

THE OPEN UNIVERSITY OF SRI LANKA
B.Sc. DEGREE PROGRAMME
FINAL EXAMINATION 2007/2008
COURSE TITLE: PARASITOLOGY
COURSE CODE: ZOU 3164/ZOE 5164



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DATE: 21st January 2008

TIME: 1.00 P.M. – 3.30 P.M.

ANSWER ANY FOUR (4) QUESTIONS.
ILLUSTRATE ANSWERS WITH LABELLED DIAGRAMS WHERE NECESSARY.

1. Justify the following statements.
 - (i) Parasites induce growth pattern changes in host tissues.
 - (ii) Organisms form symbiotic associations with each other to satisfy various needs.
 - (iii) Parasites are adapted to overcome immune mechanisms of hosts.

2.
 - (i) Describe the types of periodicity exhibited by different strains of *W. bancrofti*.
 - (ii) How would the periodic behaviour of microfilariae help in the transmission of a *W. bancrofti* infection?
 - (iii) Explain how an infection with *W. bancrofti* could be detected specifically in the laboratory.

3.
 - (i) Illustrate the life cycle of *Trypanosoma brucei* using a detailed line diagram.
 - (ii) Propose an effective control programme for African trypanosomiasis in a village community in Africa.

4. State the *major differences* between the following.
 - (i) Lifecycle of dog tapeworm, *D. latum* and pork tapeworm, *T. solium*.
 - (ii) Argasid ticks and ixodid ticks.

5.
 - (i) Describe the development phase of *Plasmodium* in humans.
 - (ii) Summarise the pathology and symptoms associated with a *P. falciparum* infection.

6. Write short notes on *any three* (03) of the following.
 - a) Development of *Fasciola hepatica* in intermediate hosts.
 - b) Tungiasis.
 - c) Transmission of enterobiasis.
 - d) Ascariasis.
 - e) Morphology of *Schistosoma mansoni* adult and egg stages.
