

The Open University of Sri Lanka  
Bachelor of Medical Laboratory Sciences (B.MLS)

MLU3242- Cell Biology and Basic BioChemistry

Semester 01- Academic year 2015/2016



No Book Test 01

*Return your question paper with the answer sheet*

Date: 04.09.2015

Duration – 1 1/2 hours

Time: 01.30 p m - 03.00 p m

Registration No.....

Please read the following instructions carefully before you answer the paper.  
(100 marks)

**Part – A (20 marks)**

There are 10 multiple choice questions in this paper, each question with five responses. Select the correct response and mark in the given answer sheet.

**Part - B (10 marks)**

You are given 10 true or false questions. Mark this statement whether true or false.

**Part C (30 marks)**

You are given 2 short answer questions. Each question contains four parts. Answer all the questions in given spaces.

**Part – D (40 marks)**

There are two structured essay questions. The question contains three parts. Answer all the questions in given spaces.

**Good Luck!**

### Part B - True/False type Questions

1. The nuclear envelope is consists of nuclear pores. (True/ False)
2. Phospholipids of plasma membrane contain glycerol. (True/ False)
3. A typical prokaryotic cells comprises a cell wall. (True/ False)
4. Examples of active transport mechanisms is  $\text{Na}^+/\text{K}^+$  ATPase pump. (True/ False)
5. Transport is a function carried out by the proteins found in the cell membrane. (True/ False)
6. Passive transport is substances move from location of high concentration to low concentration. (True/ False)
7. Transport vescicles carry lipids. (True/ False)
8. The Golgi apparatus participates in protein synthesis. (True/ False)
9. Ankyrin proteins are present in the erythrocyte membrane. (True/ False)
10. Osmosis is examples of bulk flow transport. (True/ False)

Short Answers Questions (SAQs)

1.1 Name the microscope used to visualize live cells.

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1.2 List 2 types of microfilaments.

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1.3 Outline the function of the Golgi body.

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1.4 State why phospholipids possess amphipathic properties.

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2

2.1 What type of transport mechanism is used by the  $\text{Na}^+/\text{K}^+$  ATPase pump?

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2.2 List 2 functions of membrane proteins.

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2.3 State the 2 types of protein present in the cell membrane

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2.4 Name a function of peroxisomes.

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**Structure Essay Questions (SEQs)**

1.
  - 1.1 Explain the term 'resolution' with regards to a microscope.
  - 1.2 Draw a labeled diagramme of a mitochondrion.
  - 1.3 State the sequence of events that would follow when erythrocytes are placed in a hypotonic solution.
  
2.
  - 2.1 Outline the features of passive transport of substances across the plasma membrane.
  - 2.2 Explain the process of facilitated transport.
  - 2.3 State the role of the plasma membrane in endocytosis

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