

THE OPEN UNIVERSITY OF SRI LANKA
DEPARTMENT OF ZOOLOGY
BSc DEGREE PROGRAMME
FINAL EXAMINATION 2017 / 2018
COURSE TITLE: PARASITOLOGY
COURSE CODE: ZLU3184
DURATION: TWO HOURS



DATE: 22nd April 2019

TIME: 1.30 pm – 3.30 pm

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

1. Write an essay on symbiotic associations.
2. Giving suitable examples, explain how parasites are adapted to their life style.
3. Several children from a day care centre are brought to the doctor with abdominal pain, diarrhoea and nausea. The stool samples collected from the children were smelling and fatty, but without any blood stains. Microscopic investigations showed moving objects in some stool samples and in other samples there were oval shaped objects, measuring 12 μm in average size, with a retracted cytoplasm and 2-4 nuclei located on a side.
 - i) What is your diagnosis of the disease and the parasite species causing the symptoms?
 - ii) Explain the microscopic investigations that would have been done on the stool specimens to make the laboratory diagnosis.
 - iii) Outline how this infection could have spread among the children.
 - iv) What advice on preventive measures will you give the parents and the day care centre to avoid re-infection and transmission?
4. You have learnt of two nematode parasites that live in the large intestine 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?

Contd.

5. 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) What are the major features that are different between the life cycles of *Paragonimus* and *Schistosoma*?
6. Write notes on two (02) of the following.
- a) *Sarcoptes scabiei*
 - b) Hydatid cyst of *Echinococcus granulosus*
 - c) Sporogonic cycle of *Plasmodium*
