

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2001

Date: 15th January 2001

Time: 2.00 p.m. -500 p.m.

PAPER 1

Answer all five (5) questions
Answer each question in a separate book

1. Discuss the underlying principles relating to the use of chemotherapy as a control strategy against helminthiasis of public health importance.
2. Write an account, giving examples, of the different mechanisms adopted by parasites to evade the immune responses of the host.
3. What problems may be encountered in adopting quality control methods to parasitic disease diagnostic techniques.
Describe strategies you would propose to ensure quality control of malaria diagnostic techniques in a tertiary care hospital in Sri Lanka.
4. Write an essay on insect specialization relating to the transmission of human disease agents.
5. What are the main morphological features that distinguish cestodes from trematodes.
Discuss the different strategies adopted by these parasites to gain access to new hosts.

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2001

Date: 16th January 2001

Time: 9.30 a.m. -12.30 p.m.

PAPER 11

Answer any five (5) questions

Answer each question in a separate book

- I. A study on asymptomatic malaria infections in two endemic areas in Sri Lanka; Kurunegala and Kataragama, based on clinical scores of patients followed up for 15 months, showed the following results:

	Carrier rate
Kurunegala	4.3% (1.45% <i>P vivax</i> , 2.89% <i>P falciparum</i>)
Kataragama	16.6% (only <i>P vivax</i>)

The incidence of infection (*Pv* and *Pf*) in Kataragama was significantly higher than that of Kurunegala.
Discuss these findings.
2. Write an essay on ocular disease caused by parasites.
3. Explain the mechanisms by which *Giardia intestinalis* causes its pathogenic effects in humans in relation to the clinical presentations.
4. What are the coccidian parasites recognized recently that cause intestinal infection in patients with Human Immunodeficiency Virus (HIV) ?
Discuss the factors that would contribute to intestinal coccidiosis emerging as a health problem in Sri Lanka.
5. Write an account on the epidemiology of echinococcosis in Sri Lanka.
Discuss the reasons as to why this disease is not a major human health problem in this country.
6. A herdsman in Sri Lanka who presented with fever and neurological manifestations was diagnosed as having trypanosomiasis. The causative parasite was identified as *Trypanosoma evansi*.
Explain the possible factors that were responsible for this patient's infection and clinical presentation.
7. Explain why *Toxoplasma gondii*, in general, cause a mild asymptomatic disease while in the immunocompromised it causes fatal toxoplasma encephalitis. What measures can be taken to minimize such complications in this group ?

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2003

Dati : 20th January 2003

Time : 1.30 p.m.-4.30 p.m.

PAPER 1

Answer all five (5) questions

Answer each question in a separate book

1. Explain chemotherapeutic actions of antimalarials in current use
2. 'Nutritional status of the host is important for the outcome of parasitic infections'. Comment.
3. Discuss the mechanisms of pathological lesions observed in protozoal infections.
4. Write an account on rice agro-ecosystems and spread of vector borne disease.
5. Write on:
 - 5.1 Transgenic vectors
 - 5.2 Symbionts

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2003

Date: 21st January 2003

Time: 9.00 a.m. - 12.00 noon

PAPER 11

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Answer any five (5) questions

Answer each question in a separate book

1. Explain the basis underlying the clinical presentations in parasitic infections of the skin and subcutaneous tissue in Sri Lanka.
2. Discuss the epidemiology of zoonotic parasitic diseases in Sri Lanka. Add a note on strategies to prevent these conditions in Sri Lanka.
3. Write on the impact of insecticide resistance and its significance in disease control for the major vector borne parasitic disease of humans.
4. Discuss the basis and value of currently available rapid diagnostic tests in the control of malaria in Sri Lanka.
5. Outbreaks of fever and rash were reported recently from several parts of Sri Lanka. Serological evidence indicated rickettsial disease. Discuss the possible modes of transmission of infection in these outbreaks.
6. A Cross sectional study of Bancroftian filariasis in Colombo using a single 60ul thick film and a rapid diagnostic antigen detection test showed 10.8% antigenaemia and 0.6% microfilaraemia. All microfilaraemics were antigen positive. Comment.
7. Write an account on water as a vehicle for transmission of protozoal parasitic disease.

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2004

Date: 19th January 2004

Time: 1.30 p.m. - 4.30 p.m.

PAPER I

Answer all five (5) questions.

Answer each question in a separate book.

1. Write an account on water as a source of parasitic disease to humans.
2. 'Macrophages are crucial in defence against parasites'. Comment.
3. Discuss the significance of amoebic trophozoites in human faeces.
4. Write an account of trematode infections in Asia.
5. Write on:
 - 5.1. Biological control of Anopheline vectors in Sri Lanka.
 - 5.2. The use of GIS in forecasting parasitic disease in Sri Lanka

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2004

Date: 20th January 2004

Time: 9.00 am- 12 noon

PAPER II

Answer any five (5) questions.

Answer each question in a separate book.

1. Explain the basis underlying the clinical presentations in parasitic disease of the lungs.
2. Discuss the effects of malaria in pregnancy.
Explain how you would manage a patient with malaria who is pregnant and is currently a resident in a malaria endemic area in Sri Lanka.
3. Write an account on the aetiology and pathogenesis of visceral larva migrans in humans. Discuss the risk factors for this infection in the Sri Lankan setting.
4. Write an account on larval cestode infections in humans.
5. Explain why *Toxoplasma gondii* is considered one of the most successful intracellular parasites.
6. Write on the lymphoedema management through community and home-based-care. What are the indicators for the assessment of such a programme.
7. Discuss the recent concept in the pathogenesis of cerebral malaria. Add a note on strategies for diagnosis and management of cerebral malaria in a peripheral unit.

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2007

Date: 16th January 2007

Time: 1.00 p.m.- 4.00 p.m

PAPER 1

Answer all five (5) questions.
Answer each question in a separate book.

1. Write an account on food borne trematode infections.

2. Discuss the use of combination drug therapy in the treatment and control of major parasitic diseases.

3. Write an essay on the immune response in the gut to parasitic pathogens.

4. Explain how you would ensure quality assurance and quality control in relation to laboratory diagnosis of parasitic disease in a tertiary care hospital in Sri Lanka.

5. Discuss the importance of flies in the transmission of disease.

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY, 2007

Date: 17th January 2007

Time: 9.00 a.m.- 12.00 noon

PAPER 11

Answer any five (5) questions.

Answer each question in a separate book.

1. In Sri Lanka, in the recent past, malaria has shown a dramatic downward trend. The case load reported in 2005 was around 1600 cases of which 92% was vivax malaria. Describe a proposed programme identifying key measures and strategies to prevent a resurgence of malaria in the country.
2. There are challenges as well as factors favouring the successful elimination of lymphatic filariasis from all the endemic countries. Discuss
3. Discuss the clinical presentations manifested by helminthic infections in the hepato-biliary system. Give an account on the pathogenesis and pathology caused by these infections to the organ-system.
4. Write an account on the pathogenicity of opportunistic parasitic infections in organ transplant recipients.
5. Explain the choice of diagnostic practices in malaria for use in different global endemic situations
6. Dogs are important reservoir hosts of zoonotic parasitic disease in Sri Lanka. Discuss.
7. Write an account on the parasitic disease affecting the genito-urinary system.

POSTGRADUATE INSTITUTE OF MEDICINE
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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY 2009

Date : 19th January 2009

Time : 1.00 p.m. – 4.00 p.m.

PAPER I

Answer all five (5) questions.

Answer each question in a separate book.

1. “There are no efficient vaccines available for prevention of parasitic diseases”.
Write a critical account on the above statement. (100 marks)

2. Write an essay on ‘emerging and newly established parasitic diseases in Sri Lanka’. (100 marks)

3. Albendazole, ivermectin and praziquantel are the tools needed to substantially and permanently reduce transmission of helminth infections in humans.
Discuss this statement. (100 marks)

4. Discuss the role of water resource development in the transmission of parasitic infections in humans. Support your answer with examples of specific parasites and water resource development projects where possible. (100 marks)

5. Write on the importance of arthropods as biological vectors of disease in Sri Lanka. (100 marks)

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MD (MEDICAL PARASITOLOGY) EXAMINATION
JANUARY 2009

Date : 20th January 2009

Time : 9.00 a.m. – 12.00 noon.

PAPER II

Answer any five (5) questions.

Answer each question in a separate book.

1. Write an essay on the public health importance of cestode infections in humans. (100 marks)
2. Give an example of an efficient vector that transmits a parasitic disease, describing the adaptive features that enables achieving this level of efficiency in disease transmission. (100 marks)
3. Write on
 - 3.1. Rapid diagnostic tests. (50 marks)
 - 3.2. Transgenic mosquitoes. (50 marks)
4. List three examples of known parasitic zoonoses in Sri Lanka, giving details on clinical manifestations, pathogenesis and laboratory diagnosis of each. (100 marks)
5. Write a brief account on parasitic diseases that produce an adverse outcome during pregnancy. (100 marks)
6. Write on the factors that influence the success of ongoing programmes to eliminate lymphatic filariasis in targeted countries. (100 marks)
7. Considering the downward trend in malaria incidence since the year 2000, Sri Lanka has moved to a phase of ‘ pre-elimination of malaria’. Discuss the strategies adopted in this regard, critically evaluating each. (100 marks)