

**UNIVERSITY OF SWAZILAND**

**RESIT EXAMINATION PAPER 2018**

**TITLE OF PAPER** : PARASITOLOGY

**COURSE CODE** : BIO302

**TIME ALLOWED** : THREE HOURS

**INSTRUCTIONS** :

1. ANSWER ANY FOUR (4) QUESTIONS
2. WHEREVER POSSIBLE ILLUSTRATE YOUR ANSWERS WITH LARGE CLEARLY LABELLED DIAGRAMS
2. EACH QUESTION CARRIES FIFTY (25) MARKS

**SPECIAL REQUIREMENTS:** NONE

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN  
GRANTED BY THE INVIGILATORS

QUESTION 1

Illustrate with diagrams the lifecycles of two named parasites found in Swaziland transmitted by vectors of two different Classes of the Phylum Arthropoda. For each parasite, discuss control strategies that can be used to prevent their spread.

[Total marks = 25]

QUESTION 2

Write an essay on specific and non-specific responses by hosts to parasitic infections and how parasites evade their host's immune responses.

[Total marks = 25]

QUESTION 3

a. Organisms are believed to be evolutionarily adapted for their parasitic lifestyles. Discuss characteristic structural and behavioural adaptations observed in the Order Siphonaptera (12)

b. Briefly discuss the host-parasite interface, giving examples where applicable. (13)

[Total marks = 25]

QUESTION 4

Explain what distinguishes the kinetoplastids. Give a sketch of a common example. How does this group move, feed and reproduce?

[Total marks = 25]

QUESTION 5

Give an account of a named trypanosome of economic importance. Your answer should include the following: Which organism is responsible, which are vectors and which are the definitive hosts? Describe disease and control strategies.

[Total marks = 25]