Master Degree of Tropical Medicine Course Title: Medical Parasitology Date: 24-8-2021 Time Allowed: 1.5 hours Total Assessment Marks: 100 MARKS

## Answer all the following questions:

## I. Give an account on:

- 1- The medical importance of flies.
- 2- Clinical aspects and Complications of Ascaris lumbricoides.
- 3- Pathogenesis and clinical manifestations of Chagas diseases.

# II. Case Study:

A 27 year old man who joined work in sugar cane farms in Upper Egypt four month ago, presented in urology clinic with dysurea and terminal haematurea. He didn't have any past history of urinary stones. By plain X-ray and urinalysis the following was observed:

- 1- What is the suspected parasite? (genus & species)
- 2- What are the possible complications?
- 3- Mention other three parasites causing urinary lesions.

## III. Explain why and mention 3 possible causative parasites for: 30 marks

- 1-Trace elements & vitamins deficiencies are possibly precipitated by parasitic infections.
- 2-Some parasitic infections fall under the category of nosocomial infections.
- 3-Liver is one of the commonest organs that harbor parasitic lesions.
- 4- There are many types of skin lesions triggered after exposure to arthropods.

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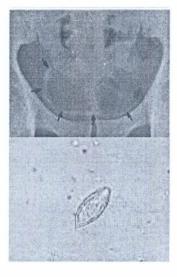


20 marks

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Medical Parasitology Dep.





## IV. Choose ONE correct answer:

1. Which of the following protozoa can cause generalized lymphadenopthay?

20 marks

- a) Trichomonas vaginalis
- b) Trichuris trichiura
- c) Toxoplasma gondii
- d) Trichinella spiralis

## 2. Which of the following helminths can cause disseminated entero-colitis?

- a) Diphyllobothrium latum
- b) Opithorchis viverrini
- c) Strongyloides stercoralis
- d) Trichinella spiralis

## 3. Which of the following protozoa can cause encephalopathy?

- a) Leishmania donovani
- b) Entamoeba dispar
- c) Naegleria fowleri
- d) Balantidium coli

## 4. Which of the following is considered an occupational disease?

- a) hydatidosis
- b) visceral larva migrans
- c) filariasis
- d) malaria

## 5. **I**vermectin is used in the treatment of:

- a) scabies
- b) Kala Azar
- c) Congenital toxoplasmosis
- d) Chagas disease

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Master Degree of Tropical Medicine Course Title: Medical Parasitology Date: 24-8-2021 Time Allowed: 1.5 hours Total Assessment Marks: 100 MARKS

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## 6. Which of the following is NOT a blood sucking arthropod?

- a) Phlebotomus morsitans
- b) Triatoma megistus
- c) dermatophagoides
- d) Pulex irritans

### 7. Which of the following *Leishmania* species causes hepatomegaly?

- a) L. maor
- b) L. tropica
- c) L. mexicana
- d) L. infantum

### 8. Which of the following is an anti-filarial drug?

- a) Permethrin
- b) Suramine
- c) Di-ethyl carbamazine
- d) Piperazine

## 9. Which of the following parasites can cause steatorrhoea?

- a) Cryptosporidium parvum
- b) Hook worm
- c) Giardia lamblia
- d) Pin worm

## 10. Anchovy sauce liver abscess may occur after:

- a) Hydatid disease
- b) Amoebiasis
- c) Toxoplasmosis
- d) Schistosomiasis mansoni

**Best wishes** 

Head of Medical Parasitology Department

Prof. Howaida Ismail

Howard

Examination for Master Degree in: Tropical Medicine Course title: Medical Microbiology & Immunology Date: 24 /8 / 2021 Term: August 2021 Time allowed: 1 hour Total assessment marks: 30 marks



Tanta University Faculty of Medicine Microbiology Department

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#### All Questions Are to Be Answered:

- Define bacterial virulence and explain the role of different factors affecting it. (4 marks).
- 2- Discuss the immune mechanisms against tumor. (4 marks)
- 3- Mention the causative agents and mode of transmission of the following diseases:

a-	Pseudomembranous colitis	(2 mark)
b-	Botulism	(2 mark)
c-	Malignant pustule	(2 mark)
d-	Toxic shock syndrome	(2 mark)
e-	Bacillary dysentery	(2 mark)

- 4- Discuss mode of infection and diagnosis of human immune deficiency virus (HIV) (4 marks)
- 5- Zoonotic diseases: Define, list the most common causative agents marks)
- 6- A 55-year-old man who just arrived from Germany experiences attacks of bloody diarrhea and abdominal cramps. He states that he had a hamburger sandwich with green salad. Culture of stools on Mac Conkey's medium reveals a pure culture of rose pink colonies. Examination of Gram-stained film from these colonies shows Gram-negative bacilli.
  - a) what is the possible causative organism of this condition? (1 marks)
  - b) What is the virulence factor of this organism? (1 marks)
  - c) What is tha most serious complication of this condition? (1mark)
  - d) Mention other types of the same species that can cause diarrhoea (2 mark)

Chairman of Department Prof. Mohamed Zakaria

Oral exam: Monday 30/8/2021At 10 am in Microbiology & Immunology Department

Final Semester Examination For Master Degree of Clinical Pathology Course Title: Medical Parasitology Date: 17-8-2021 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 techniques of direct examination of blood-dwelling parasites. Discuss in detail one of them. (8 marks)
- II- How can you confirm the diagnosis of the following parasitological cases:-
  - A. 37-year-old male patient, returning from Iraq, presented with multiple ulcers on his leg. About 6 weeks earlier, he noticed several red papules on his legs which then became ulcerated with oozing material. Over time, they reached 2 cm in diameter each with raised borders. On examination, there was no fever, chills, or weight loss.
  - B. A 6-year-old boy suffered from bouts of moderate fever associated with abdominal pains. Physical examination revealed mild hepatomegaly. Complete blood count show marked eosinophilia (35%) and mild anaemia.

#### III- Write short notes on:

- 1) PCR technique (principle and applications in parasitology).
- 2) Laboratory diagnosis of strongyloidiasis.
- 3) External myiasis.
- 4) Life cycle of *Clonorchis sinensis* (diagram only).

#### IV- Give the reason(s) for:

(15 marks)

(10 marks)

(20 marks)

- 1) The need for immunodiagnosis for schistosomiasis.
- 2) Hydatid cysts should be handled very carefully during surgery.
- 3) Renal impairment in case of malaria.
- 4) Life-threatening conditions may supervene during Ascaris infection.
- 5) Untreated kala-azar is frequently fatal.

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#### V- Compare between the following:

- 1) Stool smear in amoebiasis and cryptosporidiosis.
- 2) Blood film in lymphatic filariasis and falciparum malaria.
- 3) *Taenia solium* and *Taenia saginata* (morphology of gravid segments and scolices).
- 4) Anaemia in hookworm disease and visceral leishmaniasis.

## VI- <u>Mention the indication(s) of the usage of the following in parasitology:</u> (10 marks)

- 1) Coproantigen detection.
- 2) Toxoplasma IgG avidity test.
- 3) CSF examination.
- Diethylcarbamazine.
- 5) Ziehl-Neelsen stain.

#### VII- Choose the correct answer:

#### (15 marks)

- 1. A patient complained of recurrent fever every 72 hours. His blood film revealed a schizont with 8 merozoites. Which of the following is the suspected parasite?
  - a. Leishmania donovani
  - b. *Plasmodium malariae*
  - c. Plasmodium ovale
  - d. Plasmodium vivax

# 2. Which of the following parasites are associated with high risk of infection for lab technicians?

- a. Hymenolepis diminuta
- b. Ascaris lumbricoides
- c. Fasciola hepatica
- d. Taenia solium

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- a. Trichuris trichiura
- b. Ascaris lumbricoides
- c. Clonorchis sinensis
- d. Trichinella spiralis

#### 4. External autoinfection occurs in all the following infections EXCEPT:

- a. Cryptosporidiosis
- b. Intestinal capillariasis
- c. Enterobiasis
- d. Hymenolepiasis nana

#### 5. Entero-Test is useful for diagnosis of which of the following?

- a. Trichuris trichiura
- b. Enterobius vermicularis
- c. Clonorchis sinensis
- d. Balantidium coli

#### 6. The diagnostic stage of which parasite of the following is disporocystic tetrazoic?

- a. Cryptosporidium spp.
- b. Cyclospora cayatenensis
- c. Isospora belli
- d. None of the above

#### 7. Which of the following statements is True regarding Acanthamoeba?

- a. It is a common cause of chorioretinitis
- b. It only exists as a trophozoite stage
- c. Affection of the brain is always manifested as acute meningoencephalitis
- d. Its trophozoites and/or cysts can be detected in infected tissues

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#### 8. All the following parasites cause meningitis EXCEPT:

- a. Ancylostoma duodenale
- b. Strongyloides stercoralis
- c. Trichinella spiralis
- d. *Trypanosoma gambiense*

9. Fever, diarrhea, and eosinophilia in a returned traveller may be due to each of the following as a single causative agent EXCEPT:

- a. Strongyloides stercoralis
- b. Plasmodium falciparum
- c. Capillaria philippinensis
- d. Schistosoma mansoni

#### 10. Which of the following parasites is carcinogenic?

- a. Paragonimus westermani
- b. Schistosoma haematobium
  - c. Trichuris trichiura
  - d. Schistosoma japonicum

# 11. Which of the following mechanisms are used by African trypanosomes for immune evasion?

- a. Intracellular location
- b. Acquiring a coat of host proteins
- c. Antigenic variation
- d. Hiding inside macrophages

#### 12. Which of the following is associated with serpiginous track-like skin lesion?

- a. Ancylostoma braziliense
- b. Ancylostoma duodenale
- c. Toxocara canis
- d. Trichuris trichiura

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- a. Giardiasis
- b. Visceral larva migrans
- c. Paragonimiasis
- d. Trichuriasis

14. Which of the following parasites induces solid immunity?

- a. Giardia lamblia
- b. Cryptosporidium parvum
- c. Leishmania tropica
- d. Plasmodium vivax

15. Tropical pulmonary eosinophilia is a manifestation of which of the following?

- a. Paragonimiasis
- b. Lymphatic filariasis
- c. Schistosomiasis haematobium
- d. Strongyloidiasis

# **Best Wishes**

سيتم تحديد مواعيد الإمتحانات الشفوى و العملي بمعرفة القسم

Chairman of Department Prof. Dr.

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