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D. S. S. S. S.

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (MEDICAL MICROBIOLOGY) EXAMINATION – NOVEMBER 2021

Date:- 10th November 2021

Time:- 9.00 a.m. – 12.00 noon

PAPER I

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

Answer each question in a separate book.

1.
 - 1.1. Describe the leading causes of bacterial meningitis and how they change across the lifespan. (30 marks)
 - 1.2. Discuss the key parameters measured on cerebrospinal fluid and compare findings in pyogenic meningitis with meningitis by other microbial pathogens. (30 marks)
 - 1.3. Discuss common features of the leading pathogens of pyogenic meningitis and key elements of the immunological response to these bacteria in humans. (40 marks)
2. Antimicrobial resistance is increasing, and many attempts have been made to contain it. Discuss the “One Health approach” on antimicrobial resistance. (100 marks)
3. An outbreak of probable viral encephalitis has been reported in a group of hunters from a Southeast Asian country. A novel viral agent is suspected to have caused this outbreak.
 - 3.1. Discuss how you would identify the viral agent. (80 marks)
 - 3.2. Outline how you would identify the origin of this agent. (20 marks)
4.
 - 4.1. *Aspergillus* is a ubiquitous fungus. Discuss how it would affect human health. (40 marks)
 - 4.2. Critically evaluate the findings of laboratory diagnostic methods used, to indicate/confirm an infection with medically important *Aspergillus* species. (Description of the test method is not required.) (60 marks)
5. You have been appointed to a committee to prepare guidelines for immunization in transplant recipients in Sri Lanka.
Describe the principles that would form the basis of your guidelines. (100 marks)