

EASTERN UNIVERSITY, SRI LANKA
SECOND YEAR IN SCIENCE 1998/99 (Re-repeat)
EXTERNAL DEGREE (UNIT SYSTEM) 2004/05 MAY 2008
EX ZL 203&204 PRINCIPLES OF DEVELOPMENTAL BIOLOGY
& PARASITOLOGY

Time: 0 2 Hours

Answer four questions only selecting at least 2 questions from part A and at least 2 questions from part B.

(Illustrate your answers with clear labeled diagrams where necessary)

Part A Developmental Biology

1. a. What are foetal membranes?
b. With the diagrammatic drawings, explain the functions of foetal membranes and placenta in mammals.
2. Comment on **any two** of the following:
 - a. Neurulation in amphibia;
 - b. Acrosomal reaction;
 - c. Age-related diseases.
3. a. What is metamorphosis?
b. Explain the role of hormones in the metamorphosis of an insect.

Part B Parasitology

4. Discuss the life cycle of *Trypanosoma* spp you have studied and justify the suitable environmentally friendly control measures to cure the sleeping sickness outbreak in African countries.
5. Briefly describe the life cycle of the following with the primary host, vector, intermediate host and disease produced.
 - a. *Plasmodium vivax*
 - b. *Entamoeba histolytica*
 - c. *Schistosoma mansoni*
6. Discuss the life cycle and the path of infection to new host by *Dracunculus medinensis*.