



**Molecular Biology Program**  
Parasitology & Infectious diseases (204 Z)

المستوى الثاني / برنامج البيولوجيا الجزيئية  
علم الطفيليات و الأمراض المعدية

Department: Zoology	Marks: 60	Time: Hour	Date: 18/1/2026
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Answer the Following Questions: (Exam in Two Pages)

Question one: \_\_\_\_\_ (20Marks/ 2 each):

Choose the correct answer in the following sentences:

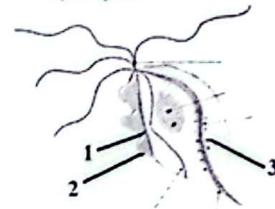
1- A parasite living inside the lumen of the intestines is.....

- a) Enterozoic parasite                      b) Hematozoic parasite                      c) Cytozoic parasite

2- Vacuolated form of *Blastocystis* is usually seen in stool specimen and measures..... in diameter.

- a) 8  $\mu\text{m}$     b) 9  $\mu\text{m}$     c) 6  $\mu\text{m}$

3- The provided image illustrates.....and the numbered parts (1-3) of this image are.....,.....and ....., respectively



- a) *T. vaginalis* & undulating membrane, costa, granules.                      b) *T. vaginalis* & costa, undulating membrane, axostyle.                      c) *T. vaginalis* & costa, undulating membrane, granules.

4- *Naegleria fowleri* parasite is .....

- a) Accidental parasite                      b) Facultative parasite                      c) none of them

5- All of the following are true EXCEPT .....

- a) Acute Chagas' disease occurs soon after infection and may last for 1-4 months.                      b) It is seen often in children under 2 years of age.                      c) The patient may die of acute myocarditis within 4-9 weeks.

6- Manifestations of congenital toxoplasmosis in the illustrated image increase.....



- a) When infection is transmitted in the first trimester of pregnancy.                      b) After birth, newborns remain infected for the rest of their lives.                      c) After weeks, months, and even years of birth, the clinical manifestations of toxoplasmosis develop.

7- *Glossina palpalis* transmits the infective stages of.....

- a) *Leishmania*    b) *Trypanosoma*    c) *Plasmodium*

8- Which of the following is the quickest and most common method of diagnosing trichomoniasis?

- a) Examining a sample of secretions under a microscope                      b) Examining a sample of urine under a microscope                      c) Performing nucleic acid amplification tests

9- The host that makes the parasite available for the transmission to another host is.....

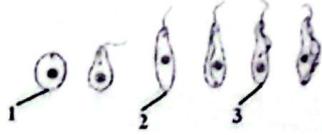
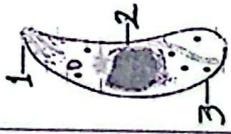
- a) Natural host    b) Reservoir host    c) None of them

10- In which parasite infection is acquired by ingestion of food or water contaminated with cysts?

- a) *E. histolytica*    b) *E. hartmanni*    c) Both a & b

**Question two: (25 Marks/ 1 each):**

- Put true (✓) or false (X) in the following sentences:

1-Physical examination and diagnosis of <i>N. fowleri</i> through <i>Cerebrospinal fluid</i> or PCR on CSF.	(...)
2- Trophozoite of <i>T. vaginalis</i> is a pear-shaped and measured 7-23µm long & 5-15µm wide.	(...)
3- Trypanosomatid cellular forms are Leishmania form, Leptomonas, Promastigote, respectively.	(...)
	
4- The relationship between certain species of flagellated protozoa living in the gut of termites is commensalism.	(...)
5- The life cycle of <i>Giardia lamblia</i> consists of two stages, the trophozoite and cyst. The trophozoite is 15 µm long and 20 µm wide anteriorly.	(...)
6-The treatment drugs used in toxoplasmosis are pyrimethamine, sulfadiazine and nitazoxanide.	(...)
7- Watery diarrhea, Nausea, Abdominal pain, Bloating, Excessive gas, Loss of appetite, Weight loss, Anal itching, Fatigue are symptoms of intestinal protozoan <i>B. hominis</i> .	(...)
8- The trophozoites of <i>N. fowleri</i> can withstand moderate heat (45 °C), but die at chlorine levels of 3 ppm and salinity of 0.7%.	(...)
9- The amoeboid form of <i>N. fowleri</i> is about 10–20 µm with rounded pseudopodia (lobopodia), an oval nucleus and a big endosome.	(...)
10- Clinical features in this stage may result intestinal amebiasis, or extra intestinal amebiasis, Diarrhoea, flatulence, and cramping.	(...)
	
11- The host that is under normal circumstances not infected with the parasite called Accidental host.	(...)
12 An important drug used for the treatment of <i>E. histolytica</i> Metronidazole and Iodoquinol.	(...)
13- Amastigotes of <i>T. cruzi</i> are intracellular, oval bodies measuring 2–6 µm in diameter having a nucleus and kinetoplast	(...)
14- Mature cyst of <i>Entamoeba histolytica</i> contains 4 nuclei and measures 10–20 µm in size.	(...)
15-Drinking clean water and chlorination of swimming pools are prevention and control of <i>Blastocystis</i> parasites.	(...)
16- Examination of thin Giemsa-stained peripheral blood, tissue biopsy, PCR on clinical samples are for <i>Trypanosoma cruzi</i> .	(...)
17- A parasite that lives its whole life in a single host known as permanent parasite.	(...)
18-Fever, Winterbottom's sign and rash, anaemia are symptoms of <i>Trypanosoma cruzi</i> .	(...)
19- The provided image illustrates a <i>Toxoplasma gondii</i> tachyzoite and the numbered parts are apical complex, endoplasmic reticulum, plasma membrane, respectively.	(...)
	
20-Eight –nucleated cyst is the infective stage of <i>E. coli</i> and causes Intestinal infections.	(...)
21- Serological test is method used for diagnosis of amoebic dysentery.	(...)
22-Transmission of <i>E.histolytica</i> through Person to person (fecal-oral) and contaminated food.	(...)
23- <i>Trypanosoma brucei gambiense</i> completes its life cycle in 2 hosts.	(...)
24- Oocysts of <i>T. gondii</i> is oval in shape and measures 10–15 µm in diameter.	(...)
25- <i>E.gingivalis</i> is a commensal parasite if swallowed; it is not digested in the stomach.	(...)

**Question three: (15 Marks):**

- Explain the pathogenesis and clinical features of *Giardia lamblia*, and where it lives?

Best of Luck انتهت الامئلة  
 Examiner: Ass.Prof./ Shereen Ahmed Fahmy  
 Head of Department: Prof. Dr./ Ayman Hyder