

UNIVERSITY OF JAFFNA, SRI LANKA SECOND EXAMINATION FOR MEDICAL DEGREES

Part 1 (1st)-2019/2020 July2024 Parasitology-Paper II

Date: 03.07.2024
Answer all four questions

Time: 9.00 am to 11.00am (2 hours)

- **01.** Krait bites in humans are a serious medical concern, often resulting in severe envenomation that requires prompt medical attention. Delay in treatment can lead to life-threatening complications.
 - 1.1 Name the two different krait species and their distribution (10 marks) patterns in Sri Lanka.
 - 1.2 Describe the typical symptoms and signs observed in a patient bitten by a common krait, including the onset and progression of these symptoms. (30 marks)
 - 1.3 Discuss the management strategies for krait envenomation, (30 marks) including the use of anti-venom and other supportive measures in the emergency unit, which are critical for patient recovery
 - 1.4 Highlight the unique characteristics that differentiate krait bite (15 marks) from cobra bites.
 - 1.5 Briefly outline the measures you would recommend to prevent (15 marks) krait bites in rural areas.
- **02.** A 10-year-old girl from a rural village was admitted to the District General Hospital Matara with a history of sporadic episodes of abdominal pain for the past six months. The patient's prior history includes living on a farmhouse inhabited by non-human primates. Her parents also noticed intermittent shedding of white, flat, motile, segmented worms in her stools. However, the patient had no history of consuming pork or beef. She had previously been treated at a peripheral hospital with mebendazole and vitamins for which she did not respond.
 - 2.1 What could be the most likely parasitic infection responsible for (10 marks) the above condition?
 - 2.2 Identify the primary hosts and transmission vectors involved in the lifecycle of the parasite mentioned in 2.1.
 - 2.3 Outline the life cycle of the parasite which you have mentioned (25 marks) in 2.1
 - 2.4 Describe the current treatment options available for above parasitic infection, including pharmacological and supportive therapies. (45 marks)

- **03.** A 40-year-old male overseas traveler from India was admitted to the Teaching Hospital Jaffna, complaining of recurrent high grade fever with chills. On admission he was anaemic and splenomegaly was identified.
 - 3.1 Name TWO (2) most likely haemoprotozoan infections (20 marks) resembling the above clinical presentation.
 - 3.2 Briefly explain the pathophysiological basis of anemia caused (30 marks) by each of the parasitic infections mentioned in 3.1
 - 3.3 What are the investigations which would help to differentiate (50 marks) the infections that you have mentioned in 3.1?
- **04.** Even though the prevalence of other parasitic conditions has significantly decreased in Sri Lanka, enterobiasis and pediculosis remain common among school children.
 - 4.1 Discuss the reasons for the higher prevalence of the above parasitic conditions among school children. (25 marks)
 - 4.2 Briefly describe the steps involved in the sample collection and the laboratory procedure for the confirmation of enterobiasis. (25 marks)
 - 4.3 Outline the treatment protocol for;
 - 4.3.1 Pediculosis (15 marks)
 - 4.3.2 Enterobiasis (15 marks)
 - 4.4 Briefly outline the measures you would recommend to prevent the reinfection of each of the above parasitic conditions among school children.

(20 marks)