

CHUKA



UNIVERSITY

UNIVERSITY EXAMINATIONS

SECOND YEAR EXAMINATION FOR BACHELOR OF SCIENCE IN NURSING

NURS 227: MEDICAL PARASITOLOGY

STREAMS: BSC (NURS) Y2S 2

TIME: 2 HOURS

DAY/DATE: WEDNESDAY 08/04/2020

8.30 A.M – 10.30 A.M

INSTRUCTIONS

- Do not write anything on the question paper.
- Mobile phones and any other reference materials are NOT allowed in the examination room.
- The paper has three sections. Answer ALL questions in Sections I and II and ONE question in section III.
- All your answers for Section I (MCQs) should be on one page.
- Number ALL your answers and indicate the order of appearance in the space provided in the cover page of the examination answer booklet.
- Write your answers legibly and use your time wisely

SECTION 1: MULTIPLE CHOICE QUESTIONS [20 MARKS]

1. What is the infective stage of *Schistosomamansoni* in man?

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|--------------------|------------------|
| A] Cercariae | C] Metacercariae |
| B] Embryonated egg | D] Miracidium |

2. The region of growth in Cestodes is the

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|-----------|---------------|
| A] Scolex | C] Proglottid |
| B] Neck | D] Strobila |

3. The most commonly affected organ in Hydatid Disease is the
A] liver C] kidney
B] lungs D] brain
4. The usual infective stage of Trematodes to man is the
A] Cercariae C] metacercariae
B] Egg D] miracidium
5. The specimen for the diagnosis of *Trichomonas vaginalis* infection in female.
A] Prostatic secretions C] Vaginal discharges
B] Urine D] B & C
6. *Taenia saginata* is associated with
A] Cats C] dogs
B] Cattle D] pigs
7. The common infective stage of Malaria to man is the
A] gametocytes C] sporozoites
B] schizonts D] merozoites
8. Malaria with the highest degree of parasitemia in man.
A] *Plasmodium falciparum* C] *Plasmodium vivax*
B] *Plasmodium malariae* D] A & B
9. The Genus of the vector for Leshmaniasis
A] *Glossina* C] *Phlebotomus*
B] *Musca* D] *Oncocerca*
10. The eggs of *Paragonimus westermani* may be demonstrated from the
A] Sputum C] urine
B] Stool D] A & B
11. Ultrasound and MRI usually help in the diagnosis of the infection cause by
A] *Dipylidium caninum* C] *Hymenolepis diminuta*
B] *Echinococcus granulosus* D] *Schistosoma mansoni*
12. An organism that exhibits both parasitic and non-parasitic modes of living and hence does not absolutely depend on the parasitic way of life
A] Facultative Parasite C] Obligate Parasite
B] Accidental Parasite D] None of the above

Regarding *Wuchereria bancrofti* answer the following questions by stating whether the statement is True or False

13. It causes river blindness
14. It is transmitted to human via mosquito
15. Its clinical manifestations are caused by microfilaria
16. The adult stage is found in the lymph nodes
17. Its infection can be diagnosed via blood examination
18. Infection with this parasite can cause extensive damage to human urogenital structures:
 - A]. *Schistosoma haematobium*
 - B]. *Ascaris lumbricoides*
 - C]. *Toxoplasma gondii*
 - D]. *Naegleria fowleri*
19. Which of this parasites does not cause malabsorption syndrome:
 - A]. *Giardia lamblia*
 - B]. *Cryptosporidium parvum*
 - C]. *Strongyloides stercoralis*
 - D]. *Balantidium coli*
20. Which statement is correct about Chagas' disease:
 - A]. Is caused by *Trypanosoma brucei* complex
 - B]. Human acquires the disease via the bites of infected sandflies
 - C]. It causes megasyndrome in patients with prolonged illness
 - D]. The most common clinical manifestation is Winterbottom's sign

SECTION II: SHORT ANSWER QUESTIONS [30 MARKS]

1. Distinguish between an
 - a. obligate parasite and a facultative parasite [2 marks]
 - b. Definitive Host and a Paratenic Host [2 marks]
 - c. Natural Host and an Accidental Host [2 marks]

2. Briefly describe three direct effects of a Parasite on the Host [6 marks]
3. Explain each of the following using the parasite host relationship concept [8 marks]

(a) Infection

- (b) Carrier state.
- (c) Disease state.
- (d) Parasite destruction.

4. Briefly explain any Six preventive measures designed to break the transmission cycle that are crucial to successful parasitic eradication. (6 Marks)
5. What are the adaptive features of arthropod vectors that make their eradication difficult? (4 Marks)

SECTION III: LONG ANSWER QUESTIONS [20 MARKS]

1. Using relevant examples, describe the specimens that may be selected for laboratory diagnosis of parasitic infections. [20 Marks]
 2. a). Outline the life cycle of the parasite Plasmodium. [10 marks]
 - b). Why has it become difficult to control the spread of this parasite? [10 marks]
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