



Page No.240

Solution 1

1%.

Solution 2

10%.

Solution 3

Biological Magnification.

Solution 4

Bird.

Solution 5

Cat.

Solution 6

Ultra Violet radiations.

Solution 7

Chlorofluro Carbons.

Solution 8

Paper and Plastics.

Solution 9

Incineration.

Solution 10

0.05 J.

Solution 11

False.

Solution 12

Sun.

Solution 13

Because after that the energy available for the next organism will be so small that it will be insufficient to sustain the life of that organism.

Solution 14

Peacock and hawk.

Solution 15

(a) Cancer.

(b) Producer.

(c) Goat.

(d) Rabbit.

(e) Lion.

PAGE NO-241:

Solution 16

Ten PerCent Law - According to ten per cent law, only 10 per cent of the energy entering a particular trophic level of organisms is available for transfer to the next higher trophic level. Example - Suppose 1000 Joules of light energy emitted by the sun falls on the plants. Consider a food chain:



The plants or first trophic level has 10 joules of energy in it. Now according to 10 percent law, only 10% of 10 joules of energy (which is 1 joule) will be available for transfer to the next trophic level, so that the herbivore will have only 1 joule of energy stored as food at the second trophic level. 10% of the remaining 1 joule will be

transferred to third trophic level of carnivore. So, the energy available in the lion as food will be only 0.1 joule.

Solution 17

CFC - Chlorofluorocarbons. Chlorofluorocarbons released into the air react with ozone gas present in the ozone layer and destroy it gradually.

Solution 18

Ozone layer absorbs most of the harmful ultra violet radiations coming from the sun and prevents them from reaching the earth.

Solution 19

The depletion of ozone layer is due to the use of chemicals called chlorofluorocarbons. Skin cancer is caused if the ozone layer will become thinner.

Solution 20

Pesticides are poisonous chemical substances which are sprayed over crop plants to protect them from pests (harmful small animals) and diseases. These chemical pesticides mix up with soil and water. From soil and water, these pesticides are absorbed by the growing plants alongwith water and other minerals. When herbivorous animals eat plant food, then these poisonous chemical pesticides go into their bodies through the food chain. And when the carnivore animals eat herbivores, then the pesticides get transferred to their bodies. Man being an omnivore; eat plant food as well as herbivores. So the pesticides present in plant food and herbivores also get transferred to the man's body through food. Thus, pesticides enter the food chain at the producer level (plant level) and in the process of transfer of food through food chains these harmful chemicals get concentrated at each trophic level.

***** END *****