

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

**MD (MEDICAL MICROBIOLOGY) EXAMINATION – NOVEMBER 2022**

**Date:** 16<sup>th</sup> November 2022

**Time:** 9.00 a.m. - 12.00 noon

**PAPER I**

Answer all **five (05)** questions

Answer each question in a separate book.

1. Catheter related blood stream infections are common nosocomial infections. Discuss the pathogenesis, the clinical and laboratory diagnosis and the strategies recommended for prevention of intra-vascular catheter related blood stream infections. (100 marks)
2. A 65-year-old diabetic man was admitted to the surgical casualty ward with fever and a painful swelling of his right leg spreading up to knee level over the past 2 days. He was confused and hypotensive on admission. Discuss the initial clinical assessment, differential diagnosis, microbiological investigations, and the management of this patient. (100 marks)
3. Solid Organ Transplantation (SOT) is generally considered a lifesaving and cost-effective treatment for patients with end-stage organ disease. Discuss the spectrum of post-transplant viral infections in solid organ transplant recipients, their prevention and management, emphasizing the challenges encountered. (100 marks)
4. A healthy farmer from Anuradhapura district who does paddy and chena cultivation and dairy farming, regularly bathes in a nearby lake.
  - 4.1. State the diseases of fungal aetiology likely to be associated with his lifestyle. (10 marks)
  - 4.2. State the aetiological agents and clinical features of two (2) diseases you mentioned in 4.1. (40 marks)
  - 4.3. Describe the laboratory diagnosis and management of above two fungal diseases stated in 4.2 (Description of the test method is not required). (50 marks)
5. Discuss the role of a clinical microbiologist in the diagnosis and management of inborn errors of immunity (primary immune deficiency), giving examples. (100 marks)