## THE OPEN UNIVERSITY OF SRI LANKA DEPARTMENT OF ZOOLOGY

**BSc DEGREE PROGRAMME** 

FINAL EXAMINATION 2021 / 2022

**COURSE TITLE: PARASITOLOGY** 

COURSE CODE: ZYU5304 DURATION: TWO HOURS

DATE: 14 October 2022



TIME: 2.00 pm - 4.00 pm

## ANSWER ANY <u>FOUR</u> (4) QUESTIONS. ILLUSTRATE ANSWERS WITH LABELLED DIAGRAMS WHERE NECESSARY.

- 1. Justify the following statements using suitable examples.
  - i) Many parasites show behavioural adaptations for active host location. [40 marks]
  - ii) Parasites often have attachment devices. [40 marks]
  - iii) Protozoan and helminth parasites have immune evasion strategies. [20 marks]
- 2. Write an essay on symbiotic associations. [100 marks]
- 3. Explain the following with respect to *Plasmodium falciparum*.
  - i) Development in the mosquito vector. [50 marks]
  - ii) Techniques available for the laboratory diagnosis of a human infection. [50 marks]
- 4. Write on the following.
  - i) Pathology and symptoms of hookworm disease. [50 marks]
  - ii) Transmission of *Taenia solium* infections to human. [50 marks]
- 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. [64 marks]
  - ii) What are the major features that are different between the life cycles of *Paragonimus* and *Schistosoma?* [36 marks]
- 6. Write notes on two (02) of the following.
  - a) Prevention and control of Leishmaniasis [50 marks]
  - b) Hydatid cyst of Echinococcus granulosus [50 marks]
  - c) Harmful effects of parasites on their hosts. [50 marks]

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