



The Open University of Sri Lanka
M.Sc. in Environmental Studies

Duration - One hour

Reg.No.

Answer all questions on this paper itself.

1. a. Distinguish between acute health effects and chronic health effects.

.....
.....
.....
.....
.....

- b. "Air pollution increases the risk of respiratory diseases in a population." Justify with reasons and suitable examples.

- c. A plant growing in the side of a high traffic road showed the following:

- leaves with some lesions
 - curtailed growth of plants and
 - chlorosis in some leaves

How do you explain the above observations with the help of your knowledge on air pollution?
(you must indicate at least two possible causes with interpretations for each observation).

d. Why do we consider “Acid rain” as a secondary pollutant?

2. a. Giving examples, classify the sources of water pollution based on their origin.

.....
.....
.....
.....
.....

b. Graphically illustrate how Biological Oxygen Demand(BOD) of a stream change when pollutants are dumped in?

c. "Sediments and suspended matters are the number one water pollutant based by weight". Explain with suitable examples highlighting possible issues.

d. "A report says that a lake is smelly and has thickly grown aquatic plants with many dead fish". Give reasons for this observation.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

e. List five effects of water pollution on human health.

.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....
.....

f. The following Table gives some effects of heavy metals in water pollution. Fill the blank column by indicating the name of possible heavy metal/s to have that symptom.

Effect/symptom	Name of possible heavy metal
Skin lesions in aquatic animals	
Excretion of amino acid and glucose in urine	
Pale yellow leaves and plant growth inhibition	
Irreversible brain damage of animals	
Anemia in animals	

3. a. How does shifting cultivation without adequate fallow period become a direct cause for land degradation?

.....
.....
.....
.....
.....
.....
.....
.....

b. What impacts on soil would you expect when a sloppy land is subjected to deforestation followed by a Tea plantation?

c. "Soils with high infiltration rates, high organic matter and high aggregate stability have better resistance for soil erosion". Comment.

4. What are the principles one should be mindful when designing controlling methods for water and wind erosion?

Water erosion:

Wind Erosion:

.....
.....
.....
.....
.....
.....