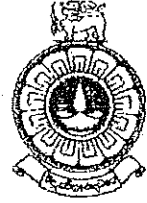


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THE OPEN UNIVERSITY OF SRI LANKA
FACULTY OF HEALTH SCIENCES
DEPARTMENT OF MEDICAL LABORATORY SCIENCES
ACADEMIC YEAR 2018/2019 – SEMESTER I



BACHELOR OF MEDICAL LABORATORY SCIENCES (BMLS) HONOURS
MDU6302 – PUBLIC HEALTH MICROBIOLOGY – LEVEL 6
FINAL EXAMINATION
DURATION: THREE HOURS

DATE: 22ND MARCH 2019

TIME: 09.30AM – 12.30 PM

PART B – Structured Essay Questions (40 Marks)**Answer 4 of the 6 questions****Question 1**

- 1.1 Explain the terms,
 - a) Vector borne disease.
 - b) Vector.
 - c) Vector borne pathogen.
- 1.2 List five vector borne infections found in Sri Lanka.
- 1.3 Using examples, discuss the limitations of controlling vector borne infections in Sri Lanka.

Question 2

- 2.1 List 4 infections which can be transmitted through contact with rats (direct or indirect).
- 2.2 Briefly describe the public health importance of two of the 4 infections listed in 2.1.
- 2.3 Discuss the role of the microbiology laboratory in diagnosis and prevention of the 2 infections described in 2.2.

Question 3

- 3.1 List five (5) sexually transmitted infections (STI).
- 3.2 Discuss the reasons why population estimates of STIs usually under-estimate their true incidence and prevalence.
- 3.3 Briefly describe strategies used to prevent STIs.

Question 4

- 4.1 List five respiratory transmitted viral infections.
- 4.2 Explain the reasons why the five infections listed in 4.1 continue to be a public health concern in Sri Lanka.

Question 5

- 5.1 Describe the different ways in which *E. coli* can cause diarrhoeal disease, explaining why at-risk populations are different in each case.
- 5.2 State the limitations in the microbiology laboratory diagnostic services in tracing the sources of an outbreak caused by *E. coli*

Question 6

- 6.1 What do you understand by the term 'surveillance'?
- 6.2 List three (3) surveillance programmes (for microbial pathogens) carried out in Sri Lanka.
- 6.3 Discuss how microbiological surveillance of an infective disease could be useful in public health.

PART C – Essay Questions (30 Marks)**Answer any 2**

1. Describe (with examples) the role of diagnostic (clinical) laboratories to support public health in Sri Lanka.
2. Compare and contrast public health strategies in the elimination of malaria and dengue fever.
3. 'Tuberculosis continues to be of major concern worldwide'
Explain why this statement is true and discuss strategies which could be developed to control this infectious disease.