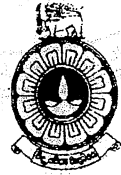


The Open University of Sri Lanka
Bachelor of Medical Laboratory Sciences (B.MLS)

MLU3144- Immunology

Semester 01- Academic year 2015/2016



No Book Test 02

Return your question paper with the answer sheet

Date: 13.10.2015

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 with five responses. Select the correct response and mark the corresponding letter in the given answer sheet.

Part - B (10 marks)

You are given 10 matching questions. Match the descriptions given in column A with the answers given in the column B . 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 the given spaces.

Part – D (30 marks)

This is a structured essay question. The question contains five parts. Answer all the questions in the given spaces.

Good Luck!

Matching Questions

A

B

- | | | | | |
|----|--|------|----|-----------------------------------|
| 1 | Disorder associated with no antibodies in youngsters | -() | a) | Wiskott-Aldrich Syndrome |
| 2 | Disorder characterized by low levels of IgG and too few IgA antibodies | -() | b) | Chronic Granulomatous Disease |
| 3 | Deficiency of immunoglobulins in body secretions and mucous membranes lining the airways and digestive tract | -() | c) | Cartilage Hair Hypoplasia |
| 4 | Disorder characterized by totally disabled antibodies and T cells | -() | d) | Leukocyte Adhesion Defect |
| 5 | Disorder characterized by a tendency to bleed easily and the development of an intensely itchy, scaling skin rash | -() | e) | agammaglobulinemia |
| 6 | Immune system abnormality linked to dwarfism | -() | f) | Chediak-Higashi Syndrome |
| 7 | Disorder where phagocytes are unable to produce the oxygen-transporting compounds that are needed to kill certain types of germs | -() | g) | Selective IgA Deficiency |
| 8 | Disorder where phagocytes that are unable to migrate to the site of an infection | -() | h) | Chronic Mucocutaneous Candidiasis |
| 9 | Disorder caused by a flaw in three distinct types of cells namely phagocytes, platelets and melanocytes | -() | i) | Severe Combined Immunodeficiency |
| 10 | Disorder of the immune system where patients are unable to defend themselves against the <i>Candida</i> fungus | -() | j) | hypogammaglobulinemia |

(10 marks)

Registration No:.....

Short answer questions

1.

1.1. List three disease conditions that cause secondary immunodeficiencies

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(06 marks)

1.2. How does the Human Immunodeficiency virus (HIV) attack the immune system

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(04 marks)

1.3. Give four mechanisms that the Human Immunodeficiency virus (HIV) use to evade immune system

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(04 marks)

1.4. Give three mechanisms which is used by the immune system to destroy HIV infected cells

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(06 marks)

2.

2.1. Briefly define the term “vaccine”

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2.2. Name the five basic types of vaccines

(05 marks)

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2.3. Give two examples of recombinant vector vaccines

(05 marks)

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(04 marks)

2.4. Give three advantages of adjuvants in vaccine preparation

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(06 marks)

Structured essay questions (30 marks)

1.

1.1. Briefly explain the innate immune mechanism(s) that can be used against invading extracellular bacteria

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(05 marks)

1.2. If the innate immune system is unable to stop the progression of bacteria using the above (1.1) mechanism(s), explain the next mechanisms that involved to destroy the bacteria

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(10 marks)

1.3. Briefly explain the role of antibodies in the prevention of a viral infection

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(05 marks)

Registration No:.....

1.4. Briefly explain how antigenic shift and antigenic drift help evade host immune mechanisms during a viral infection

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(05 marks)

1.5. Briefly explain the role played by NK cells(natural killer cells) in the prevention of a viral infection

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(05 marks)