



# UNIVERSITY OF EMBU

2017/2018 ACADEMIC YEAR

TRIMESTER EXAMINATIONS

SECOND YEAR EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE  
(NURSING)

HNS 232: MEDICAL PARASITOLOGY

DATE: AUGUST 3, 2018

TIME: 2:00-5:00PM

## INSTRUCTIONS:

**Answer:**

**All MCQs in Section A;**

**All Short-answer Questions in Section B**

**All Long-answer Questions in Section C**

**Cancelled work should be done neatly by crossing with a single line in the essay and by use of X in the MCQs**

## SECTION A: MULTIPLE CHOICE QUESTIONS (TOTAL: 20 MARKS)

**Choose (CIRCLE/TICK) only one correct answer from the following questions**

1. Each of the following statements concerning Malaria is **correct except**:
  - a) The female anopheles mosquito is the vector
  - b) Early infection, sporozoites enter hepatocytes
  - c) Release of merozoites from red blood cells cause fever and chills
  - d) man is the definitive host.
2. Each of the following statements concerning hookworm infection is **correct except**:
  - a) Hookworm infection can cause pneumonia
  - b) Hookworm infection is acquired by humans when filariform larvae penetrate the skin
  - c) Hookworm infection is caused by *Necator americanus*

- d) Hookworm infection can be diagnosed by finding the trophozoite in the stool
3. The male partner of a female patient with *Trichomonas vaginalis* should:
- Be treated only if symptomatic
  - Be treated only if examination is positive
  - Be treated always
  - Not be treated
4. Both *Trypanosoma* and *Leishmania* are spread by:
- Blood-sucking vectors
  - Mother-to-fetus
  - Fecal-oral route
  - Person-to-person
5. The form of *Giardia lamblia* which plays a greater role in transmission is:
- Trophozoites
  - Metacysts
  - Karyosomes
  - Cysts
6. Malabsorption syndrome observed in giardiasis most likely results from:
- Poor enzyme digestion
  - Mechanical barrier to absorption
  - Insolubilising the proteins and fats
  - None of the above
7. The helminth responsible for causing the greatest number of worm infections worldwide is:
- Enterobius vermicularis*
  - Ascaris lumbricoides*
  - Strongyloides stercoralis*
  - Trichinella spiralis*
8. Infection of *Fasciolopsis buschi* is acquired by:
- Ingestion of raw contaminated aquatic vegetation
  - Ingestion of raw fresh water snails
  - Ingestion of raw fresh water fish
  - None of the above

9. The species of *Schistosoma* that lodges in veins of urinary bladder and can cause haematuria is:
- a) *Schistosoma mansoni*
  - b) *Schistosoma haematobium*
  - c) *Schistosoma japonicum*
  - d) *Schistosoma intercalatum*
10. *Paragonimus westernami* infection is often associated with:
- a) Haematuria
  - b) Dysentery
  - c) Haemoptysis
  - d) Jaundice
11. Amoebic abscess can occur in the following except:
- a) Liver
  - b) Lung
  - c) Brain
  - d) Muscle
12. The Following are the advantages of using formalin in preservation of stool except:
- a) It is inexpensive
  - b) It preserves trophozoites well
  - c) It is good overall fixative
  - d) It is easy to prepare
13. The intermediate host for *Fasciola hepatica* is:
- a) Humans
  - b) Blood-sucking insect
  - c) Snails
  - d) Cyclops
14. The disease that resembles babesiosis in both pathology and symptomology is:
- a) Giardiasis
  - b) Amebiasis
  - c) Toxoplasmosis
  - d) Malaria

15. *Phlebotomus* sandfly acts as a vector for:
- a) African sleeping sickness
  - b) South American trypanosomiasis
  - c) Kala-azer
  - d) Infectious blindness
16. The trematode which infects by penetrating the skin is:
- a) *Fasciolopsis spp*
  - b) *Heterophyes spp*
  - c) *Paragonimus spp*
  - d) *Schistosoma spp*
17. The drug of choice in schistosomiasis is:
- a) Metronidazole
  - b) Chloroquine
  - c) Albendazole
  - d) Tinidazole
18. Trypanosomes are able to evade the host immune system by:
- a) Having an anti- phagocytic capsule
  - b) Being obligate intracellular parasites
  - c) Continuously altering their surface antigens
  - d) Producing enzymes that digest antibodies.
19. The group of humans with the highest rate of helminth infections is:
- a) Children living in rural America
  - b) Children throughout the world
  - c) Young girls who live in cold climates
  - d) Children in rural tropical or subtropical areas
20. The following are medically important arthropods except:
- a) Triatomid bug
  - b) Deerfly
  - c) Flesh fly
  - d) All of the above

**SECTION B: ANSWER ALL THE QUESTIONS IN THIS SECTION (40 MARKS; USE THE ANSWER BOOKLET PROVIDED)**

1. State four symptoms of Loeffler's syndrome observed in helminthic infections. (4 marks)
2. Write short notes on relapse and recrudescence in relation to malaria parasite (6 marks)
3. Explain laboratory diagnosis of *Trichomonas vaginalis* infection in women. (5 marks)
4. Explain the circumstances that may lead to selection of the following specimens for laboratory diagnosis
  - a) Blood (3 marks)
  - b) Urine (2 marks)
5. Describe autoinfection in *Enterobius vermicularis* (pinworm infection) (5 marks)
6. Explain transmission of *Toxoplasma gondii* infection in humans (4 marks)
7. Describe pathogenicity and clinical manifestation of hookworm infection in man (7 marks)
8. State four symptoms of bancroftian filariasis (elephantiasis) (4 marks)

**SECTION C: ANSWER ALL THE QUESTIONS IN THIS SECTION (40 MARKS; USE THE ANSWER BOOKLET PROVIDED)**

1.
  - a) Distinguish between direct and indirect life cycles of human parasites (4 marks)
  - b) Discuss the various ways of transmission of parasitic infections (16 marks)
2. Discuss *Diphyllobothrium latum* under the following headings:
  - a) Transmission (2 marks)
  - b) Life cycle (12 marks)
  - c) Prevention (4 marks)
  - d) Treatment (2 marks)

--END--

