



UNIVERSITY OF ESWATINI
Faculty of Health Sciences
Department of General Nursing

MAIN EXAMINATION PAPER MAY 2019

TITLE OF PAPER :INTRODUCTION TO PARASITOLOGY FOR NURSES
COURSE CODE :GNS104
DURATION: :2.0 HOURS
PROGRAMME: :BACHELOR OF NURSING SCIENCE
MARKS :100

INSTRUCTIONS :READ THE QUESTIONS
AND INSTRUCTIONS CAREFULLY.
ANSWER QUESTION 1 AND ANY OTHER
THREE(3) QUESTIONS.
EACH QUESTION CARRIES 25 MARKS
WRITE NEATLY AND CLEARLY
NO PAPER SHOULD BE BROUGHT INTO OR
OUT OF THE EXAMINATION ROOM.
BEGIN EACH QUESTION ON A SEPARATE
SHEET OF PAPER.

DO NOT OPEN THIS QUESTION PAPER UNTIL PERMISSION IS GRANTED BY THE
INVIGILATOR

QUESTION 1

Instructions: For each of the following questions / statements choose and write **CLEARLY** the letter that corresponds with the most appropriate response in your answer sheet e.g. 1. d

COMPULSORY[All candidates must answer this question] (2.0 MARKS EACH).

1. Helminths includes;

- a.) cestodes, trematodes, plasmodia, nematodes
- b.) cestodes, nematodes, toxoplasma gondii, trematodes
- c.) nematodes, hookworms, trematodes, *fasciola hepatica*, *trichomonas vaginalis*
- d.) cestodes, trematodes, nematodes

2. Chronic anemia is a symptom commonly associated with;

- a.) *Trichuristrichuria*
- b.) *Ascarislumbricoides*
- c.) *Necatoramericanus*
- d.) *Ancylostomumduodenale*
- e.) Both c and d

3. Schistosoma;

- a.) is a dioecious protozoa
- b.) is a monocious helminth
- c.) is a hermaphroditic worm
- d.) is a dioecious helminth
- e.) None of the above

4. *Trichuristrichuria*;

- a.) is an intestinal nematode that is soil transmitted in warm, humid conditions
- b.) can cause diarrhea, rectal prolapse and anemia
- c.) it can cause pneumonitis
- d.) none of the above

5. Enterobius (pin worm)

- a.) is prevalent in cold and temperate climate, mainly in children
- b.) it has oral suckers, lips and teeth
- c.) it has a cylindrical body cavity

- d.) a and c
e.) None of the above
6. Infection with the following parasites is more severe in immunosuppressed persons, malnourished also suffering from intercurrent disease;
- a.) *Ancylostomaduodenale* and *Necatoramericanus*
b.) *Strongloidesstercolaris*
c.) Plasmodium and Toxoplasma
d.) all the above
e.) None of the above
7. a.) Filarial worms, liver fluke, pork tape worms, are all Biohelminths
b.) Trichuris (whip worm), Ancylostoma (hook worm) and Enterobius (pin worm) are all Biohelminths
c.) Plasmodium, Toxoplasma, Trypanosomes are all Bioheminths
d.) all the above
e.) None of the above

WRITE TRUE OR FALSE. (in your answer sheet e.g. 5. TRUE)

8. Parthenogenesis means ability to produce offspring without fertilization.
9. Pathogenesis means ability to produce offspring without fertilization.
10. Oviparous means producing larvae discharged from uterus of female.
11. Helminthology is the study of parasitic worms and their effect on their vector.
12. Biohelminths refer to parasitic worms that have to undergo development in intermediate hosts to complete their life cycle. **(1.0 MARK)**
13. Ovoviviparous means production of eggs which hatch prior to discharge from the uterus of female. **(1.0 MARK)**
14. Viviparous means production of embryos/L₁ larvae. **(1.0 MARK)**

QUESTION 2

Copy the disease card below onto your answer booklet. Complete it by filling your answers into the empty boxes. **[25 Marks]**

	Onchocerciasis	Lymphatic Filariasis
Vector		
Location of adults		
Symptoms		
Diagnosis		
Treatment		
Prevention and control		

QUESTION 3

Briefly explain the following phenomena/observations;

- a) Control measures at individual/community, national, regional levels. **(10)**
- b) The knowledge of the life cycles of parasites is critical for effective prevention and control. **(5)**
- c) Common pathways for the transmission of parasites. **(5)**
- d) Some parasites must migrate to certain locations within hosts to complete their life cycle. **(5)**

[25 Marks]

QUESTION 4

You are called in an emergency case in a rural village, where there has been an excessive rainfall with flooding and a break down of water purification systems. As a result the community people and day care children have been drinking from the overflowing rivers.

- a) State your list of tentative diagnoses, explain your reason for your choices **(5)**
- b) List the most common symptoms likely to be exhibited by the patients **(5)**
- c) Explain your diagnostic approach **(5)**
- d). Describe your control and disease prevention measures **(10)**

[25 Marks]

QUESTION 5

Explain the following terms;

- a) Antimalaria based combination therapy. (5)
- b) Differences in diarrhea due to *Entamoebahistolytica* and *Giardia lamblia* (5)
- c) Field Diagnosis (5)
- d) Parasite adaptations for evading the Host defense mechanisms. (5)
- e) Chemoprophylaxis. (5)

[25 Marks]

QUESTION 6

- a) Outline the Plasmodium life cycle (15)
- b) The following are four regions where malaria is commonly found: Cambodia in South East Asia, Dar Es Salaam, Tanzania, Africa, Shanty towns in India, sugar cane fields in low veld of Eswatini. (5)
Explain the reason why these areas have high levels of malaria. What do they have in common?
- c) What are the Key methods to prevent malaria transmission? (5)

[25 Marks]

END OF QUESTION PAPER