



MASENO UNIVERSITY

UNIVERSITY EXAMINATIONS 2012/2013

SECOND YEAR SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE AND BACHELOR OF EDUCATION (SCIENCE) WITH INFORMATION TECHNOLOGY (MAIN CAMPUS)

SZL 206: GENERAL PARASITOLOGY

Date: 22nd July, 2013

Time: 8.30 – 10.30 a.m.

INSTRUCTIONS:

1. Answer ALL questions in Section A.
2. Answer ANY TWO questions in Section B.

SECTION A

[60 marks]

Answer **ALL** questions. Each question carries 6marks

Q1. State any **six (6)** general principles that are consistent among phoretic relationships.

Q2. a) The clown fish, *Amphiprion percula*, and the sea anemone have developed a hetero-specific relationship. **Explain** the basis of their co-existence.

b) Define the terms **cleaning symbiosis** and **mutualism** and give **two (2)** examples in each case; **explain** the difference between the two terms.

Q3. Define the term **facultative parasite** and give **three (3)** examples; state **i)** how each parasite is contracted and **ii)** the lesion(s) involved in each case.

Q4. a) Give **two (2)** examples of protozoal parasites (species) in the following locations in the human body and name the diseases they cause; state the stage of the parasite that is infective in each case:

i) Intestinal tract **ii)** Urogenital tract **iii)** Blood and tissue.

b) Define the term **reservoir host**; give **three (3)** examples and in each case state **i)** the name of **one (1)** parasite and **ii)** the disease involved.

Q5. Name **any six (6)** specimens that may be selected for laboratory diagnosis, depending on the nature of parasitic infection; in each case, give **one (1)** example of a pertinent parasite and the **stage of the life cycle** one would see.

Q6. State **six (6)** characteristics of the worms in the Phylum Platyhelminthes.

Q7. a) Name any **four (4)** characteristics of the worms in the Phylum Nematelminthes.

b) Describe laboratory diagnosis of *Entamoeba histolytica*.

Q8. a) Describe pathogenesis of hookworm infection in man.

b) Give examples of nematode parasites that occupy the following locations:

- i. Muscle.
- ii. Lymphatics.
- iii. Subcutaneous tissue
- iv. Conjunctiva.
- v. Intestines

Q9. State **six (6)** differences, in the life cycles, that distinguish diphyllbothriasis and taeniasis.

Q10. a) Describe myiasis; name the organisms involved in its aetiology.

b) Name **three (3)** species of bugs that are responsible for transmission of Chagas' disease.

SECTION B

[40 marks]

Answer **ANY TWO** questions in this section. Each question carries **20 marks**

Q11. Discuss **sources** of infection and **routes** by which parasites enter the host's body, giving details of the parasite, the stage of the parasite, intermediate and definitive hosts, involved.

Q12. Metabolic dependence of a parasite on its host is a complex matter, involving a number of factors. Discuss.

Q13. Discuss the different types of zoonotic trematode (flake) infections, based on mode of infection, parasite life cycle, location in the human body, clinical features, geographic distribution, diagnosis and prevention.

Q14. Discuss strategies for control and prevention of parasitic infections.