

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



MLU3144- Immunology

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: 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 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)

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

Part – D (30 marks)

There is an one structured essay questions. The question contains five parts. Answer all the questions in given spaces.

Good Luck!

Matching Questions

- | A | | B |
|---|------|------------|
| 1 Initiator of the classical complement pathway | -() | a) C3bBb3b |
| 2 Major complement amplification in all three pathways | -() | b) C4 |
| 3 C3 convertase in classical complement pathway | -() | c) C6 |
| 4 C3 convertase in alternative complement pathway | -() | d) C1 |
| 5 Component of membrane attack complex | -() | e) C4b |
| 6 Compound involved in activation of classical complement pathway | -() | f) C3 |
| 7 The potent activator of neutrophils | -() | g) C4b2a |
| 8 A anaphylotoxin which help in mast cell degranulation | -() | h) C9 |
| 9 A common active product of complement pathway act as opzanin | -() | i) C4a |
| 10 The final compound that binds to the Membrane attack complex | -() | j) C5b67 |

(10 marks)

Short answer questions

1.

i. Write basic classes of antibody produced against single type of epitope.

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(5 marks)

ii. Name **two** functions of variable region of the antibody

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(4 marks)

iii. Write **six** methods which help to increase the diversity of antibody

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(6 marks)

iv. Briefly explain antibody generation according to the clonal expression theory

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(5 marks)

2.

i. Write the basic functions of cell mediated immunity.

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(6 marks)

ii. What is the role of MHC molecules in cell mediated immunity?

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(4 marks)

iii. Write cells types mainly involved in cell mediated immunity.

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(5 marks)

iv. Why human deficiency virus can disable adaptive immune system?

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(5 marks)

Structured essay questions (30 marks)

1.

i. Write the mechanism behind the swelling which occur during the localized tissue injury?

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(6 marks)

ii. What are the functions of inflammation?

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(3 marks)

iii. If inflammation cannot control the infection, body starts the adaptive immune mechanism. Explain initiation of this process?

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(12 marks)

iv. What are the basic types of cytokines?

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(5 marks)

v. Briefly explain how temperature is involved in pathogen destruction

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(4 marks)