

OPEN STUDENT FOUNDATION

CHAPTER 8

Std 10 : SS

Date : 25/02/24

IMPORTANT QUESTIONS DAY 8

Section A

- Write the answer of the following questions. [Each carries 1 Mark] [2]
1. True or False : Generally available resources are known as easily available resources.
 2. This type of soil is found in the valley and sloppy regions of Himalayas at an altitude of about 2700 to 3000 metres. It's layer is very thin and under developed. What type of soil is it ?
(A) Laterite (B) Mountain (C) Marshy (D) Red

Section B

- Write the answer of the following questions. [Each carries 2 Marks] [8]
3. Define resource. Classify resources on the basis of their ownership.
 4. What is called as Mountain soil ?
 5. Write a short note about the desert soil.
 6. State the remedies to prevent soil erosion.

Section C

- Write the answer of the following questions. [Each carries 3 Marks] [21]
7. Define the terms : (1) Solitary resource, (2) Resource, (3) Soil Erosion
 8. What is soil erosion and how to prevent them ?
 9. Define resource. Classify resources on the basis of their ownership.
 10. Write a notes on Alluvial soil.
 11. Write notes on Black soil.
 12. Describe the process of soil formation and state on which basis these are classified.
 13. 'Resources are useful in different ways.' Explain.

Section D

- Write the answer of the following questions. [Each carries 4 Marks] [12]
14. Show the following in the outline map of India : One region of black soil
 15. Show the following places with proper symsbols at their proper places in the given outlined map of India : Desert soil
 16. What is soil ? Explain the types of soils of India details.

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Section A

● Write the answer of the following questions. [Each carries 1 Mark] [2]

1. True or False : Generally available resources are known as easily available resources.
➡ True
2. This type of soil is found in the valley and sloppy regions of Himalayas at an altitude of about 2700 to 3000 metres. It's layer is very thin and under developed. What type of soil is it ?
(A) Laterite (B) Mountain (C) Marshy (D) Red

➡ Ans : (B)

Section B

● Write the answer of the following questions. [Each carries 2 Marks] [8]

3. Define resource. Classify resources on the basis of their ownership.
➡ Try Yourself
4. What is called as Mountain soil ?
➡ This type of the soil is found in the valley and sloppy regions of the Himalayas as an altitude of about 2700 to 3000 meters.
➡ This soil is very underdeveloped and its layer is very thin.
➡ This soil is found in Assam, Darjeeling, Uttarakhand, Himachal Pradesh and Kashmir.
➡ In Himalayas the soil is found at a general altitude in the regions of pine and chid trees.
5. Write a short note about the desert soil.
➡ Desert soil is found in the area where climate is arid or semi-arid.
➡ This soil is sandy and less fertile.
➡ Rajasthan, Haryana and southern Punjab states of India have this type of soil.
➡ It is found in Kachchh and some parts of Saurashtra in Gujarat.
➡ Crops like millet and jowar can also be taken in this soil if provided with irrigation facility.
6. State the remedies to prevent soil erosion.
➡ It means the transportation of land particles from one place to another with help of moving air and water.
➡ Plant trees in fallow land.
➡ Control the grazing activity on the land.
➡ Plantation should be carried out in contour method in sloppy regions.
➡ Construct check dams where there are streams.
➡ Cultivate very deeply in the field to decrease the speed of the water.

Section C

[21]

- Write the answer of the following questions. [Each carries 3 Marks]

7. Define the terms : (1) Solitary resource, (2) Resource, (3) Soil Erosion

➡ Try Yourself

8. What is soil erosion and how to prevent them ?

➡ Try Yourself

9. Define resource. Classify resources on the basis of their ownership.

➡ The things on which man is dependent, from which man's necessities are fulfilled and which can be used by man by his physical as well as intellectual capacity; are known as resources.

➡ The natural resources should have both the virtues of utility and capacity to work.

➡ Resources are divided mainly in three types :

(i) On the basis of ownership

(ii) On the basis of distribution centers

(iii) On the basis of re-availability

(i) On the basis of ownership there are three types of resources :

(a) Resources which are owned by an individual or a family are known as individual resources. e.g., Building, land etc.

(b) Resources which are owned by country or a region as public property are known as national resources. e.g., international trade, army.

(c) Resources which are all physical or non-physical resource are used for human welfare are known as global resources. e.g., resources of common ownership of countries.

(ii) On the basis of distribution centers there are four types of resources :

(a) Resources which contain useful gases in the atmosphere are known as universal resources. e.g., oxygen, nitrogen, ozone etc.

(b) Resources which are available easily are known as generally available resources. e.g., land, soil, water, pastures etc.

(c) Resources which are available at limited sources are called rare resources. e.g., mineral oil, coal, gold, uranium etc.

(d) Resources which are available at only one or two places of the world are known as solitary resources. e.g., Chryolite, a mineral available from Greenland.

(iii) On the basis of re-availability there are two types of resources :

(a) Some resources reproduce themselves as per their usage during a specific time or these are inexhaustible are known as renewable resources. e.g., Solar insolation, animals, birds etc.

(b) Some resources are those which cannot be reused once they are used or they cannot be reproduced or which can be reformed in near future; are known as non-renewable resources. e.g., mineral, coal, natural gas etc.

10. Write a notes on Alluvial soil.

➡ Alluvial soil is spread about 43% of the total area of India.

➡ This soil is found in the Northern plain from the Brahmaputra valley in the East up to Satluj in the west

in the valley.

- ➔ It is found in the valley regions of Tapi, Mahanadi, Godavari, Krishna and Kaveri rivers.
- ➔ Moreover it is found in the delta regions of above rivers.
- ➔ The formation of alluvial soil is due to the alluvial deposition by the rivers.
- ➔ Potash, phosphoric acid and limestone are in more proportion while nitrogen and humus are in less proportion.
- ➔ Nitrogen content can be stabilized by taking the crops of pulses in this type of soil.
- ➔ Crops like wheat, paddy, sugarcane, jute, cotton, maize, oil seeds etc. can be grown in this type of soil.

11. Write notes on Black soil.

- ➔ Black soil is also known as Regur soil.
- ➔ This soil was formed due to the spreading of Deccan Lava.
- ➔ Lava rocks and climate play an important role in the formation of such soil.
- ➔ It covers about 15% of the total area of India.
- ➔ As this soil is more suitable to cotton it is also known as 'Cotton soil'.
- ➔ It is found in entire Maharashtra, Western Madhya Pradesh, Andhra Pradesh and certain parts of Karnataka.
- ➔ In Gujarat Surat, Bharuch, Narmada, Vadodara, Tapi and Dang districts have this type of the soil.
- ➔ There is more proportion of iron, lime, calcium, potash, aluminium and magnesium carbonates in its soil.
- ➔ It is considered to be quite fertile soil.
- ➔ This soil has capacity of retaining more moisture.
- ➔ Whenever the moisture dries up they develop fissures.
- ➔ Crops like cotton, linseed, mustard, groundnut, tobacco and udad are grown in this soil.

12. Describe the process of soil formation and state on which basis these are classified.

- ➔ Soil formation is done due to material available through the denudation. Minerals, humidity, air and humus are mixed up in it. Thus soil is the natural mixture of minerals and biotic elements which has the capacity to grow and develop vegetation.
- ➔ The parental rock lies below the soil. Generally the part of the surface of the earth wherein the vegetation grows is known as soil.
- ➔ The soil is the layer or the surface of the matter formed due to the mixture of the scattered material of the parental rocks and vegetation. Factors of denudation prepare very thin powder through the denudation of rocks. The humus formed due to the disintegration or decay of vegetation or insects is added to this. These biotic elements play an important role in the development of the vegetation.
- ➔ The climatic impact on the duration of soil formation is so important and widespread the soil formed of different type of rocks in that region over long time is the same.
- ➔ So the soil formed out of the same parental rocks under different climatic influence is different.
- ➔ Soils are classified on the basis of their colour, climate, parental rocks, structure, humus etc.
- ➔ Recently ICAR (Indian Council of Agricultural Research) has divided Indian soils into 8 types.

- (i) Alluvial soil (v) Desert soil
- (ii) Red soil (vi) Mountain soil
- (iii) Black soil (vii) Forest soil
- (iv) Laterite soil (viii) Marshy or Peaty soil

13. 'Resources are useful in different ways.' Explain.

- ➡ Most of the activities from agriculture to industries ultimately depend directly or indirectly on natural resources.
- ➡ It is the backbone of the economy of the country. They are the pillars of economic power and prosperity of the people.
- ➡ At every stage of human life it makes our attention concentrate on one or other role.
- ➡ It supplements the necessities of food for man.
- ➡ It is useful as the raw materials for many industries different things and raw minerals.
- ➡ It is useful for obtaining energy through sunlight, wind and moving water.
- ➡ Coal, petroleum and natural gas are useful as fuel for the industries as well as household use as firewood as energy resource.

Section D

● Write the answer of the following questions. [Each carries 4 Marks]

[12]

14. Show the following in the outline map of India : One region of black soil

➡ Try Yourself

15. Show the following places with proper symbols at their proper places in the given outlined map of India : Desert soil

➡ Try Yourself

16. What is soil ? Explain the types of soils of India details.

- ➡ The soil is the layer or the surface of the matter formed due to the mixture of the scattered materials of parental rocks and vegetation.
- ➡ Factors of denudation prepare very thin powder through denudation of rocks. The humus formed due to the disintegration or decay of vegetation or insects is added to this. The biotic elements play an important role in the development of vegetation.
- ➡ Recently Indian Council of Agricultural Research (ICAR) has divided the soils of India into 8 types :
 - (i) Alluvial soil (ii) Red soil (iii) Black soil (iv) Laterite soil (v) Desert soil (vi) Mountain soil (v) Forest soil (viii) Marshy soil and peaty soil
- ➡ The climatic impact in the duration of soil formation is so important and widespread that the soil formed of different types of rocks in that region over a long period of time is the same. So the soil formed out of the same parental rocks under different climatic conditions is different. Soils are classified on the basis of their colour, climate, parental rocks, structure, humus etc. Of these, mountain soil and forest soil are found at different altitude in mountainous regions.
 - (i) Alluvial soil : This soil is spread over 43% of the total area of India.
 - ➡ It 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.

- Due to the alluvial deposition the alluvial soil is formed.
- There is more proportion of potash, lime stone and phosphoric acid in this soil.
- There is less proportion of nitrogen and humus.
- Nitrogen content can be stabilized if the crops of pulses are taken in this soil.
- Crops like wheat, paddy, sugarcane, jute, cotton, maize, oil seeds etc. can be grown in this type of the soil.

(ii) Red soil : This soil covers over 19% of the total land of India.

- It is spread from Tamil Nadu in the peninsular India up to Bundelkhand in the north and from Rajmahal hills from the east up to Kachchh in the west.
- This soil is found in the districts of Udaipur, Chittodgadh, Dungarpur, Banswada and Bhilwada.
- Due to the presence of red oxide in the soil it is red in colour.
- It becomes yellow while going down towards the center of the earth.
- Lime, gravel and carbonate are not found in this soil.
- There is also the deficiency of magnesium, phosphate, nitrogen and potash in this soil.
- Crops like millet, cotton, wheat, jowar, linseed, groundnut, potato etc. are grown in this soil.

(iii) Black soil : This soil occupies about 15% of the total area of India.

- Due to the spreading of Deccan lava this soil was formed.
- It is found in entire Maharashtra, western Madhya Pradesh, Andhra Pradesh and certain parts of Karnataka.
- In Gujarat it is found in Surat, Bharuch, Narmada, Vadodara, Tapi and Dang districts.
- In the formation of this soil, lava rocks and climate play an important role.
- There is more proportion of iron, lime, calcium, potash, aluminium and magnesium carbonates in this type of the soil.
- This soil is considered to be quite fertile.
- It has also the capacity of retaining more moisture.
- Whenever the moisture dries up they develop less fissures.
- This soil is more suitable to cotton so it is also known as 'Cotton Soil'.
- Crops like cotton, linseed, groundnut, mustard, tobacco and udad are grown in this soil.

(iv) Laterite soil : This is actually padkhau soil but its name laterite is derived from the Latin word 'Later' which means a brick.

- It is red in colour due to iron oxide.
- When this soil become wet it become smooth like butter but when it dries it becomes very hard.
- It is formed due to changing of dry and moist climate and due to the prevention of silica based material.
- This soil has developed in the higher areas of peninsular plateau of India.
- This soil contains more amounts of iron, potash and aluminium, but it is less fertile.

➤ Crops like cotton, paddy, ragi, sugarcane, tea, coffee etc. can be taken with the use of fertilizers in this soil.

(v) Desert soil : This soil is found in the area where the climate is arid and dry.

➤ This soil is sandy and fertile.

➤ It is found in Rajasthan, Haryana and southern Punjab while in Gujarat it is found in Kachchh and some important parts of Saurashtra.

➤ It contains more amount of dissolved minerals.

➤ Crops like millet and jowar can be taken with the facility of irrigation in this type of soil.

(vi) Mountain soil : This soil is found in the valley and sloppy regions of Himalayas at an altitude of 2700 to 3000 meters.

➤ In Himalayas it is found at a general altitude in the regions of pine and chid trees.

➤ This soil is also found in Assam, Darjeeling, Uttarakhand, Himachal Pradesh and Kashmir.

➤ It is very underdeveloped soil and its layer is very thin.

(vii) Forest soil : This soil is found in limited area of India.

➤ This soil is found within the altitude of 3000 to 3100 meters in the coniferous forests of Himalayas.

➤ It is also found in Sahyadri, Eastern ghats and Terai region of Himalayas.

➤ The surface of the earth in this type of the soil is covered by the shaded leaves and upper part of the land becomes black due to increase in humus caused because of decaying leaves.

➤ It changes into blue or red colour while going down within the land.

➤ Crops like tea, coffee and spices are grown in this soil.

➤ Crops like wheat, maize, barley, paddy etc. can also be taken in this soil.

(viii) Marshy soil and peaty soil : This soil is found in very limited extent in India.

➤ This soil is developed in humid regions due to accumulation of biotic elements.

➤ It is found in Odisha, West Bengal, Coastal Tamil Nadu, Central areas of Northern Bihar and Almoda district of Uttarakhand.

➤ This land is submerged under water during rainy season and when water recedes the crop like paddy can be taken in this type of the soil.

➤ This soil shows an excess of biotic elements and minerals but insufficiency of phosphate and potash.