

THE OPEN UNIVERSITY OF SRI LANKA  
DEPARTMENT OF ZOOLOGY  
B.Sc. /B.Ed. DEGREE PROGRAMME  
FINAL EXAMINATION 2015 / 2016  
COURSE TITLE: PARASITOLOGY  
COURSE CODE: ZLU3184 / ZOU3164  
DURATION: TWO HOURS



DATE: 30<sup>th</sup> June 2016

TIME: 1.00 P.M. – 3.00 P.M.

ANSWER ANY FOUR (4) QUESTIONS.

ILLUSTRATE ANSWERS WITH LABELLED DIAGRAMS WHERE NECESSARY.

1. Apply your knowledge of *Wuchereria bancrofti* to propose an effective control programme against filariasis in Sri Lanka.
2. You have learnt of two nematode parasites that live in the large intestines of human.
  - i) State the scientific names and common names of those two nematode parasites.
  - ii) Describe the morphology of their adult female worms.
  - iii) What are the disease symptoms and pathologies associated with the two parasites?
3.
  - i) *Plasmodium* exhibits many adaptations for parasitism. Justify this statement.
  - ii) Describe the *Plasmodium falciparum* development phase in the vector.
4. A farmer in an African village is diagnosed with an infection of *Schistosoma mansoni*.
  - i) Illustrate the life cycle of *S. mansoni* using a detailed line diagram.
  - ii) Outline the factors that could have played an important role in the transmission of schistosomiasis to this farmer.
  - iii) Explain how this infection would have been diagnosed in the laboratory.
5. Highlight the major differences between the following.
  - i) Life cycle of *Taenia solium* with that of *Diphyllobothrium latum*.
  - ii) Scolex of *Taenia solium* with that of *T. saginatus*.
6. Write notes on two (02) of the following.
  - a) Tungiasis.
  - b) Scabies.
  - c) Tick infestations.