

THE OPEN UNIVERSITY OF SRILANKA
 CENTRE FOR ENVIRONMENTAL STUDIES & SUSTAINABLE
 DEVELOPMENT
 M. Sc. IN ENVIRONMENTAL SCIENCE 2017/18
 AQUATIC RESOURCES AND THEIR MANAGEMENT
 ZYPA606 – LEVEL 10
 FINAL EXAMINATION



DATE: 09.12.2018

TIME: 1.30 p.m. – 4.30 p.m.

Answer any four (4) questions

1. (i) Describe the occurrence of subsurface waters using fully labelled diagrams. (60 marks)
- (ii) Discuss the ground water pollution issues in Sri Lanka. (20 marks)
- (iii) Briefly explain the ground water problem in Jaffna peninsula and the measures taken by the Department of Irrigation Sri Lanka to alleviate the problem. (20 marks)

2. (i) Discuss the dissolved oxygen profiles in productive and unproductive temperate lakes. (80 marks)
- (ii) Explain the type of oxygen curve that you would expect in a tropical eutrophic lake. (20 marks)

3. (i) Briefly describe the causes for eutrophication took place in the Kotmale reservoir. (40 marks)
- (ii) Discuss the preventive measures to control eutrophication process. (40 marks)
- (iii) Briefly explain the water pollution problem occurred in Vavuniya tank and measures taken to resolve it? (20 marks)

4. (i) Explain the consequences of over exploitation and destruction of mangrove ecosystems. (55 marks)
- (ii). What are the management practices that can be adopted to improve mangrove ecosystems in Sri Lanka? (45 marks)

5. (i) Explain the human activities that have degraded the Mundal lagoon in Sri Lanka. (65 marks)
- (ii) Discuss the ways by which the condition of the lagoon can be restored. (35 marks)

6. (i) Describe the factors that lead to coastal erosion in the southwestern region of Sri Lanka. (50 marks)
- (ii) Briefly describe the management practices established to protect the coastal area. (50 marks)

7. Write notes on any two (2) of the following;

- (a) Properties of water in relation to the structure of the water molecule
- (b) Physicochemical characteristics of 1st order streams
- (c) The marine fishery resources of Sri Lanka

(50 marks for each)
