



NATIONAL UNIVERSITY (SUDAN)

Faculty of Medical Laboratory Sciences

Student Practical Manual

Parasitology and Medical Entomology Department

Third year, Semester (5)

Helminthology(MLS-HLMT-313)

Student Name:

ID: **Batch:**

INSTRUCTIONS

- *Wear lab coat*
- *Wear Gloves*
- *Avoid swallow any chemical*
- *Follow the procedures provided*
- *Write your results in this manual*

Practical No [1]

Differentiation between classes of Heminthes

In table differentiate between classes of helminthes

Practical No [2]

Lab diagnosis of *Ascaris lumbricoides*

1- A 42-year-old female presented to her physicians in Cape Town, South Africa with pneumonia-like symptoms, attacks of coughing, and bronchial asthma. Sputum specimen collected from patient and laboratory diagnosis showed larva and the blood examination showed eosinophilia.

(a) What is the your suggested diagnosis?

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(b) What is the disease caused by that parasite?

.....

(c) What is the diagnostic stag/s?

.....

.....

(d) Draw the diagnostic stage/s that diagnosed under the microscope?

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Practical No [3]

Identification of *Trichuris trichiura*

1- What is the laboratory diagnosis for Trichuriasis?

(a) Samples:

(b) Test/s used in the laboratory?

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(c) Procedure of the wet mount test that follow in the routine laboratory?

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(d) Result:

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2- The laboratory diagnosis of *Trichuris trichiura* is made by finding:

- A) Barrel shape egg
- B) Larva
- C) Cyst
- D) Trophozoite

3- With drawing identify the diagnostic stage of *Trichuris trichiura*?

4- Draw adult of *Trichuris trichiura*?

Practical No [4]

Identification of *Entrobium vermicularis*

1- Mother came with her child to the clinic for examination, the child is suffering from intense irritation around the anus, and also the mother noticed presence of some string like structure in stool sample of her child. The doctor sent the child's to laboratory for necessary tests

(e) What is your suggested diagnosis?

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(f) What is the disease caused by that parasite?

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(g) Draw the diagnostic stage that identified under the microscope?

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(h) Drawing diagnostic stage/s?

2- To collect feces from patient infected with *Enterobius vermicularis* we used:

- A) Syringe
- B) Scotch tape
- C) Pipette
- D) None of the above

3- The infective stage of *Enterobius vermicularis* is:

- A) Larva
- B) Trophozoite
- C) Cyst
- D) None of the above

Practical No [5]

Lab diagnosis of Hook worms

1- A 30-year-old male presented to her physicians in Khartoum, with pneumonia-like symptoms, attacks of coughing, and bronchial asthma. The blood film examination showed eosinophilia, iron deficiency anemia. Also the faecal occult blood test was positive.

(a) What is the suggested diagnosis?

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(b) What is the disease caused by that parasite?

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(c) Draw the diagnostic stage/s that diagnosed under the microscope?

Practical No [6]

Lab diagnosis of *Strongyloides stercoralis*

1- A 15-year-old male presented to her physicians in Madani city, with itchy dermatitis, rash allergic and respiratory symptoms, abdominal pain, dysentery, malabsorption, steatorrhoea, and dehydration with electrolyte disturbance. The doctor sent the male to laboratory for necessary tests

(a) What is the suggested diagnosis?

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(b) What is the disease caused by that parasite?

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(c) What is the diagnostic stag?

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(d) Draw the diagnostic stage that diagnosed under the microscope?

Practical No [13]

Laboratory diagnosis of *Dracunculus medinensis*

Sample:.....

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Technique.....

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