

## RAJARATA UNIVERSITY OF SRI LANKA FACULTY OF APPLIED SCIENCES

B.Sc. (Special) Degree in Applied Biology Fourth Year – Semester II Examination – April/May2016

## BIO 4210 - AQUATIC RESOURCES AND CONSERVATION

Time: Two (02) hours

## Answer four (04) questions including question No. 1.

- 1. Write short notes on any **four (04)** of the following.
  - a) Great Pacific garbage patch
  - b) Thermocline
  - c) Three basic tidal patterns
  - d) Oxygen sag curve
  - e) Drainage patterns
- 2. a) What is meant by elemental pollution?
  - b) Explain in detail, the anthropogenic impacts on trace element pollution in freshwater environments with appropriate examples.
- 3. a) Why water is considered as a renewable resource?
  - "In ancient cultural context, water management was not taken as an isolated issue"
    Justify the above statement, comparing with the modern methods of water management.
- 4. a) State the factors that should be considered to show the importance of phosphorous for organisms.
  - b) Discuss the human impacts on phosphorous cycle.
  - c) Illustrate the "Phosphorous cycle" using a diagram.
  - d) Comment on each step in the above illustration.
- 5. "The thermohaline circulation is a part of the ocean circulation which is driven by density differences in the water."
  - a) Explain succinctly the reasons for "density differences" in the ocean.
  - b) Evaluate the importance of "thermohaline circulation".