

Final Semester Examination For Master Degree of
Clinical Pathology
Course Title: Medical Parasitology
Date: 1-10-2016
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 the parasites which may infect the laboratory workers. Mention the infection control measures. {10 marks}

II- How can you confirm the diagnosis of the following parasitological cases:- {15 marks}

1) A 53-year-old male Egyptian engineer lives in Aswan presented with regular repeated attacks of fever, rigors, malaise, and headache. On physical examination, the spleen tip was palpable. The haemoglobin was 7.5 g /dl, and the total bilirubin was 2.3 mg /dl.

2) A 45-year-old male Egyptian farmer presented with recurrent abdominal pain and diarrhea with broncho-pulmonary manifestations. Clinically there were linear skin eruption on the buttocks and trunk.

3) An AIDS patient has developed progressively severe headache and mental confusion, with ataxia and retino-choroiditis. On clinical examination there was generalized lymphadenopathy. Focal lesions are present on a computed tomography scan of his brain. His level of immunoglobulin (IgG) to infectious agent is high.

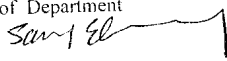
III- Give an account on: {20 marks}

- 1) Nested PCR (principle and applications in Parasitology).
- 2) Diagnosis of *Wuchereria bancrofti* infection.
- 3) Diagnosis and treatment of scabies.
- 4) Life cycle of *Trichuris trichiura* (diagram).

IV- Give the reason(s) of: {15 marks}

- 1) Detection of *Fasciola* egg in the stool examination is not always evident for infection.
- 2) Blood film is not used for the diagnosis of onchocerciasis.
- 3) Concentration by sedimentation is better than floatation technique in the diagnosis of trematodes.

((TURN OVER THE PAPER))

Chairman of Department
Prof. Dr. 

V- Compare between the followings:

{10 marks}

- 1) Eggs of *Ascaris lumbricoides* and *Capillaria philippinensis*.
- 2) Trophozoite of *Naegleria fowleri* and *Acanthamoeba* spp.
- 3) Oocyst of *Cryptosporidium* spp. and *Cyclospora cayetanensis*.
- 4) Eggs of *Hymenolepis nana* and *H. diminuta*.
- 5) Eggs of *Clonorchis sinensis* and *Fasciolopsis buski*.

VI- Menion the parasitological indications of the following:- {10 marks}

- 1) Schneider's media.
- 2) Zeihl-Neelsen stain in stool examination.
- 3) Fine-needle aspiration biopsy.
- 4) Enterotest.
- 5) Baermann's technique.

VII- Choose the correct answer:

{10 marks}

- 1) The protozoal parasite that can be diagnosed by the detection of sporocyst in the stool is:
 - a) *Giardia lamblia*.
 - b) *Cryptosporidium parvum*.
 - c) *Sarcocystis bovis/hominis*.
 - d) *Toxoplasma gondii*.
- 2) Charcoal Leyden crystals are helpful in the diagnosis of infection with the following parasites EXCEPT:
 - a) *Schistosoma mansoni*.
 - b) *Entamoeba histolytica*.
 - c) *Taenia* spp.
 - d) *Capillaria philippinensis*.
- 3) Sputum examination is helpful in the diagnosis of the following parasitic infections EXCEPT:
 - a) Ascariasis.
 - b) Metagonimiasis.
 - c) Strongyloidiasis.
 - d) Paragonimiasis.
- 4) Viability test is used for the diagnosis of infection with the following parasites:
 - a) *Fasciola hepatica*.
 - b) *Schistosoma mansoni*.
 - c) *Strongyloides stercoralis*.
 - d) *Dracunculus medinensis*.
- 5) Hyperbilirubinaemia may be detected in infection with the following parasite:
 - a) *Trichuris trichiura*.
 - b) *Fasciola gigantica*.
 - c) *Heterophyes heterophyes*.
 - d) *Hymenolepis nana*.
- 6) Trophozoites can act as the infective stage in the following parasites EXCEPT:
 - a) *Giardia lamblia*.
 - b) *Toxoplasma gondii*.
 - c) *Naegleria fowleri*.
 - d) *Trichomonas vaginalis*.

Prof. Dr. Sami El...