

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 ^{above} 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)