

UNIVERSITY OF JAFFNA, SRI LANKA

BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES

SECOND YEAR SECOND SEMESTER EXAMINATION -JANUARY 2013

MLSMP 2201 MEDICAL PARASITOLOGY

PAPER II

Date: 21.01.2013

Time: 2hours

ANSWER ALL QUESTIONS.

1.
  - 1.1 List protozoans which cause diarrhea in human. (10marks)
  - 1.2 How would you collect the stool sample for the laboratory investigation? (20marks)
  - 1.3 How would you differentiate the above mentioned protozoans in the laboratory?(70marks)
  
2.
  - 2.1 Name the filarial parasite causing lymphatic filariasis in Sri Lanka. (10 marks)
  - 2.2 Explain the term **periodicity** of microfilaria and its **importance**. (30 marks)
  - 2.3 What are the methods available for the diagnosis of the above infection in the laboratory? (60 marks)
  
3.
  - 3.1 Name the intestinal nematodes which cause anaemia in human (10marks)
  - 3.2 Briefly describe the **life cycle** and **other clinical features** of any of the nematodes mentioned in (3.1) (60marks)
  - 3.3 Outline the laboratory procedure to confirm the above infection (30marks)
  
4. Outline the laboratory diagnostic procedure for the following conditions
  - 4.1 Taeniasis (25 marks)
  - 4.2 Hydatid disease (25 marks)
  - 4.3 Urinary schistosomiasis (25 marks)
  - 4.4 Enterobiasis (25 marks)

- 5.
- 5.1 Name four stains that are commonly used for the permanent staining of protozoan parasites. (20marks)
- 5.2 Discuss the common problems encountered during the staining of protozoan parasites. (20marks)
- 5.3 How would you prepare a stained slide with Ziehl-Neelsen stain on stool sample for the diagnosis of *Cryptosporidium spp* (40marks)
- 5.4 State the quality control measures that should be followed during the above procedure (20marks)
- 6.
- 6.1 List the **mosquito born diseases** and **the respective mosquito species** responsible for the transmission of the <sup>above</sup> mentioned diseases in Sri Lanka. (30 marks)
- 6.2 How would you control the above mentioned mosquitoes (70 marks)
7. Write short notes on
- 7.1 Zinc Sulphate centrifugal floatation (50 marks)
- 7.2 The limitation of immunodiagnostic methods in parasitology. (50 marks)
- 8.
- 8.1 List the immunodiagnostic methods that are used in laboratory diagnosis of toxoplasmosis (20 mark)
- 8.2 Describe briefly the underlying principles of the above laboratory tests. (40 marks)
- 8.3 Briefly explain immunological mechanisms occurring in human body to counteract the infection of toxoplasmosis. (40 marks)