

The Open University of Sri Lanka
 M.Sc. in Environmental Science -Level 07
 Final Examination - 2017
 NEP 1209/1203 - Environmental Pollution



Duration – Three (03) hours

Date: 26th November 2017

Time: 9.30a.m.– 12.30p.m.

Answer any four (04) questions.

1. a. Briefly explain how ground level Ozone(O₃) is formed.
 b. How does ground level Ozone(O₃) differ from stratospheric Ozone(O₃)?
 c. Discuss the major pollutants seen in the photochemical smog indicating their sources and effects to the environment.
2. a. What is acid rain?
 b. What are the causes for the formation of acid rain?
 c. Elaborate with examples the effects of acid rain on animals, plants and material.
3. Soil pollution is a form of land pollution, where the upper layer of the soil is damaged. This is caused by the overuse of chemical fertilizers, soil erosion caused by running water and other pest control measures; this leads to loss of fertile land for agriculture, forest cover, fodder patches for grazing etc. The effects of land pollution are very hazardous and can lead to the loss of ecosystems. When land is polluted, it directly or indirectly affects the climate patterns.

With the help of the knowledge on land degradation and with reference to suitable examples, explain the highlighted effects/issues given in the above statement.

4. a. Why is analysis of nonmetallic Nitrogen(N) in water important in determination of the water quality ?
 b. Outline the methods used to determine N forms available in water.
5. a. Why does “Advanced Waste Water Treatment” perform in treating wastewater?
 b. Discuss the physical treatment method being practiced in advanced waste water treatment procedure.
6. Write short notes on any three(03) of the following.
 - a. Toxic organic and inorganic pollutants in water
 - b. Water quality indicators
 - c. Biological treatment of hazardous waste
 - d. Particulate emission control technologies in industries