#### #638427

Explain how animals dwelling in the forest help it grow and regenerate

#### Solution

Different types of animals like herbivores, carnivores, micro-organisms, etc. are found in the forests. They help in growing and regenerating forests in many ways

- (i) The dead plants and animals are converted to humus by the microorganisms. This humus helps in returning the nutrients back to the soil which is absorbed by the plants.
- (ii) Herbivores clear the ground by eating grass and in a way help in the growth of new vegetation.
- (iii) Animals also help in dispersing the seeds of certain plants.
- (iv) The decaying animal dung provides nutrients to various types of seedlings to grow.
- (v) Dungs of animals provide nutrient to various types of seedlings to grow.

# #638428

Explain how forests prevent floods

#### Solution

Forest is a natural absorber of rain water. It allows rain water to seep through. The roots of the trees absorb the water and prevent it from flowing away. The trees present in the forest prevents the rain from directly hitting the ground which may result in floods. It rather hits the ground slowly. Hence, trees in the forest slow down the movement of running water and thus help in preventing floods.

### #638429

What are decomposers? Name any two of them. What do they do in the forest?

### Solution

The micro-organisms that decompose/ convert the dead remains of plants and animals to humus are called decomposers. The two common examples of decomposers are bacteria and fungi. They play an important role in clearing the debris of dead remains of plants and animals and convert them into humus which enriches the nutrients of the soil.

# #638430

Explain the role of forest in maintaining the balance between oxygen and carbon dioxide in the atmosphere

## Solution

The green plants and trees present in the forest utilize carbon dioxide from the environment during the process of photosynthesis and release oxygen in the atmosphere. This oxygen is inhaled by the animals during respiration. Animals release carbon-dioxide during respiration which is absorbed by plants. In this way the oxygen and carbon dioxide cycle goes on. Since forests contain a large number of plants and trees, they help in maintaining the balance between oxygen and carbon dioxide in the atmosphere.

# #638431

Explain why there is no waste in a forest.

# Solution

When the plants and animals die in the forest, this is considered as waste. When they die, the microorganisms present in the soil helps to convert the waste into hummus or nutrients for the soil which in turn used by plants. And, therefore forest doesn't contain any waste materials.

# #638432

List five products we get from forests.

# Solution

Any material or substances which can be obtained from the forestry minerals can be used for direct utilization or commercial use is known as forest products. Trees are harvested in a wide range that can be used in our daily life.

- 1. Solid timber products are used for making joinery, furniture, kitchen cupboards and wall panels.
- 2. Wood fibre products are used to make paper, cardboard, and particle board.
- 3. Peeling a log produces the coating that may be glued together to make plywood, or laminated veneer lumber (LVL), used in building homes and offices, boats, toys, furniture and joinery.
- 4. Lots of medicines can be obtained from the forest.
- 5. Food is also obtained from the forest

### #638433

The insects, butterflies, honeybees and birds help flowering plants in

# Solution

Pollination is the transfer of pollen grains from the anther to stigma. It can be done in two ways either manually or naturally. When the pollen grains are transferred from one flower to another flower with the help of people can be referred as manual pollination. In the natural pollination, the pollination is done without the help of people, here the insects, butterflies, honeybees and birds help to transfer pollen grains from one flower to another flower, and thus results in the flowering or fertilization.

### #638434

A forest is a purifier of air and water. Explain.

### Solution

A forest is a purifier of air and water. Trees present in forests act as green filters. They release oxygen as a product of photosynthesis. In this way, they purify air by increasing the amount of oxygen in atmosphere. They also helps in removing harmful particles and pollutants.

Due to activity rain, soil gets erode. The eroded soil enters into water bodies and pollutes it. Trees slow down the activity of rain and rain water gets absorbed by the soil. In this way, forest help in purifying water.

## #638435

Herbs form a layer in forest called the

# Solution

Forest has various layers of plants. The five layers of the forest include, canopy, understory, shrub layer, herb layer, and forest floor. The herb layer consists of ferns, grasses and wildflowers. It is the thickest layer in the forest. It is the home for various forest animals that live on the ground such as insects, mice, snakes etc. It is the layer just above the forest floor.

## #638436

The decaying leaves and animal droppings in a forest enrich the

## Solution

When the plants and plants die, various microorganisms present in the soil helps to convert the dead and decayed matters into humus. This humus is enriched with nutrients which mix up with the soil. So, the soil is enriched with humus

## #638437

Why should we worry about the conditions and issues related to forests far from us?

# Solution

Forest is the important source of daily life that has to be managed properly. Forest is mainly concerned with the maintenance of wildlife, ecological balance, prevention of soil erosion, etc. When the deforestation is continued to the certain extent then it leads to floods, increase in earth's temperature, decreasing animals habitats and soil erosion.

Causing devastation to the forest directly or indirectly disturbs the human dwelling and environment. So, it must be a matter of concern among us.

# #638438

Explain why there is a need of variety of animals and plants in a forest

#### Solution

Forests are the essential life on earth. All plants and animals continue to live in forest life. Forest plays an important role in the ecological balance, environmental balance etc.

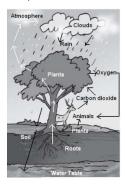
Each and every living being in the forest is interconnected so that carbon dioxide and oxygen cycle will be balanced and when anyone among them is out of balance it results in the entire organisms to be weakened. When animals and plants die, the various microorganisms present in the soil helps to convert the dead and decayed matter into humus and thus the fertility of soil can be increased which boosts up the plant growth. All food chains and food webs need the variety of plants and animals.

#### #638439

In fig. the artist has forgotten to put the labels and directions on the arrows. Mark the directions on the arrows and label the diagram using the following labels: clouds, rain, atmosphere, carbon dioxide, oxygen, plants, animals, soil, roots, water table.

### Solution

The arrow mark indicates the movement of water from the soil to the plants and from there back into the abiotic system in the form of water vapour through a process called transpiration.



### #638440

Which of the following is not a forest product?

(i) Gum (ii) Plywood (iii) Sealing wax (iv) Kerosene

# Solution

Any product or substances which is obtained from the forestation for direct consumption or commercial use are said to be forest product. Gums are obtained from the woody elements of plants or in seed coatings. From the thin layers or the pile of wood, plywood is manufactured. Sealing wax is made from beeswax. So, these are the products of the forest. Kerosene is not the forest product because it is a fossil fuel.

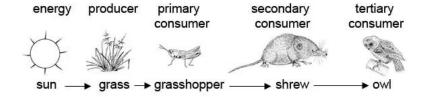
## #638441

Which of the following statements is not correct?

- (i) Forests protect the soil from erosion.
- (ii) Plants and animals in a forest are not dependent on one another.
- (iii) Forests influence the climate and water cycle.
- (iv) Soil helps forests to grow and regenerate.

# Solution

Plants and animals in a forest are not dependent on one another, this is the wrong statement among the given options. They should depend on each other for survival, because each provides something the other needs. This dependency can be well illustrated with the help of food chain in the ecosystem.



# #638442

Micro-organisms act upon the dead plants to produce

(i) sand (ii) mushrooms (iii) humus (iv) wood

# Solution

Micro-organisms act upon the dead plants to produce humus. The micro-organisms which convert the dead plants and animals to humus are known as decomposers like bacteria and fungi. For the healthy soil, humus contains many useful minerals and nutrients.