



UNIVERSITY OF SWAZILAND
Faculty of Health Sciences
Department of General Nursing

RE-SIT EXAMINATION PAPER JULY 2018

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.
: 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: COMPULSORY[All candidates must answer this question]

Write TRUE OR FALSE against the question number in the answer booklet. (25)

- 1) Coccidia are intestinal protozoan parasites infecting man and belong to the genus *Eimeria*. (2)
- 2) Sporulated Oocysts of *Toxoplasma gondii* are commonly transmitted via contaminated food and water. (2)
- 3) The most common Trematodes species that infects man is *Faciola hepatica* and its indirect life cycle requires a snail as an Intermediate Host. (2)
- 4) The Final Host becomes infected with *F. hepatica* by ingesting the infective stage cercaria with contaminated vegetables. (2)
- 5) Large numbers of immature stages of *F. hepatica* in the small intestine causes destruction of mucous membrane resulting in diarrhoea. (2)
- 6) The life cycle of tapeworms such as *Taenia saginata* is indirect. Man becomes infected by ingesting uninspected meat carrying the infective stage of the parasite called Rediae. (2)
- 7) The most important and widely distributed nematodes are the Hookworms, *Ascaris* spp., *Enterobius vermiculari* and *Strongyloides stercoralis*. (2)
- 8) The life cycle of most nematodes is direct. They do not require other intermediate hosts to complete their life cycles. (2)
- 9) Most protozoa are highly motile; many have no flagella, cilia and undulating membrane as organs of locomotion. (2)
- 10) Protozoa reproduction is complex and does not involve both asexual and sexual processes at times in the same species. (2)
- 11) Protozoan cysts may remain viable in external environment for many months.(1)
- 12) Life cycle of *Giardia* includes the following developmental stages; Cyst and Trophozoites. (1)
- 13) *Giardia* can interfere with nutrient absorption especially lipids. (1)
- 14) All nematodes parasitic worms consist of unsegmented bodies. (1)
- 15) The predominant species of malaria parasite responsible for disease in all endemic countries in the world is *Plasmodium ovale*. (1)

QUESTION 2

- a) Briefly outline the life cycle of hookworms. (5)
- b) List the 3 interaction factors that determine hookworm epidemiology.
Describe how they could be used for prevention and control. (10)
- c) Name 2 hookworm species of medical importance. (2)
- d). Describe the pathogenesis of anaemia in hookworm infection. (5)
- e) Describe the method of treatment for hookworm infection. (3)

[25 marks]

QUESTION 3

Discuss the life cycle, clinical presentation, management and control of *Plasmodium falciparum*.

[25]

QUESTION 4

Giardiasis commonly results in sudden onset of watery diarrhea with no blood or mucus among infected children leading to dehydration and death.

- a) What causes the diarrhea among patients infected with *Giardia lamblia*? (5)
- b) Why is blood and mucus rare in faeces of patients of giardiasis? (2)
- c) Explain how children acquire infection with *Giardia lamblia*. (2)
- d) Giardiasis is sometimes referred to as “traveller’s diarrhoea” Why is the disease called so? (4)
- e) Name one drug recommended for by the World Health Organisation for the successful treatment of giardiasis. (1)
- f) Discuss three measures that maybe initiated in a community with high incidence of giardiasis to reduce the disease. (6)
- g) What is the epidemiologic importance of finding *Entamoeba coli* in persons that are not infected with *Entamoeba histolytica*? (3)
- h) Describe ONE feature commonly used by laboratory technicians to differentiate cysts of *Entamoeba histolytica* from those of *Entamoeba coli*. (2)

[25 marks]

QUESTION 5

A six months pregnant 23 year old female arrives at the hospital clinic and complains of a recurring vaginal discharge, itching and burning sensation with urination for several days.

- i. What is your tentative diagnosis? (5)
- ii. Explain the most useful clinical examination for a confirmative diagnosis. (5)
- iii. Explain the expected laboratory results for your suspected diagnosis. (5)
- iv. Outline the most appropriate line of treatment and control for the suspected medical condition. (10)

[25 marks]

END OF QUESTION PAPER