



UNIVERSITY OF COLOMBO, SRI LANKA

FACULTY OF GRADUATE STUDIES

MASTER OF ENVIRONMENT MANAGEMENT– Semester I –2018/ 2019

**MEM 6101- Natural Resource and Environment Management
Three Hours**

Answer only four questions

No of pages: 03

Important Instructions to Candidates

If a page or a part of this question paper is not printed, please inform the supervisor immediately.

Enter Your Index Number on all pages of the answer script.

ESSAY TYPE: Write the answers to these questions on writing paper provided.

Electronic devices capable of storing and retrieving text, including electronic dictionaries and mobile phones are not allowed.

Answer only four questions

Question 1

- I. Discuss briefly the issues in ground water management in Sri Lanka. (20 marks)
- II. Goal 6 of SDGs indicates to ensure availability and sustainable management of water and sanitation for all. Discuss how the governments could improve water quality by 2030. (30 marks)

Question 2

- I. Using examples explain the following statement "Insects are considered as an important component of the biosphere". (20 marks)
- II. How do you describe an "integrated Pest Management" as an environmentally friendly strategy, with respect to its definition? (10 marks)
- III. Describe the important component of an Integrated Pest Management (IPM) Programme for successful management of an insect pest? (20 marks)

Question 3

- I. Define 'Natural Resource' and comment on its categorization (15 marks)
- II. Explain the importance of solar energy resource for plants, animals and human beings (35 marks)

Question 4

- I. List 5 vegetation types found in the coastal belt of Sri Lanka? (10 marks)
- II. Provide two characteristic features in each and at least two locations that they could be found in Sri Lanka (12 marks)
- III. Briefly comment on the importance of coastal vegetation and wildlife to us (28 marks)

Question 5

- I. Describe in detail ecosystem services provided by forests (30 marks)
- II. Compare and contrast an even aged forest and uneven aged forests (20 marks)

Question 6

Write an essay on "Forest Landscape Restoration". (50 marks)

Question 7

Examine and explain in detail the relationship between the economy and the environment of the following (50 marks)

- Economic activities require natural resources and the environment supplies them
- Environment provides resources for production
- Environment provides goods for direct consumption
- Over extraction of resources create environmental problems

- Production and consumption activities produce residuals which pollutes the environment
- Environment has an inbuilt recycling mechanism to purify water, air, soil, and noise pollution
- When the society created more residuals beyond the carrying capacity of the environment pollution becomes a problem
- Environment provide beauty, cultural values and heritage values
