

UNIVERSITY OF RUHUNA  
BACHELOR OF SCIENCE IN FISHERIES AND MARINE SCIENCES DEGREE

Level IV Semester I - July/August 2015

FAQ 4123- Fish Pathology and Parasitology

Time: 02 hours

Answer only **Four (04)** questions.

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- 01). (a) "Ectoparasites are more dangerous than endoparasites" Give reasons. (10 marks)  
(b) What are the clinical signs of ectoparasitic diseases? (10 marks)  
(c) Discuss the effect of *Ichthyobodo necator* as an ectoparasite in freshwater aquaria  
(30 marks)
- 02). Discuss the factors contributing disease outbreaks in fish farms. (50 marks)
- 03). Describe **any two** of the following (25 marks each)  
(a) Addition of therapeutic substances to feed  
(b) Prevention of disease occurrence in fresh water aquaria  
(c) Methods of adding chemicals to water
- 04). (a) What are the techniques used in disease diagnosis? (05 marks)  
(b) What are the monoclonal and polyclonal antibodies? (15 marks)  
(c) Briefly describe the hybridoma technology. (30 marks)

05) Write short accounts on the following.

- (a) Bacteria culture media (15 marks)
- (b) Gram staining and Acid Fast staining (15 marks)
- (c) Bio-chemical tests for bacterial identification (20 marks)

06). (a) Define the term pathology. (05 marks)

(b) How does vibriosis is diagnosed and controlled in shrimp aquaculture? (15 marks)

(c) South East Asian countries are a hot spot of koi herpes virus (KHV). A commercial fish farm of Sri Lanka needs to import koi brood stocks from Thailand. As a fish pathologist, how would you instruct the farmer on susceptible species, favorable environment conditions, mortality clinical signs, routes of transmission diagnosis and control of KHV? (30 marks)

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