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## POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

## MD (MEDICAL VIROLOGY) EXAMINATION - JANUARY 2021 (RESCHEDULED)

Date: 12th January 2021

**Time:** 9.00 a.m. – 12.00 noon

## **PAPER I**

Answer all five (05) questions.

Answer each question in a separate book.

1. Surveillance of infectious diseases is an important component of the health system of a country.

Describe the viral disease surveillance programmes in Sri Lanka, including utilization of data. (100 marks)

2.

- 2.1. Briefly describe the pathogenesis of SARS-CoV-2 virus infection (COVID-19). (30 marks)
- 2.2. Outline the reasons why SARS-CoV-2 virus caused a pandemic. (20 marks)
- 2.3. Critically evaluate the different types of vaccines/vaccine candidates for COVID-19 and comment on the progress of vaccines in the front line.

  (50 marks)

3.

- 3.1. Describe the aetiology and epidemiology of acute encephalitis syndrome (AES). (40 marks)
- 3.2. Discuss the laboratory diagnosis of acute viral encephalitis with special emphasis on recent advances. (60 marks)
- 4. The United Nations (UN) has stated that antimicrobial resistance (AMR) could cause 10 million deaths due to drug resistant infections each year, by 2050.
  - Discuss the causes for the rapid emergence and spread of AMR as a global problem and outline the strategies required to prevent and control AMR.

    (100 marks)
- 5. Discuss the use of antibody testing in patients, for the diagnosis of diseases. (100 marks)