 What are the signs and symptoms of Kwashiorkor? (5 marks)
- 2.2 What are the factors other than protein deficiency that cause the development of Kwashiorkor? (5 marks)
- 2.3 State two basic ways in which protein deficiency can arise (6 marks)
- 2.4 What is the condition known as "hypoproteinemia"? (4 marks)

**Part D**

**Question 1**

1. What is meant by an "Eating Disorder"? (2 marks)
2. Why does a person suffering from Anorexia Nervosa develop an abnormally low body weight? (3 marks)
3. Describe the symptoms of Bulimia Nervosa? (3 marks)
4. What are the symptoms of a "Selective Eating Disorder"? (2 marks)
5. How is obesity linked to disease and health problems? (2 marks)
6. What are the factors that contribute to the development of eating disorders? (3 marks)

**Question 2**

1. What are the types of dietary fats? Give one example for each type. (3 marks)
2. What are the functions of essential fatty acids in the body? (4 marks)
3. What are fatty acid oxidation disorders? (2 marks)
4. What are the factors that cause fatty acid oxidation disorders? (2 marks)
5. How do fatty acid oxidation disorders affect children? (2 marks)
6. Briefly indicate how fatty acid oxidation disorders could be treated. (2 marks)