



# TECHNICAL UNIVERSITY OF MOMBASA

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FACULTY OF APPLIED AND HEALTH SCIENCES

DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES

**UNIVERSITY EXAMINATION FOR:**

**BACHELOR OF SCIENCE IN ENVIROMENTAL HEALTH**

**AML 4203 : MEDICAL PROTOZOOLOGY**

**END OF SEMESTER EXAMINATION**

**SERIES: AUGUST 2017**

**TIME: 2 HOURS**

**DATE: 1 Sep 2017**

## Instructions to Candidates

You should have the following for this examination

-Answer Booklet, examination pass and student ID

This paper consists of **TWO** Section(s). Attempt ALL questions.

**Circle the correct answer in section A.**

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PAPER 1

Section A 30 Marks

1) Which of the following is not important diagnostic feature for *Giardia Lamblia*

- a) Consist of two stages trophozoite and cyst.
- b) It is bilateral Symmetrical
- c) It is pear shaped
- d) It has four pairs of flagella
- e) Oval

2) The following protozoa are classified in the class of zoomastigophora except of:

a) *Trypanosomes*.

b) *Leishmania*

c) *Iodamoeba butschli*.

d) *Chilomastix*.

e) *E. tenax*

3) Which of the following flagellate cysts have being lemon shaped with cuterior hyaline knob.

a) *Giardia lamblia*.

b) *Trichomonas hominis*.

c) *Trichomonas vaginalis*.

d) *Chilomastix mesnili*.

e) *E. histolytica*

4) Which of the following protozoa have falling leaf movement?

a) *Entamoeba coli*.

b) *Chilomastix mesnili*

c) *Entamoeba butschli*

d) *Trypanosome cruzi*

e) *E. gingivalis*

5) Visceral leishmaniasis is also referred as:

a) Changes

b) Kala- azar.

c) Cutaneous leishmaniasis

d) Espondia

e) Dermatitis

6) Which of the following trypanosome species cause slow onset chronic trypanosomiasis.

- a) *Trypanosomes brucci gambiense*.
- b) *Trypanosomes brucci rhodensience*.
- c) *Trypanosomes cruzi*.
- d) *Trypanosomes cruzi* and *Trypanosome rhodensience*
- e) T.bruccei and T. cruzi

7) Genie animals and livestock trypanosomiasis is caused by:

- a) *Trypanosomes brucei gambiense*.
- b) *Trypanosomes brucei rhodensiences*.
- c) *Trypanosomes brucei*
- d) *Trypanosomes cruzi*.
- e) *Trypanosome regelli*

8) *Isospora belli* and sarcocystis species are classified in the following class:

- a) *Entamoeba*
- b) *Endolimax*
- c) *Sporozoa*
- d) *Cilliata*.
- e) *Trichomas*

9) Diagnosis of *Isospora belli* is based on the following:

- a) Demonstration of unsporulated oocyst in faeces

- b) Demonstration of sporulated oocyst in faeces
- c) Demonstration of trophozoites oocyst in blood
- d) Demonstration of sporulated oocyst in urine
- e) Demonstration of sporulated oocyst in tissues
- f)

10) Isosporabeli and Sacocystis hominis occur in:

- a) Urogenic tract
- b) Intestinal tract
- c) Respiratory tract
- d) Blood System.
- e) Skin

11) Penta*Trichomonas huminis* resides in the:

- a) Intestinal tract
- b) Respiratory tract
- c) Urogenital tract
- d) Blood System.
- e) Mouth

12). Which of the following flagellate diagnosis is by demonstration of Trophozoites and cysts in faces?

- a) *Chilomestix mesnili*
- b) *Trichomonas vaginalis*.
- c) *Trichomonas tenax*.
- d) *Trypanosoma cruzi*
- e) *Entamoeba histolytica*

13). The demonstration of trophozoites in vaginal secretion, scrapings urethral discharge and sedimented urine specimens is a definitive diagnosis of:

- a) *Trichomonas tenax*
- b) *Trichomonas hominis*.
- c) *Chilomatrix mesnili*.
- d) *Trichomonas vaginalis*.
- e) *Entamoeba coli*

14). Which of the following trophozoite flagellate have diagnostic characteristic of cytostome resembling shepherd crook?

- a) *Trichomonas hominis*
- b) *Trichomonas vaginalis*.
- c) *Trichomonas tenax*.
- d) *Petatrchomonas chilomastix mesnili*.
- e) *Balantidium coli*

15). Which of the following flagellate is non pathogenic

- a) *Trichomonas hominis*
- b) *Trichomonas vaginalis*
- c) *Entamoeba histolytica*
- d) *Leishmaia* species
- e) *Entamoeba gingivalis*

16). Cytostome and cytopye is a characteristic of

- a) Cyst of *Giardia lamblia*
- b) Trophozoite of *Giardia lamblia*

- c) Cyst of *Balantidium coli*
- d) Leishmania
- e) E, coli

17). Which of the following parasites survive the host immune attack by surviving in the macrophages?

- a. *Entamoeba histolytica*
- b. Malaria parasites
- c. *Giardia lamblia*
- d. Leishmania species
- e. Ascaris

18). Which of the following is the drug of choice for treatment of vaginitis due to trichomonas vaginilis?

- a. Metronidazole
- b. Piperazine
- c. Thiabendazole
- d. chloroquine
- e. Mebendazole

19). Which of the following protozoa is the most pathogenic?

- a. *Plasmodium ovale*
- b. *Plasmodium falciparum*
- c. *Plasmodium malariae*
- d. *Plasmodium vivax*
- e. *E. coli*

20). Of the four species of plasmodium the most less pathogenic species is:-

- a. *Plasmodium ovale*

*b. Plasmodium vivax and Ovale*

*c. Plasmodium malariae*

d. Plasmodium ovale and plasmodium falciparum

e. *P. cymongi*

21). The pathogenic ciliate is diagnosed by the presence of

a. A two nucleate cyst

b. An iodine cyst

c. None nucleate cyst

d. Four nucleate cyst

e. Eight nucleate cyst

22). The following are the most likely vectors for balantidiosis

a. Female anopheles mosquitoes

b. Bed bugs

c. Fleas

d. Phlebotomies' sand flies

e. Lice

23). The pale clay Bucky and smelly stool received in the laboratory is suspected of the following protozoa:-

*a. Chlamydomonas mesnili*

*b. Entamoeba histolytica*

*c. Entamoeba coli*

*d. Trichomonas hominis*

*e. Giardia*

24). The organelles of locomotion in *Balantidium coli* are:-

a. Flagelle

b.Pseudopodia

c.Cilia

d.Gliding

e. Sliding

25). Which of the following protozoa flagellate is intestinal?

a.*Giardia lamblia*

b.*Leishmania* species

c.*Trypanosome brucei brucei*

d.*Trypanosome cruzi*

e.*Trichinella*

26). Picomplexia contains:-

a.Amoebae

b.Dientamoeba

c.Malaria parasites

d.Iodamoeba

e.*P. ovale*

27). *Trichomonas tenax* resides in:-

a.Vagina

b.Caecum

c.Small intestine

d.Large intestine

e. Blood



28). *Entamoeba gingivalis* lives in:-

- a. Vagina
- b. Mouth
- c. Caecum
- d. Small intestine
- e. Blood

29). How many pairs of the flagella are present in the trophozoite of *Giardia lamblia*?

- a. One pair
- b. Two pair
- c. Three pairs
- d. Four pairs
- e. Eight pairs

30). The hemoflagellate include:-

- a. *Entamoeba coli*
- b. *Balantidium coli*
- c. *Trichomonas vaginalis*
- d. *Trypanosomes*
- e. *Trichuris*

Section B 40 Marks

**Section B Answer all questions**

31. a). Describe the Lifecycle *leishmania* parasites

10 marks

b). Describe the effect of *Trypanosomes* on man?

10 marks

32. a). Outline the pathogenesis of *Entamoeba histolytica*? 10 marks

b) Describe in detail the Elisa method in aid of protozoa diagnosis? 10 marks