



Final TERM EXAM.
Jan. 2025



Molecular Biology Program
Parasitology & Infectious diseases (234 Z)

المستوى الثاني/ برنامج البيولوجيا الجزيئية
علم الطفيليات و الأمراض المعدية

Department: Zoology	Marks: 60	Time: Hour	Date: 5/1/2025
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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 35 year old male presents with complaints of fever and flu-like symptoms. He is also found to have hepatosplenomegaly. A blood smear was ordered for parasite analysis.

Which vector responsible for transmission of the pathogen?

- a) Tsetse fly b) Triatomine bug c) Both a & b

2- Most of the normal floras of the humans' body can be considered as.....

- a) symbionts b) mutualistic c) commensals.

3- The image shown before you found in the buccal cavity of man causes.....



- a) No disease b) Amoebic dysentery c) Bronchitis

4- *Naegleria fowleri* parasite is

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

5-- Which of the following "trophozoite" is a vector for

- a) *Giardia lamblia* b) *Balantidium coli* c)) none of them

6-All of the following are diagnostic features of the provided image, except.....



- a) It is slightly larger than a white blood cell, measuring 9 X 7 μ m. b) Have five flagella arise near the cytostome. c) Can survive for 24 hours, an ability to persist with a moist surface for 1 to 3 hours.

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- Which type of *Plasmodium* invades young and old RBCs cells.....

- a) *vivax* b) *falciparum* c) Both a & b

10- Reservoir hosts of *Trypanosoma* are.....

- a) Gazelle b) Oryx c) Both a & b

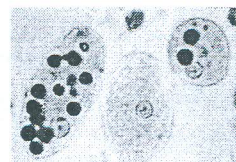
Question two: (25 Marks/ 1 each):

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

1-The life cycle of *Giardia lamblia* consists of two stages, the trophozoite and cyst. The trophozoite is 15 µm long and 20 µm wide anteriorly. (....)

2- The effective drugs against *Giardia lamblia* are metronidazole, tinidazole or nitazoxanide. (....)

3- The size of provided image about 10-40µm in diameter, can penetrate into the intestinal wall and invade the liver and other organs. (....)



4- Cytozoic Parasite is one that wanders in to an organ in which it is not usually found. (....)

5-Nephritic syndrome following *Plasmodium* infections is type of direct effects of the parasite on the host (....)

6-Blood, Stool, Urine, Biopsy material and Vaginal discharge are the only laboratory diagnosis for protozoan parasites. (....)

7-Mild diarrhea, foul-smelling with abdominal cramps, flatulence, and streatorrhoea are symptoms of intestinal protozoan *Giardia lamblia*. (....)

8- The trophozoites of *E.hartmanni* do not ingest red blood cells, and their motility is generally less vigorous than that of *E.histolytica*. (....)

9-Pathogenesis and disease symptoms of *Trichomonas vaginalis* is found in the urethra & vagina of women and the urethra & prostate gland of men. (....)

10-The shown image represents the resting stage that enables the parasite to survive inside the body and infection begins from swallowing it. (....)



11- Intermediate host harbors a parasite in the adult stage. (....)

12- An important drug used for the treatment of *E. histolytica* Metronidazole and Chloroquine. (....)

13- Amastigote phase lives in pharynx and midgut of sand fly and feeds on blood of insect. (....)

14-The basal body anterior of nucleus, with short, non-functional, flagellum in *Leishmania* form. (....)

15- Fever, Chills and rapid breathing are symptoms of Trypanosoma parasites. (....)

16- Examination of tissue biopsy,spleen,bone marrow or lymph node was for *Trypanosoma*. (....)

17-Pseudoparasite is artifact mistaken as parasite such as: *Blastocystis hominis*. (....)

18-Reservoir host makes the parasite available for the transmission to another host. (....)

19- The provided image illustrates epimastigote (crithidia form).



20-Quadrinucleated cyst is the infective stage of *E. coli* and causes Intestinal infections. (....)

21-There are 2 sub-species of *T.gambiense* and *T.rhodesiense* cause sleeping sickness. (....)

22-Transmission of *E.histolytica* through Person to person (fecal-oral) and contaminated food. (....)

23-There are five species of *Plasmodium* infecting humans and definitive host is mosquito. (....)

24- *L. donovani* causes the classic kala-azar ("black sickness") or dumdum fever. (....)

25- *T.gambiense* distinguished from other forms by the presence of a kinetoplast&flagllum base. (....)

Question three: (15 Marks):

- Describe the life cycle of Trypanosoma parasite mentioning the name of disease of its all type?

Best of Luck انتهيتم الاسئلة

Examiner: Ass.Prof./ Shereen Ahmed Fahmy

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