



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF ENVIROMENT & HEALTH SCIENCES
UNIVERSITY EXAMINATION FOR:
BCHALOR OF SCIENCE IN COMMUNITY HEALTH
AML 4131 : INRODUCTION TO MEDICAL PARASITOLOGY
END OF SEMESTER EXAMINATION

SERIES: AUGUST 2017

TIME: 2 HOURS

DATE: 25 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.

PAPER 1

Section A

1.Pseudopodium is the organelle of locomotion of:-

- (a)*Giardia lamblia*
- (b)*Leishmania tropica*
- (c)*Leishmania donovani*
- (d)*Entamoeba histolytica*
- (e)*Balantidium*

2.Which of the following protozoa belong to class cilliophora?

- (a). *Cryptosporidium parvum*
- (b). *Plasmodium species*

(c). *Entamoeba histolytica*

(d). *Balantidium coli*

(e) *Giasdia lamblia*

3. Diagnosis of trichomonas huminis infections can be established by:-

(a) Demonstration of trophozoites in urine

(b). Demonstration of trophozoites in saliva

(c). Demonstration of cysts in urine

(d). Demonstration of trophozoites and cysts in feces

(e). Demonstration of trophozoites in blood

4. Each of the following statements concerning hookworm infection is correct except

(a) Hookworm infection can cause pneumonia

(b) Hookworm infection is acquired by active penetration

(c) Diagnosed by finding the trophozoite in the stool

(d) Hookworm infection is caused by *Necator americanus*

(e) Hookworm infection is caused by *Acylostoma duodenale*

5. Pigs or dogs are the source of human infection by each of the following parasites except:

(a) *Taenia solium*

(b) *Ascaris lumbricoides*

(c) *Trichinella spiralis*

(d) *Ascaris suum*

(e) *Echinococcus granulosus*

6. Which of the following parasites are diagnosed by use of xenodiagnosis?

(a) *Strongyloides stercoralis*

(b) *Shistosoma mansoni*

(c) *Trichinella spiralis*

(d) *Ascaris lumbricoides*

(e) *Trichuris trichiura*

7. One of the following parasites has more than two host to complete its lifecycle

(a) *Ascaris lumbricoides*

(b) *Enterobius vermicularis*

(c) *Trichuris trichiura*

(d) *Paragonimus westermani*

(e) *Trichuris trichiura*

8. How is the intermediate flea host of *Dipylidium caninum* infected?

(a). Hatched larvae penetrate through the adult flea exoskeleton

(b.) Hatched larvae penetrate through the larval flea exoskeleton

(c). Hatched larvae are engested by the adult flea

(d). Eggs still within their gravid proglottids are engested by larval fleas

(e). Eggs released from their gravid proglottids are engested by adult fleas

9. The following is the first larval stage of trematodes

- a) Schistosomulum
- (b) Miracidia
- (c) Cercariae
- (d) Metacercariae
- (e) Adult

10. The following are advantages of using formalin in preparation of stool samples except

- (a) Easy to prepare
- (b) Good overall fixative
- (c) Long shelf life
- (d) Preserves trophozoites well
- (e) Short half life

11. The following nematodes are acquired through ingestion of infective eggs except

- (a) *Ascaris lumbricoides*
- (b) *Hookworm*
- (c) *Trichuris trichiura*
- (d) *Enterobius vermicularis*
- (e) *Trichinella spiralis*

12. The drug of choice in the treatment of *Ascaris lumbricoides*

- (a) Metronidazole
- (b) Abendanzole
- (c) Piperazine
- (d) Chloroquine
- (e) Tinidazole

13. The drug of choice for treatment against *Schistosoma* adults is

- (a). Mebendazole
- (b). Albendazole
- (c). Arecoline hydrobromide
- (d). Bunamidine hydrochloride
- (e). Praziquantel

14. Each of the following statements concerning *Ascaris lumbricoides* is correct except?

- (a) *Ascaris lumbricoides* is one of the largest nematode
- (b) *Ascaris lumbricoides* can cause pneumonia
- (c) Both dogs and cats are intermediate host of *Ascaris lumbricoides*
- (d) *A lumbricoides* is transmitted by ingestion of egg
- (e) They segmented

15 Which of the following parasite species of Schistosomes that lodges in the mesenteric veins of intestines and cause erosions of G.I.T

- (a) *Schistosoma metheei*
- (b) *Shistosoma japonicum*
- (c) *Schistosoma haematobium*
- (d) *Schistosoma bovis*
- (e) *Shistosoma rhodiani*

16 The pathological changes in Schistosomiasis are caused mainly by:

- (a). immature eggs.
- (b). Mature eggs.
- (c). Adult worm

- (d). Adult worm
- (e). Schistosomulum

17 Which parasite from the list below has been associated with the development of pernicious anemia?

- (a). *Diphyllobothrium latum*
- (b). *Echinococcus granulosus*
- (c). *Spirometra mansonioides*
- (d). *Schistosoma haematobium*
- (e). *Paragonimus westermani*

18 Which of the following agent is used to prevent Malaria

- (a) Mebendazole
- (b). Chloroquine
- (c). Inactivated vaccine
- (d). Zinc tablet
- (e) Metronidazole

19 Which of the following requires two intermediate hosts to complete its life cycle?

- (a) *Taenia solium*
- (b) *Diphyllobothrium latum*
- (c) *Hymenolepis nana*
- (d) *Taenia saginata*
- (e) *Ascaris lumbricoides*

20 All of the following are hepatic flukes except?

- (a) *Fasciola hepatica*
- (b) *Fasciola gigantica*

- (c) *Metagonimus yokogawi*
- (d) *Dicrocoelium dentriticum*
- (e) *Chronechis sinensis*

21. What is the method of choice for demonstrating a pinworm infection?

- (a). Ova and parasite exam of stool
- (b). Ova and parasite exam of sputum
- (c). Scotch tape preparation from perianal area
- (d). Serological testing
- (e) Electrophoresis

22 The following worms belong to class Nematelminths:

- a) *Hymenolepis nana*
- b) *Dipylidium caninum*
- c) *Echinococcus granulosus*
- d) *Opistorchis felineus*
- e) *Trichuris trichiura*

23 Which one of the following is not soil transmitted helminth?

- (a) *Ascaris lumbricoides*
- (b) *Hookworm*
- (c) *Trichuris trichiura*
- (d) *Enterobius vermicularis*
- (e) *Trichinella spiralis*

24 Which one of the following parasites are associated with occult gastrointestinal bleeding and iron deficiency;

- A) Hookworms
- B) *Trichuris trichiura*
- C) *Strongyloides stecoralis*
- D) *Trichinella spirali*

25 Which of the following is the dog tapeworm?

- (a) *Hymenolepis nana*
- (b) *D. latum*
- (c) *Hymenoleptis dimunita*
- (d) *Enchinococcus granulosus*
- (e) *Taenia solium*

26. For filarial nematodes, what key characteristic(s) of the microfilarial form is/are used to identify them?

- (a). Sheathed or unsheathed
- (b). Distribution of nuclei within its tip
- (c). Length of buccal cavity
- (d) Morphology
- (e) Size

27. Worldwide, the most prevalent helminth to infect human is:

- (a) *Ascaris lumbricoides*
- (b) *Hookworm*
- (c) *Trichuris trichiura*
- (d) *Enterobius vermicularis*
- (e) *Schistosoma mansoni*

28. Humans are infected by eating improperly cooked pork containing

- (a) *Hymenolepis nana*
- (b) *D. latum*
- (c) *Hymenoleptis dimunita*
- (d) *Enchinococcus granulosus*
- (e) *Taenia solium*

29. Which one of the following parasites that cause rectal prolapse

- (a) *Ascaris lumbricoïdes*
- (b) *Trichuris trichiura*
- (c) *Enterobius vermicularis*
- (d) *Strongyloides stecoralis*
- (e) Hookworms

30. Which one of the following is the infective stage of shistosomes?

- (a) Miracidia
- (b) Cercariae

(c) Metacercariae

(d) Schistosomulum

(e) Filariform

Section B 40 Marks (**Answer all the questions**)

31. Write an essay on *Taenia saginata* infection in man 10 marks

32. Describe the lifecycle of *Ascaris lumbricoides* 10 marks

33. a). Describe the lifecycle of *Schistosoma mansoni*? 10 marks

b) Outline the Kato Katz method in parasite quantification 10 marks