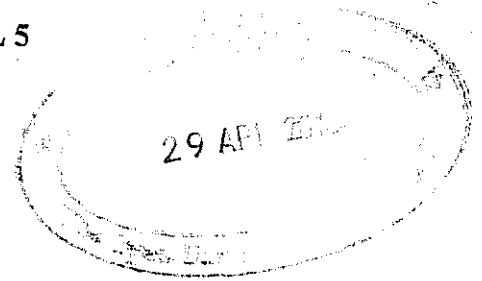


THE OPEN UNIVERSITY OF SRI LANKA  
B.Sc./B.Ed. DEGREE PROGRAMME 2012/ 2013 – LEVEL 5  
PARASITOLOGY - ZLU3184 / ZLE5184  
NO BOOK TEST 1  
DATE: 9<sup>th</sup> FEBRUARY 2013  
TIME: 11.00 AM – 12.00 NN



REGISTRATION NO. ....

**PART B** (60 marks)

**2.0 Write answers within the space provided.**

2.1 Given below are examples of symbiotic associations found among animals. You have learnt of the key characteristics of the different types of associations. Based on that knowledge identify the type of symbiotic association and give reasons for your answer.

- (i) Many crustaceans live on the surface of corals eating their mucus coating and dead skin and they usually live without affecting their coral hosts.

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- (ii) Fleas live on dogs, biting their skin and sucking their blood and causing the dogs to itch.

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- (iii) Some mites move from place to place on a beetle, but neither have a physiological dependence on each other.

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*Contd....*

(iv) The zooxanthellae live inside coral tissue, taking advantage of waste products of the coral and transforming them into substances the coral can use to grow and maintain its calcium carbonate home.

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**2.2 Differentiate between the following:**

(i) Indirect and direct life cycles.

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(ii) Definitive and intermediate hosts.

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(iii) Biological and mechanical vectors.

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**2.3 Categorise the *Trichomonas* parasite based on the following aspects.**

(i) Level of its dependency on the host: .....

(ii) Location exploited in the host: .....

(iii) Duration of time spent in the host: .....

*Contd....*

2.4 Give an example of a parasite, whose infection is transmitted from one human to another through the following modes:

(i) Oral : .....

(ii) Skin : .....

(iii) Sexual : .....

2.5 Explain the purpose of the following parasitic adaptations.

(i) *Plasmodium* possesses an apical complex in its merozoite stage.

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(ii) *Trypanosoma* exhibits antigenic variation.

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(iii) Tapeworm scolex bears suckers.

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(iv) High reproductive rate of digeneans.

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2.6 A community health worker advises you to sleep inside a net in order to reduce the spread of an amebiasis infection to other family members. Would you agree with this advice? Explain your answer.

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2.7 A dog suspected to have a *Giardia lamblia* infection is brought to you for a diagnosis.

(a) How would you establish the diagnosis in the laboratory?

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Contd....

(b) Explain what simple laboratory investigations would lead you to the diagnosis of giardiasis.

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(c) List two (02) diagnostic features that would help you to confirm the laboratory diagnosis.

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