



(University of Choice)

**MASINDE MULIRO UNIVERSITY OF
SCIENCE AND TECHNOLOGY
(MMUST)**

MAIN CAMPUS

**UNIVERSITY EXAMINATIONS
2019/2020 ACADEMIC YEAR**

SECOND YEAR SECOND SEMESTER EXAMINATIONS

DIPLOMA

**IN MEDICAL LABORATORY SCIENCE AND TECHNOLOGY
MAIN EXAM**

COURSE CODE: BMD 226

**COURSE TITLE: MEDICAL PARASITOLOGY AND
ENTOMOLOGY II**

DATE: 9TH DECEMBER 2020

TIME: 2.00 -4.00PM

INSTRUCTIONS TO CANDIDATES

This paper is divided into three sections, **A B** and **C**, carrying respectively: Multiple Choice Questions (**MCQs**), Short Answer Questions (**SAQs**) and Long Answer Questions (**LAQs**).

TIME: 2 Hours

MMUST observes ZERO tolerance to examination
cheating

SECTION A: MULTIPLE CHOICE QUESTIONS (20 MKS)

Instructions to the candidate

1. Which of the following tape worms infection occurs after ingestion of eggs
 - A) *Echinococcus granulosus*
 - B) *Taenia saginata*
 - C) *Taenia solium*
 - D) *Diphyllobothrium latum*

2. Hydatidosis is common in which region of Kenya?
 - A) Central
 - B) North Eastern
 - C) Western
 - D) Coast

3. The larvae of one of the nematodes below get encysted in the skeletal muscle of the accidental host
 - A) *Ascaris lumbricoides*
 - B) *Trichuris trichura*
 - C) *Trichinella spiralis*
 - D) *Enterobius vermicularis*

4. Which of the following worms' infection is acquired through drinking of water contaminated with crustaceans?
 - A) *Echinococcus granulosus*
 - B) *Trichinella spiralis*
 - C) *Diphyllobothrium latum*
 - D) *Dracunculus medinensis*

5. Which is the fluke parasite that causes urinary schistosomiasis?
 - A) *Schistosoma mansoni*
 - B) *Schistosoma haematobium*
 - C) *Schistosoma mekongi*
 - D) *Schistosoma japonicum*

6. The fluke parasite that causes intestinal schistosomiasis is known as :
 - A) *Schistosoma mansoni*
 - B) *Schistosoma haematobium*
 - C) *Schistosoma intercalatum*
 - D) *Schistosoma malayensis*

7. The snail *Biomphalaria* spp. is vector for
 - A) *Schistosoma malayensis*
 - B) *Schistosoma intercalatum*
 - C) *Schistosoma haematobium*
 - D) *Schistosoma mansoni*

8. The snail *Bulinus* spp. transmits:
 - A) *Schistosoma mansoni*

- B) *Schistosoma malayensis*
 - C) *Schistosoma haematobium*
 - D) *Schistosoma intercalatum*
9. Which of the following parasite egg has a lateral spine
- A) *Schistosoma haematobium*
 - B) *Schistosoma mansoni*
 - C) *Schistosoma mekongi*
 - D) *Shistosoma japonicum*
10. Molluscs include snails and slugs, clams, octopus and squid, and numerous other kinds, many of which have shells belong to the CLASS:
- A) Gastropoda
 - B) Insecta
 - C) Sarcodina
 - D) Secernentea
11. The following are liquid insect killing agents EXCEPT:
- A) Ethyl acetate
 - B) Diethyl ether
 - C) Plaster of Paris
 - D) Chloroform
12. Which of the chemicals below is not a solid insect killing agent
- A) Calcium cyanide
 - B) Sodium cyanide
 - C) Pottassium cyanide
 - D) Ammonia
13. Besides its construction, the performance of a trap depends on such factors below EXCEPT:
- A) Location
 - B) Air
 - C) Weather
 - D) Temperature
14. The following are insect attractants apart from :
- A) Salt
 - B) Sound
 - C) Pheromones
 - D) Oat meal
15. The ORDER Diptera belongs to true flies whose characteristics include ALL the following EXCEPT
- A) One pair of functional wings
 - B) Halteres are in place of hind wings
 - C) Two pairs of wings
 - D) Undergo holometabolous life cycle
16. Which of the statements below is TRUE about dipterous larvae

- A) Some are parasitic
- B) They are aquatic/semi aquatic
- C) They have legs
- D) They have pseudopods

17. ALL the below are sub orders of the ORDER diptera EXCEPT

- A) Nematocera
- B) Oxyurida
- C) Brachycera
- D) Cyclorhapha

18. Which of the insects below are not true fliers

- A) Cockroaches
- B) House flies
- C) Tsetse flies
- D) Sandflies

19. The infestation of human tissues with dipterous larvae is known as :

- A) leishmaniasis
- B) Trypanosomiasis
- C) Myiasis
- D) Malaria

20. The following parasites are accidental/abnormal to man EXCEPT

- A) *Echinococcus granulosus*
- B) *Diphyllobothrium latum*
- C) *Trichinella spiralis*
- D) *Ascaris lumbricoides*

SECTION B: SHORT ANSWER QUESTIONS (60 MKS)

1. With the aid of a diagram, draw the structures of *Schistosoma* eggs [10 Marks].
2. Describe periodicity in filarial worms with specific examples [10 Marks].
3. Briefly discuss the life cycle of *Echinococcus granulosus* [10 Marks].
4. Explain Trichinosis/Trichinellosis disease [10 Marks].
5. Tabulate the laboratory diagnosis of *Dracunculus medinensis* [10 Marks].
6. With specific examples discuss the control of Schistosomiasis [10 Marks].

SECTION C: LONG ANSWER QUESTIONS (40 MKS)

1. Give a detailed account of the pathology of both urinary and intestinal schistosomiasis [20 Marks].
2. Write an essay about the control of mosquitoes [20 Marks].