



TECHNICAL UNIVERSITY OF MOMBASA

FACULTY OF APPLIED AND HEALTH SCIENCES
DEPARTMENT OF MEDICAL SCIENCES
UNIVERSITY EXAMINATION FOR:
BACHELOR OF SCIENCE IN MEDICAL LABORATORY SCIENCES
BACHELOR OF SCIENCE IN COMMUNITY HEALTH

AML 4209: MEDICAL HELMINTHOLOGY

END OF SEMESTER EXAMINATION

SERIES:APRIL2016

TIME:2HOURS

DATE:Pick DateMay2016

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 2

Section A

1. Pica may be seen in heavy infection with the following

(a) Trichinella

(b) Enterobius

(c) Ascaris

(d)Hookworms

(e)Trichuris

2. Which one of the following is not a cutaneous larva migrans?

- a). *Toxocoracati*
- b). *Ancylostomabraziliense*
- c). *Ancylostomacanthinum*
- d) *Uncinariastenocephala*
- e) *Trichuristrichiura*

3. Very high eosinophilia is associated with which of the following

- a). Trichinosis
- b). Onchocerciasis
- c). Hydatid disease
- d). Ascariasis
- e) Enterobiasis

4. Which is the most common cause of Creeping Eruption or Cutaneous Larva Migrans.

- a). Trichinosis
- b). Onchocerciasis
- c). Hydatid disease
- d). Trichinella
- e) *Ancylostomabraziliense*

5. Which of the following parasite may produce Loeffler's syndrome to man

- a). *Trichuristrichiura*
- b). *D. latum*
- c). *Gnathostomaspingerum*
- d). *Ascarislumbricoides*

e) *Enterobiusvermicularis*

6 . The adult worm of *Clonorchissinensis* is most frequently found in the following

- a). Intrahepatic bile duct
- b). Lung parenchyma
- c). Urinary bladder submucosa
- d). Lumen of intestine
- e. Brain

7. The size of ova of *Trichuristrichiurais* approximately

- a). 70 x 30 um
- b). 60 x 40 um
- c). 50 x 22 um
- d) 60 x 38 um
- e) 160 x 80 um

8. Which one of the following is not a cestode

- a). *Diphyllobothrium*
- b). *Hymenolepsis*
- c). *Schistosoma*
- d). *Taenia*
- e) *Echinococcus*

9. *Diphyllobothriumlatum* is associated with

- a). *Cat*
- b). Fish
- c). Pig
- d). Dog

e) Cow

10. Lateral uterine branches in gravid proglottid are counted for diagnosis of infection caused by the following

a). *Diphyllobothrium latum*

b). *Dipylidium caninum*

c). *Taenia saginata*

d). *Hymenolepis nana*

e). *Taenia solium*

11. Bothriocephalus anemia is associated with

a). microcytic hypochromic cells

b). Folate deficiency

c). iron deficiency anemia

d). pernicious anemia

e). Leukemia

12. The normal lifecycle of *Strongyloides stercoralis* is approximately

a). 2 years

b). 5 years

c). 12 years

d). 30 years

e.) 15 years

13. Which of the following can infect the central nervous system?

a). *Taenia solium*

b). *Toxoplasma gondii*

c). *Echinococcus* sp

d). *Taeniasaginata*

e) *Ascaris*

14. The size of rhabditiform of *Strongyloidesstercoralis* is approximately

a). 100 x 50 um

b). 250 x 20 um

c). 200 x 30 um

d). 300 x 25 um

e). 350 x 25 um

15. A dog that chases and eats wild rabbits is most likely to become infected with which cestode?

a. *Echinococcusgranulosus*

b. *Taeniasaginata*

c. *Diphyllobothriumlatum*

d. *Dipylidiumcaninum*

e. *Taeniapisiformis*

16. Which one of the following is not a component of lugols iodine?

a). Potassium iodide

b). Ethyl alcohol

c). Iodine crystals

d). Water

e) Solvent

17. Eosinophils kills the parasite by the following

- a). Production of antibodies
- b). Intracellular digestion
- c). Extra cellular killing
- d). Activation of mononuclear cells
- e) Inflammation

18. Obstructive uropathy is associated with

- a). *Schistosoma haematobium*
- b). *Schistosoma japonicum*
- c). *Schistosoma mansoni*
- d). *Schistosoma mekongi*
- e) *Schistosoma intercalatum*

19. Pipe-stem fibrosis of the liver in Schistosomiasis is due to what stage of the parasite?

- a). Adult
- b). Juvenile
- c). eggs
- d). Cercaria
- e), Metacercaria

20. Which of the following has been associated with Schistosomes?

- a). Carcinoma of urinary bladder
- b). Carcinoma of liver
- c). Carcinoma of small intestine
- d). Carcinoma of lungs
- e) Carcinoma of Brain

21. Adult worms of the following are found in subcutaneous nodules

- a). *Loa loa*
- b). *Dracunculus medinensis*
- c). *Onchocerca volvulus*
- d). *Brugia malayi*
- e). *Wuchereria bancrofti*

22. The eggs of the following *Schistosoma* sp are elongate and have a prominent terminal spine are

- a). *S. mansoni*
- b). *S. japonicum*
- c). *S. haematobium*
- d). *S. intercalatum*
- e) *S. Chaompala*

23. Snails are both the first and second intermediate hosts of the following trematodes

- a). *Echinostoma ilocanum*
- b). *Fasciola hepatica*
- c). *Paragonimus westermani*
- d). *Fasciola hepatica*
- e) *Clonorchis sinensis*

24. The infective stage of the following parasite is found in crabs or crayfishes.

- a). *Fasciola hepatica*
- b). *Echinostoma ilocanum*
- c). *Clonorchis sinensis*
- d). *Opisthorchis felinus*

e) *Paragonimus westermani*

25. Collection of blood specimen in the investigation of microfilaria depends on

a). Time

b). Locality

c). Time and locality

d). Species

e) Parasite

26. What parasite has an egg that is plano-convex and is readily infective after discharge?

a). *Toxocaracanis*

b). *Trichuristrichiura*

c). *Ancylostomaduodenale*

d). *Toxocaracati*

e) *Enterobiusvermicularis*

27. Which one of the following is diagnosed by muscle biopsy?

a). *Trichinella spiralis*

b). *Ascarislumbricoides*

c). *Strongyloidesstercolaris*

d). *Cryptosporidium parvum*

e) *Schistosomahaematobium*

28. A host that harbours the asexual stage of a parasite is known

- a). Definitive host
- b). Intermediate host
- c). Reservoir host
- d). Facultative
- e) Obligate

29. Produces Ground itch to man.

- a). *Trichuristrichiura*
- b). *Necatoramericanus*
- c). *Enterobiusvermicularis*
- d). *Ascarislumbricoides*
- e) *Strongyloidesstercoralis*

30. Which of the following drugs would be the best choice for the treatment of a *Schistosoma haematobium* infection in man?

- a. Albendazole
- b. Fenbendazole
- c. Eprinomectin
- d. Clorsulon
- e. Praziquantel

Section B Answer all the questions 40 marks

31a). Classify *Ancylostomaduodenale* (10 marks)

b). Describe the effect of *Shistosomahaematobium* in man? (10 marks)

32. a). Discuss *Diphyllobothriumlatum*? (15 marks)

b) Describe in detail the Kato katz technique? (5 marks)