



**RAJARATA UNIVERSITY OF SRI LANKA  
FACULTY OF APPLIED SCIENCES**

**B.Sc. (Special) Degree in Applied Biology  
Fourth Year – Semester I Examination –October/November 2015**

**BIO 4210 – AQUATIC RESOURCES AND CONSERVATION**

**Time: Two (02) hours**

---

**Answer four(04) questions only, including question No. 1. Illustrate your answers with labeled diagrams where appropriate.**

1. Write short notes on any **four (04)** of the following.
  - a) Ocean waves
  - b) Thermocline
  - c) *In-situ* bioremediation of water
  - d) Oxygen sag curve
  - e) Types of streams
  
2.
  - a) What is meant by aquatic pollution?
  - b) How would you categorize pollution in freshwater aquatic resources of Sri Lanka?
  - c) Giving examples, briefly discuss the impacts of ballast water on marine environment.
  
3. "Village tanks in the dry zone of Sri Lanka are not isolated entities, but often found in clusters forming part of a hydrologically integrated system that are known as cascades".  
Analyse the above statement in relation to resource management.



4. a) What are facts that you would select to show the importance of sulphur for organisms?
- b) Diagrammatically illustrate the "Global Sulphur Cycle".
- c) Comment on each step in the above illustration.
- 5) "Upwelling is an oceanographic phenomenon that involves in **wind-driven motion** of dense, cooler and usually nutrient-rich water towards the ocean surface, replacing the warmer, nutrient-depleted surface water."
- a) How would you assess the importance of the "**wind-driven motion**" for the above phenomenon?
- b) Comment on the ecological effects of upwelling.