



**THE KENYA POLYTECHNIC UNIVERSITY
COLLEGE
SCHOOL OF HEALTH SCIENCES AND TECHNOLOGY**

**DEPARTMENT OF BIOMEDICAL LABORATORY SCIENCES AND
TECHNOLOGY**

DIPLOMA IN MEDICAL LABORATORY SCIENCES

END OF YEAR II EXAMINATION

NOVEMBER SERIES 2011

PARASITOLOGY

TIME: 3 HOURS

INSTRUCTIONS

This paper consists of TWO SECTIONS: A and B.

Answer ALL questions in SECTION A and B.

Circle the letters of ALL correct answers in each multiple choices questions

Any wrong answer for multiple choices will be penalized (0.5 marks)

Section A (40 Marks)

1 Amoeboma is a parasitic disease caused:

- a. Giardia Lamblia
- b. Entamoeba coli
- c. Entamoeba histolytica
- d. Isasporabelli

2 The portion of the gastro intestinal tract where excystation of Entamoeba histolytica occurs is called:

- a. Duodenum
- b. Colon
- c. Rectum
- d. Lower elium

3 Amebic meningitis is diagnosed by:

- a. Blood film
- b. Serological examination
- c. Lumber puncture
- d. Finger prick

4 Hookworm ova is characterized by:

- a. 3-Segmented larva
- b. Round shape
- c. Thick wall
- d. 1-Segmented larva

5 Acanthamoeba species cause:

- a. chronic primary meningoencephalitis
- b. keratitis with blindness
- c. granuloma of internal organs
- d. Lumenal amebiais

6 Liver abscess is a known complication of infection with:

- a. fasciola hepatica
- b. giardia lamblia
- c. schistosoma mansoni
- d. entamoeba histolytica

7. The phylum of Toxoplasma gondii is:

- a. Zoomastigophora
- b. Platyhelminthes
- c. Apicomplexa
- d. Chordata

8 Infective stage of wuchereria bancrofti to humans is

- a. Larva
- b. Oocyst
- c. Filariform larva
- d. Microfilaria

9 One of the Intestinal sporozoan parasites is

- a. Cryptosporidium sp
- b. Pneumocystisw carinii
- c. Plasmodium sp
- d. Leishmania

10 Intermediate host of Leishmania major is

- a. Phebotomus martini
- b. Phlebotomus pedifer
- c. Phlebotomus orientalis
- d. Phlebotomus dubosgui

11 Trypanosoma epimastigote is:

- a. Found in definitive host
- b. Free living
- c. Found in intermediate host
- d. Host cells

12 Scotch tape method is performed in the diagnosis of:

- a. Trichuriasis
- b. Enterobiasis
- c. Ascariasis
- d. Taeniasis

13 Xynopsilla cheopis is an intermediate host of:

- a. Tenia saginata
- b. Tenia solium
- c. Hymenolepis nana
- d. Hymenolepis diminuta

14 Flask shaped ulcers in the colon are caused by:

- a. Giardia lamblia
- b. Acanthamoeba
- c. Entamoeba histolytica
- d. Toxocara canis

15 Trichomoniasis vaginalis is diagnosed by:

- a. Swap method
- b. X-method
- c. Staining method
- d. Iodine method

16 Loasis is a parasitic disease caused by a

- a. Protozoan worm
- b. Filrial worm
- c. Hookworm
- d. Flatworm

17 Trichomonas vaginalis moves by :

- a. pseudopodia
- b. cilia
- c. flagella

d. none of the above

18 The following statement is true about giardiasis :

- a. Characterized by Flatulence
- b. Epizootic
- c. Zoonotic
- d. Blidness

19 Infection with giardia lamblia is through:

- a. Ingestion of the trophozoite stage
- b. Ingestion of the cyst stage
- c. Ingestion of the egg
- d. Ingestion of larva

20 After ingestion of giardia lamblia, cyst hatching takes place in the :

- a. stomach
- b. lower part of small intestine
- c. upper part of small intestine
- d. colon

21 The parasite that results in symptoms of duodenitis is:

- a. Entamoeba coli
- b. Balantidium coli
- c. Entamoeba histolytica
- d. giardia lamblia

22 The protozoan causing amebic dysentery is :

- a. Entamoeba coli
- b. Endolimax nana
- c. Naegleria fowleri
- d. Entamoeba histolytica

23 The protozoan transmitted mainly by sexual contact is:

- a. Trichomonas hominis
- b. Dientamoeba fragilis
- c. Trichomonas vaginalis
- d. Balantidium coli

24 Schistosoma hematobium is transmitted by:

- a. Anopheles arabiensis
- b. Biomphalaria sp
- c. Bulimus sp
- d. Glossina sp

25 Laboratory diagnosis of Leishmaniasis *major* is best done by:

- a. Fecal examination
- b. Serology
- c. Blood examination
- d. Skin scraping

26 The following disease is transmitted by Culex sp:

- a. Malaria
- b. Schistosomiasis
- c. Elephantiasis
- d. Hydatidosis

27 Relapse in malaria is due to:

- a. Hypnozoites
- b. Trophozoites
- c. Gametocytes
- d. Sporozoites

28 The following parasites cause fever except:

- a. *Trichinella spiralis*
- b. *Naegleria fowleri*
- c. *Hymenolopis nana*
- d. *Plasmodium vivax*

29 Lymphadenitis is associated with the following infections except:

- a. African trypanosomiasis
- b. Leishmaniasis
- c. Ascariasis
- d. Elephantiasis

30 Chronic trypanosomiasis in humans is due to:

- a. *Trypanosoma brucei*
- b. *T. cruzi*
- c. *T. rhodesiense*
- d. *T. gambiense*

31 Dogs are sources of infection for the following parasites:

- a. *Entamoeba histolytica*
- b. *Echinococcus granulosus*
- c. *Trichomonas hominis*
- d. *Plasmodium knowlesi*

32 The following statements are true regarding *Plasmodium falciparum* infection except:

- a. it causes malignant tertian infection
- b. relapses occur every 3 months
- c. characterized by severe anemia
- d. characteristically paroxysms occurs every 72 hours

33 African animal trypanosomiasis is caused by :

- a. *Trypanosoma brucei*
- b. *Trypanosoma cruzi*
- c. *Trichinella spiralis*
- d. *Onchocerca volvulus*

34 *Naegleria fowleri* inhabits:

- a. Fresh water pools
- b. Salt lakes
- c. Running water
- d. Marshy environments

35 Nephrotic syndrome in *Plasmodium malariae* is due to :

- a. Deposition of immune-complexes in glomerular capillaries
- b. Severe anemia
- c. Hypoproteinemia

d. Hyperglycemia

36 Sporogony takes place in:

- a. human blood
- b. the liver cells
- c. mosquitoes
- d. other sites

37 Stained smears from an organ in Visceral leishmaniasis show:

- a. amastigote form
- b. promastigote form
- c. epimastigote form
- d. trypomastigote form

38- Black water fever is due to:

- a. Theileria sp
- b. Babesia sp
- c. Plasmodium sp
- d. Anaplasma sp

39 Multiplication of sporozoites is called:

- a. Gametogony
- b. Schizogony
- c. Sporogony
- d. Merogony

40 visceral Leishmaniasis culture of the biopsy material on NNN medium results in :

- a. amastigote form
- b. promastigote form
- c. Epimastigote form
- d. Leishmania form

SECTION B (60 Marks)

41. Outline the life cycle of:

- a) Ancylostoma duodenale 10mks
- b) Schistosoma haematobium 10mks

42. Compare pathogenesis of onchocerciasis and hookworm 20mks

43. Contrast the formalin-ether concentration and wet preparation diagnostic techniques 20mks