WORKSHEET 1

CHAPTER 5 – NATURAL RESOURCES

A. Tick (✓) the correct option.

1. The two forms of oxygen found in the atmospheres are
   a. water and ozone.
   b. water and oxygen.
   c. ozone and oxygen.
   d. water and carbon dioxide.
2. Which of the following is not a greenhouse gas?
   a. Carbon dioxide
   b. Water vapour
   c. Methane
   d. Ammonia
3. Oxygen is returned to the atmosphere mainly by
   a. burning of fossil fuel.
   b. respiration.
   c. photosynthesis.
   d. transpiration.
4. Growth of lichens on barren rocks is followed by the growth of
   a. moss.
   b. ferns.
   c. gymnosperms.
   d. algae.
5. Oxygen is harmful for
   a. ferns.
   b. *Chara*.
   c. nitrogen fixing bacteria.
   d. mango tree.

B. Fill in the blanks.

1. _____ makes the soil porous and allows water and air to penetrate deep underground.
2. The process of conversion of complex organic compounds into ammonia is called _____
3. _____ is a denitrifying bacteria.
4. _____ and _____ gases cause acid rain.
5. Ozone layer in the atmosphere screens out _____ of the sun.

C. Match the column.

1. Soil formation	a. CFC
2. Water pollution	b. CO_2
3. Global warming	c. Fertilizers, pesticides, sewage
4. Acid rain	d. Weathering
5. Ozone deplation	e. Oxides of nitrogen and sulphur

Name: ..... Teacher's signature: .....

Class: IX Date: .....

D. State True (T) or False (F)

1. *Rhizobium* helps in nitrogen fixation in the root nodules of leguminous plants.
2. Sulphur dioxide is necessary for manufacting of proteins by plants.
3. Wind is caused by uneven heating of air over land and water bodies.
4. The process of converting free nitrogen of the atmosphere into nitrogen compounds is called nitrification.
5. The outer crust of the earth is atmosphere.

E. Answer the following questions.

1. What is soil erosion? Give two methods of reducing it.
2. Why is life on venus and mars not possible?
3. Name the gases which causes greenhouse effect.
4. Arrange the following in order of their sequence of occurrence in nitrogen cycle starting from nitrogen gas:
   Ammonification, nitrification, denitrification, nitrogen fixation.
5. Explain the following in terms of water pollution.
   (*i*) Addition of undesirable substances
   (*ii*) Removal of dissolved oxygen
   (*iii*) Change in temperature

ANSWERS

WORKSHEET 1

A. Tick (✓) the correct option.

1. c 2. d 3. c 4. a 5. c

B. Fill in the Blanks.

1. Humus
2. Ammonification
3. *Pseudomonas*
4. Sulphur dioxide, nitrogen oxides
5. Ultraviolet rays

C. Match the column.

1. d 2. c 3. b 4. e 5. a

D. State True (T) or False (F).

1. T 2. F 3. T 4. F 5. F

E. Answer the following questions.

1. The removal and transportation of the top layer of soil from its original position to another place by flowing water or wind is called soil erosion. Soil erosion can be checked by growing more trees on barren land. Terrace farming reduces soil erosion on hillside. In addition, sowing grasses, planting xerophytes, contour bunding and making proper drainage canals around the field helps in preventing soil erosion.
2. Life is not possible on these planets because carbon dioxide forms 95-97% of the atmosphere on these planets.
3. Carbon dioxide, methane, water vapour, nitrous oxide
4. Nitrogen fixation → ammonification → nitrification → denitrification
5. (*i*) The undesirable substances could be fertilizers and pesticides used in farming or they could be poisonous substances like mercury salts used by paper industries. These could also be disease causing microbes, like the bacteria which cause cholera.

   (*ii*) Dissolved oxygen is used by the plants and animals that live in water. Any change that reduces the amount of dissolved oxygen would adversely affect these aquatic organisms.

   (*iii*) Aquatic organisms are used to a certain range of temperature in the water body where they live, and a sudden change in temperature would be dangerous for them or affect their breeding. The eggs and level susceptible to temperature changes.