

Final Semester Examination For Master Degree of
Clinical Pathology
Course Title: Medical Parasitology
Date: 13-2-2017
Time Allowed: 3 hours
Total Assessment Marks: 90 MARKS



Tanta University
Faculty of Medicine
Department of
Parasitology

The following questions must be answered: (Draw whenever possible)

I- Enumerate and draw the infective stages of five parasites which may infect the laboratory personnel through handling stool samples. Mention the infection control measures.

(15 marks)

II- **How can you confirm the diagnosis of the following parasitological cases:-** (15 marks)

1) A 5-year-old Egyptian child, living near Alexandria, presented with intermittent fever, abdominal enlargement and asthenia. On physical examination, there was marked splenomegaly and wasting. The haemogram revealed anaemia (haemoglobin: 7.5 g /dl), neutropenia, and mild thrombocytopenia.


2) A 45-year-old Egyptian female who was on steroid therapy for treatment of systemic lupus erythematosus, complained of recurrent abdominal pains, persistent diarrhoea, and intractable cough. Complete blood count revealed moderate eosinophilia (17%).

III- **Give an account on:** (15 marks)

- 1) Laboratory diagnosis of *Trichinella spiralis* infection.
- 2) Clinical types and diagnosis of myiasis.
- 3) Life cycle of *Plasmodium falciparum* in the human host (diagram only).

((TURN OVER THE PAPER))

Chairman of Department

Prof. Dr. 

IV- Give the reason(s) for: (15 marks)

- 1) Detection of *Schistosoma* eggs in the stool examination is not always possible.
- 2) Microfilaraemia may be absent in some cases of lymphatic filariasis.
- 3) Concentration by sedimentation is better than floatation technique in the diagnosis of trematodes.
- 4) The remarkable ability of helminths to establish chronic infections.
- 5) Some cases of amoebiasis may turn fatal.

V- Compare in a table between the following: (10 marks)

- 1) Eggs of *Trichuris trichiura* and *Capillaria philippinensis*.
- 2) Cyst of *Naegleria fowleri* and *Acanthamoeba* spp.
- 3) Oocyst of *Cryptosporidium* spp. and *Isospora belli* in fresh stool.
- 4) Eggs of *Clonorchis sinensis* and *Paragonimus westermani*.

VI- Mention the parasitological indications of the following: (10 marks)

- 1) Thick blood film.
- 2) Fine-needle aspiration biopsy.
- 3) Duodenal fluid sampling.
- 4) Skin biopsy.

VII- Choose the correct answer(s): (10 marks)

- 1) **All the following parasites could cause ectopic lesions EXCEPT:**
 - a) *Fasciola hepatica*
 - b) *Trichuris trichiura*
 - c) *Heterophyes heterophyes*
 - d) *Paragonimus westermani*
- 2) **Which of the following infections is/are associated with internal autoinfection?**
 - a) Cryptosporidiosis
 - b) Heterophyiasis
 - c) Giardiasis
 - d) Intestinal capillariasis
- 3) **Infection with which of the following can predispose to malignancy?**
 - a) *Trichuris trichiura*
 - b) *Plasmodium ovale*
 - c) *Schistosoma haematobium*
 - d) *Opisthorchis viverrini*
- 4) **Viability test is used for the diagnosis of which parasitic infection of the following?**
 - a) *Fascioliasis*
 - b) *Schistosomiasis mansoni*
 - c) *Strongyloidiasis*
 - d) *Dracunculiasis*

