Natural Resources Class 10 GSEB Solutions Social Science Chapter 8

Gujarat Board Class 10 Social Science Natural Resources Textbook Questions and Answers

I. Answer the following questions in detail.

Question 1.

What is meant by resource? Describe its usages.

Answer:

Things on which man is dependent which can fulfil his needs and for which man has the physical and intellectual capacity to utilize them are called as resources.

Usage of Resources:

(i) Resources as food: The resources obtained from nature feed us. Fruits, crops, milk and milk products and meat obtained from domestic animals, fish and other aquatic animals from reservoir, honey prepared by honey bees, etc, are used as food. Thus, nature serves as a food resource.

(ii) Resource as a source of raw material: Nature gives a large variety of products from forests. Agro products, wool, hides and meat available from animals, minerals ores, etc, serve as raw material for many industries.

(iii) Resource as energy resources: Nature gives us coal, petroleum, natural gas, etc. These resources are used as fuel in industries as well as domestic fuel. Moreover, elements of nature such as sun, wind, sea waves, tides and ebbs and waterfalls, etc, are also used in generating energy.

Question 2.

What is meant by soil conservation? State the remedies of soil conservation. Answer:

Soil conservation refers to the prevention of soil erosion and to maintain its quality. The most important aspect of soil conservation is to retain the soil particles at their original place.

Remedies for Soil Conservation (erosion):

- 1. The roots of the forest cover hold up the soil particles. So, more trees should be planted.
- 2. Plant trees in the river gorges and on mountain slopes.
- 3. A series of trees should be grown near a desert region to prevent the winds with more velocity. It will stop the advancing desert.
- 4. The river floods should be controlled by diverting their flow in other rivers or in dry river beds.





- 5. Unrestricted grazing loosens the soil layer on the mountains. Hence, it should be prevented.
- 6. Methods like horizontal cultivation, terraced farms, etc, should be implemented.
- 7. Humus content should be added to the soil whose fertility is lost.
- 8. Government, society and the people should work together for soil conservation.

II. Answer the following questions as directed.

Question 1.

Describe the process of soil formation and state on which basis these Are classified. Answer:

Soil is a thin layer on the surface of the earth and is composed of various elements. The part of the surface of the earth where the vegetation grows is known as 'soil'. In other words, the soil is a natural mixture of minerals and biotic elements which have the capacity to grow and develop vegetation.

Soil formation takes place on the parental material also called parental rocks. Natural factors like temperature, climate, vegetation, topography, time, etc., results into denudation of the flat top portion of rocks. This process results in the formation of thin layer of small rocks, clay and dust. The humus formed due to the disintegration or decay of vegetation or insects is added to this thin layer. These biotic elements play an important role in the development of vegetation. Together all these form a crust of land or say soil. Soils are classified on the basis of their colour, climate, parental rocks, structure, humus, etc.

Question 2.

Write a short note on alluvial soil.

Answer:

Alluvial soil is formed due to the alluvium that the river's deposits along their banks. This soil contains potash, phosphoric acid and limestone in large proportion whereas nitrogen and humus in small proportion. About 43% area of India is covered with alluvial soil. This soil is found in the northern plain from the Brahmaputra Valley in the east up to Satluj in the west and in the delta regions of Mahanadi, Godavari, Krishna and Kaveri rivers. The nitrogen content of the alluvial soil can be stabilized if crops of pulses are grown in it. Crops like wheat, paddy, sugarcane, jute, cotton, maize, oilseeds etc can be grown in this soil.

Question 3.

Write note on black soil.

Answer:

It is believed that black (Regular) soil was formed due to the solidification of lava spread over large areas during volcanic activity in the Deccan Plateau, thousands of years ago. So, we can say that rocks and climate played an important role in the formation of black soil. Black soil is very fertile. It has good capacity of retaining moisture. Whenever the moisture dries up, the soil develops fissures and then cracks.





Black or regur soil covers about 15% of the total area of India. It is found in entire Maharashtra, Western Madhya Pradesh, Andhra Pradesh, and certain area of Karnataka. In Gujarat, it is found in Surat, Bharuch, Narmada, Vadodara, Tapi and Dang districts. Black soil contains iron, lime, calcium, potash, aluminium and magnesium carbonates in more proportion. Crops like cotton, linseed, mustard, groundnut, tobacco and urad are grown in this soil. The soil is quite suitable for cultivating cotton and hence is also known as cotton soil.

III. Answer the following questions in brief:

Question 1.

What is soil erosion? State the measures to prevent it. Answer:

Soil Erosion: When land particles get transferred from one place to another due to fastmoving air i.e. wind and water, it is called soil erosion.

It takes many years to form the upper layer of soil. When this top layer of soil erodes due to heavy rain or by stormy wind, the agricultural production on that soil decreases. Hence, it is extremely important to check that the soil does not erode. Measures to prevent soil erosion:

- 1. Control grazing activity on the land.
- 2. Plantation should be carried out in contour method in sloppy regions.
- 3. Trees should be planted in fallow land.
- 4. Construct check dams on streams.
- 5. To reduce the speed of the water cultivation should be done very deeply in the fields.

Question 2.

What is called as Mountain Soil?

Answer:

Mountain Soil: The layer of the mountain soil is very thin and is underdeveloped. Mountain soil is found in the valley and sloppy regions of Himalayas at an altitude of about 2700 to 3000 metres. This soil is found in Assam, Darjeeling, Uttarakhand, Himachal Pradesh and Kashmir. This soil is found in the regions of pipe and child trees in Himlayas.

Question 3.

Write short note on the Desert Soil.

Answer:

Desert soil is sandy and infertile. It contains more of dissolved minerals and lacks organic matter. Desert soil is found in areas having arid or semi-arid climate. This soil is found in Rajasthan, Haryana and Southern Punjab. In Gujarat, this type of soil is found in Kachchh and some parts of Saurashtra. If proper irrigation facilities are used, then crops like millet and jowar can be cultivated in this soil.





IV. Select the correct option and write answer.

Question 1.

The resource available at one or two places in the world is

- (a) Universal resource
- (b) Common available resource
- (c) Rare resource
- (d) Solitary resource

Answer:

(d) Solitary resource

Question 2.

Soil information takes place due to elements of parental rocks.

- (a) Weathering and erosion
- (b) Transportation and stagnancy
- (c) Sequence and non-sequence
- (d) Vertical and headwords

Answer:

(a) Weathering and erosion

Question 3.

Which is the other name of Padkhau soil?(a) Alluvial soil(b) Laterite soil(c) Plack soil

(c) Black soil

(d) Red soil

Answer:

(a) Alluvial soil

Question 4. Recently the soil of India are classified into types by Indian Council for Agricultural Research (ICAR).

- (a) Seven
- (b) Sixteen
- (c) Five
- (d) Eight.

Answer:

(d) Eight.



