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**POSTGRADUATE INSTITUTE OF MEDICINE**  
**UNIVERSITY OF COLOMBO**

**MD (MEDICAL VIROLOGY) EXAMINATION – NOVEMBER 2019**

**Date:-** 6<sup>th</sup> November 2019

**Time:-** 9.30 a.m. – 12.30 p.m.

**PAPER I**

Answer **all five (05)** questions.

Answer each question in a separate book.

1. Your virology laboratory at the teaching hospital has been upgraded as the Regional Virology Laboratory of the province. Discuss how you would introduce automation to the existing laboratory facilities. (100 marks)
2. Briefly discuss the modes of transmission of hepatitis E virus. Describe the possible consequences of this infection, and how it might be treated/prevented. (100 marks)
3.
  - 3.1. Outline the viral infections in allogenic haematopoietic stem cell transplant recipient relating to timing/phases and source of infection. (30 marks)
  - 3.2. Briefly describe the strategies that should be adopted to prevent viral infection in haematopoietic stem cell transplant recipients, including the role of the laboratory in your answer. (70 marks)
4. A 45 year old male patient who presented to medical casualty was diagnosed with severe pneumonia, needing intensive care and intubation. On the 6<sup>th</sup> day of intubation, his oxygen requirement increased with general deterioration of the condition. He was suspected as having ventilator associated pneumonia (VAP).
  - 4.1. Critically evaluate how you would investigate this patient. (40 marks)
  - 4.2. Discuss the challenges in treatment of this patient. (30 marks)
  - 4.3. State the measures that are important in the prevention of VAP. (30 marks)
5. Discuss the immuno-pathogenesis of dengue virus infection. (100 marks)