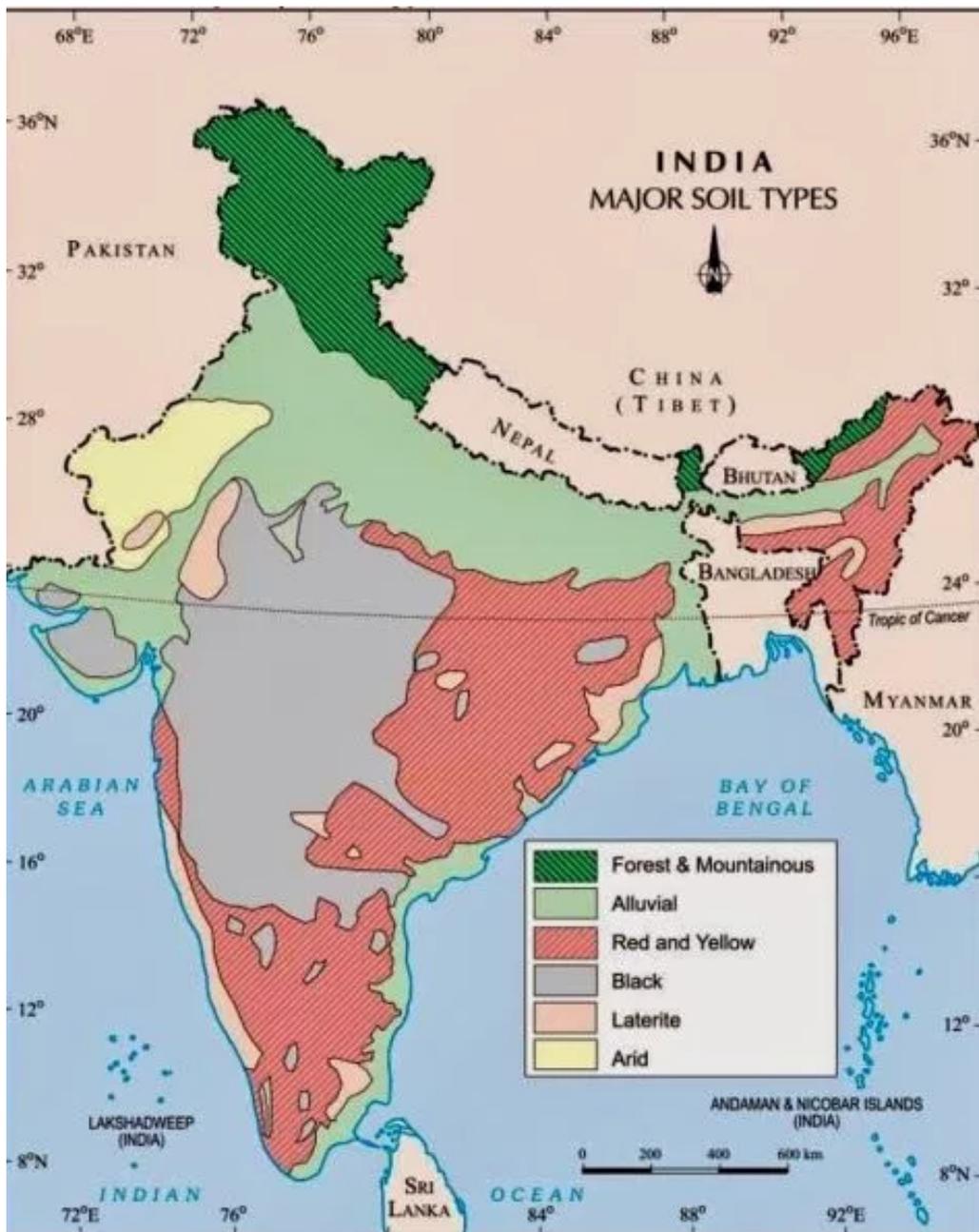


## Chapter 4. Soils in India



### Very Short Questions

**Question 1:** Which subject deals with the study of Soil?

**Answer:** Pedology is the subject deals with the study of soil.

**Question 2:** What do you mean by 'Soil'?

**Answer:** 'Soil' means the uppermost layer of the earth's crust, which contains the organic as well as mineral matter necessary for the growth of plants.

**Question 3:** What all conditions can alter the characteristics of Soil?

**Answer:** The conditions of climate, topography, vegetation and underlying rock can alter the characteristics of Soil.

**Question 4:** Mention the types of Soils found in India.

**Or**

Name the four major Soil types found in India, leaving out desert and mountain Soils.

**Or**

Name four major groups of Soil found in the Indian Plains and Plateaus.

**Answer:** There are four main types of Soils found in India:

(i) Alluvial Soil, (ii) Black Soil,  
(iii) Red Soil, (iv) Laterite Soil.

**Question 5:** Which two types of Soils are the most important Soils?

**Answer:** Alluvial Soil and Black Soil are the most important Soils.

**Question 6:** What is meant by 'in Situ'?

**Answer:** 'In situ' are the Soils which are found where they are formed.

**Question 7:** Mention two ways by which Soil can get nitrogen.

**Answer:** Fertilizers and mixed farming.

**Question 8:** What do you understand by Humus?

**Answer:** Humus: The decaying of organic materials, e.g., dead leaves, stems, roots, living bacteria, fungi, worms etc., produce humus, which is important for Soil fertility.

**Question 9:** Where are Alluvial Soils found in India?

**Answer:** Alluvial Soils occupy the extensive tracts of Punjab, Uttar Pradesh, Bihar, Bengal, Orissa, and the coastal strips of Peninsular India. They also occupy parts of Gujrat and Rajasthan.

**Question 10:** Name the Soil known for its self-ploughing quality and the capacity to hold moisture. Name any two cash crops for which it is specially suited.

**Answer:** Black cotton Soil; Cotton and Sugarcane.

**Question 11:** What is one disadvantage of Bhangar alluvium?

**Answer:** Sometimes it has high content of sodium salts which makes it unproductive.

**Question 12:** (i) Which minerals are found in Regur Soil?  
(ii) Name the important crops grown on it.

**Answer:** (i) Iron, Calcium, Aluminium and Magnesium.  
(ii) Cotton, Sugarcane, Groundnut, Jowar and Bajra.

**Question 13:** Name one important crop that thrives best in Regur and Red Soil, and a sea-port from where it is exported.

**Answer:** The crop that thrives best in Regur Soil is Cotton. It is exported from Mumbai sea-port. The crop that thrives best in Red Soil is Sugarcane. It is exported from Chennai.

**Question 14:** How is the Red Soil formed?

**Answer:** Red Soil is formed due to the prolonged weathering of the old crystalline rocks. They have a mixture of clay and sand.

**Question 15:** Name the soil which is formed due to high temperature and heavy rainfall with alternating wet and dry periods.

**Answer:** Name two states where this type of soil is found.  
(i) Laterite soil (ii) Orissa and Karnataka.

**Question 16:** Which of the Soil is affected by Soil erosion and which crops grow well in Laterite Soil.

**Answer:** The Soil affected by Soil erosion is Laterite Soil. The important crops of this Soil is Tapioca and Cashewnuts.

**Question 17:** In which areas is Soil erosion prominent in India.

**Answer:** Soil erosion is prominent in the North-eastern hilly region of Arunachal Pradesh, Assam, the Chambal Valley, West Bengal and Thar Desert.

**Question 18:** Mention the types of Soil erosion.

**Answer:** Types of Soil erosion are as follows:  
(i) Erosion by water (ii) Erosion by wind.

**Question 19:** What is gully erosion?

**Answer:** When rain falls heavily, the run off scours out deep grooves. This cutting up of the Soil gives rise to bad lands or ravine lands. This type of erosion is known as Gully erosion.

**Question 20:** How does erosion by wind take place?

**Answer:** Sometimes in dry areas, dust and silt may be lifted and carried to a great distance by the wind. This is known as Wind erosion.

**Question 21:** Mention causes of Soil erosion.

**Answer:** Causes of Soil erosion are:

- (i) The agents of gradation like wind and water
- (ii) Nature of the Soil
- (iii) Human factors

**Question 22:** How is man responsible for Soil erosion?

- Answer:** (i) Indiscriminate cutting down of forests.  
(ii) Overgrazing by cattle.  
(iii) Faulty methods of cultivation e.g. Jhooming.

## Short Questions

**Question 1:** How is Soil formed?

**Answer:** Soil is formed by the Parent rock material through a process of break up or wear and tear. The decomposition of plant remains, animal manures and dead animals add to the fertility of the soil.

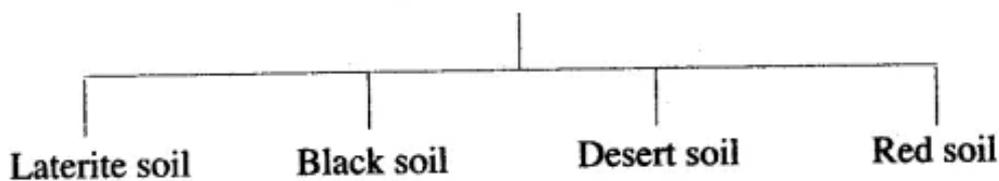
**Question 2:** How we define Soil from agricultural point of view?

**Answer:** Soil is the thin layer of loose mixture of small rock particles and rotting organic matter that covers much of the world's land surface. It supports all forests, grasslands and crops from which all living creatures on earth derive their food.

**Question 3:** What are the different types of Soil according to their Zones?

**Answer:** Zonal Soils:

### Soils of the Tropical Zone



# TYPES OF SOILS

- Eight major types according to Indian Council of Agricultural Research (ICAR).
  - Alluvial soils
  - Black soils
  - Red soils
  - Laterite soils
  - Desert soils
  - Mountain soils
  - Saline and Alkaline soils
  - Peaty and Marshy soils

**Question 4:** Alluvial Soils are also called 'Riverine Soils'. Why?

**Answer:** The chief region of Alluvial Soils in India is the Indo-Gangetic plain, where Alluvial Soils have been deposited mostly by rivers. The coastal belts are the areas of alluvium. The deltaic alluvium on the eastern coast has also been deposited by river-channels. Therefore, Alluvial Soils are rightly called Riverine Soils.

**Question 5:** How is the Alluvial Soil found in the Ganga plain different from that found in the Godavari valley?

**Answer:** The Alluvial Soil of the Ganga plain is formed due to the deposition of alluvium which is brought from the Himalayan region. These are light in colour. The Alluvial Soil of the Godavari valley is formed due to the deposition of alluvium brought mainly from the Deccan trap region which is volcanic in origin. It is dark in colour.

**Question 6:** How is Alluvial soil formed? Why is this soil agriculturally important?

**Answer:** Alluvial soils are formed by the sediments brought by the rivers. The rivers deposit very fine silt called 'alluvium' in their plains during the course of their journey starting from its source in the mountains and ending till its mouth. This soil is agriculturally very important because it is a mixture of sand, clay and silt (loamy) which makes it very fertile. It is rich in potash and lime. It is light and porous therefore easily tillable. It is suitable for growing large variety of Rabi and Kharif crops.

**Question 7:** (i) What is Black Soil?

(ii) Give any two characteristics or features of the Soil found most suitable for growing cotton and sugarcane in Maharashtra.

**Answer:** (i) It is Black in colour therefore it is called Black Soil. These Soils are also called Regur Soil. These are formed in situ, i.e., formed where they are found. These Soils have originated from solidification of basic lava spread over large areas of Deccan Plateau during volcanic activity.

(ii) Two characteristics or features of the Black Soil which is most suitable for growing cotton and sugarcane in Maharashtra are:

- (a) It is fine grained, rich in iron, lime and calcium.
- (b) It retains moisture and becomes exceedingly sticky.

**Question 8:** How is Black Soil formed?

**Answer:** Black Soil is formed as a result of denudation of lava-flow rocks. They contain large quantities of lime, potash, aluminium, magnesium. They are deficient in phosphorus, nitrogen and organic matter. Black Soil is highly retentive of moisture, and become sticky when wet.

**Question 9:** What are the other names of Black Soil? Where are they found?

**Answer:** Black Soil is also known as 'Regur Soil' or 'Black Cotton Soil'. Black Soil is found in Gujrat, Maharashtra, parts of Madhya Pradesh, South Uttar Pradesh, North-west Orissa and the western parts of Andhra Pradesh.

**Question 10:** (i) Explain the origin of the Black Soil. Name two States in India, which have Black Soil.

(ii) Mention any two advantages of the Black Soil.

**Answer:** (i) Black Soil is formed by weathering of volcanic rocks. It is found in Maharashtra and M.P. (ii) It retains moisture for a long time, is rich in lime, potash and calcium.

**Question 11:** Where is Red Soil found?

**Answer:** Red Soil is found in Tamil Nadu, Karnataka, South-eastern Maharashtra, parts of Andhra Pradesh and Orissa. They are also found in the southern districts of Uttar Pradesh, Madhya Pradesh and eastern Rajasthan.

**Question 12:** What are mineral deficiencies of Red Soil? How can they be corrected?

**Answer:** The Red Soils are generally poor in nitrogen, phosphoric acid and humus. They become reasonably fertile when fertilizers are added to it.

**Question 13:** How is Red Soil formed? State two reasons for the low productivity of Red Soil or . disadvantages.

**Answer:** Red Soil is formed by weathering of crystalline and metamorphic rocks.

Reasons for low productivity:

- (i) Deficient in nitrogen, humus. (ii) Porous, friable.

**Question 14:** How is Laterite Soil formed?

**Answer:** It is formed by the weathering of Soil or due to intense leaching during the periods of heavy rainfall. All the soluble materials are removed and a hard stony layer remains.

**Question 15:** Where is Laterite Soil found?

**Answer:** It is found in Andhra Pradesh, Tamil Nadu, Karnataka, Assam, Bengal, Orissa and along the Western and Eastern Ghats.

**Question 16:** State two disadvantages of Laterite Soil.

**Answer:** Disadvantages of Laterite Soils are:

- (i) They contain high percentage of acidity.
- (ii) It is generally coarse in texture and cannot retain moisture.

**Question 17:** (i) Why is Laterite Soil unsuitable for cultivation? Name an area where this Soil is found.

(ii) Name the type of Soil found on the summit of the Eastern Ghats. Explain the causes of its formation.

**Answer:** (i) Laterites are intensively leached Soils of the monsoon climate. They lack in elements of fertility and thus are normally of low value for crop production. Laterite Soil is found in India in hill summits of Eastern and Western Ghats and Assam Hills.

(ii) Laterite Soils are found on the summits of the Eastern Ghats. These are formed in the areas which experience high temperature and heavy rainfall. They are formed by the process of leaching.

**Question 18:** What is the meaning of 'Soil Erosion'?

**Answer:** The washing away or the removal of the Soil is known as Soil erosion. Soil erosion, thus, may be termed as the detachment and transportation of Soil particles by agents of denudation such as weathering, running water and wind, etc.

**Question 19:** Mention the types of Soil erosion by water.

**Answer:** Soil erosion by water can be of the following sub-types:

- (i) Sheet erosion (ii) Rill erosion (iii) Gully erosion
- (iv) Stream Bank erosion. (v) Sea-shore erosion. (vi) Slip erosion.

**Question 20:** State the factors upon which the rate of Soil erosion depends.

**Answer:** The rate of Soil erosion depends upon:

- (i) Character of the slope of land. (ii) The density of vegetation.
- (iii) Rainfall—Heavy or Light.

**Question 21:** Define 'Leaching'? In which region South of the Tropic of Cancer, can one find Soil formed by 'Leaching'?

**Answer:** Leaching Soil is the process by which soluble substances such as organic basic minerals and mineral salts are washed out of the upper layer of a Soil into a lower layer by percolating rain water, e.g., Laterite Soil.

Found in Karnataka which is south of Tropic of Cancer.

**Question 22:** What is sheet erosion?

**Answer:** When the vegetation cover of an area is removed, the rain water instead of sinking into the ground, washes the Soil down the slope. Each succeeding rain-stream washes away a thin layer of absorbent top Soil. This is known as Sheet Erosion.

**Question 23:** What is rill erosion?

**Answer:** In rill erosion small finger-like rills begin to appear on the landscape. These rills are usually smoothed out by working of the farm implements. But, slowly the rills increase not only in number but also in their shape and size. They get wider and deeper. This reduces the actual area under crop and results in declining crop yields.

**Question 24:** What is stream bank erosion?

**Answer:** The banks of the streams or rivers get eroded every year by the flowing water. In certain areas, the streams and rivers often change their course bit by bit every year and their beds get widened.

**Question 25:** (i) How does sea or shore erosion occur?  
(ii) How is slip erosion caused?

**Answer:** (i) The tidal waters of sea cause considerable Soil erosion along the coast, particularly during the rainy season when the sea gets rough. The roaring waves rush and dash on the coast, swallowing every time bits of coastal lands.

(ii) Slip erosion is caused by hydraulic pressure exerted by moisture penetrating into the Soil during heavy rains. Sometimes the entire field on hill side may slide down because of slip erosion.

**Question 26:** How does wind erode Soil?

**Answer:** When wind blows over barren land, there will be damage to the top Soil. In the areas of scanty rainfall wind erosion is predominant. When deforestation due to over-grazing or cultivation makes the top Soil bare, wind erosion occurs.

**Question 27:** Mention some measures to check Soil erosion.

**Answer:** Some measures to check Soil erosion are: Contour method of ploughing, terraced farming, plugging of gullies and ravine method, constructing dams across the streams, check on unrestricted grazing over the pastures, afforestation and legal binding on primitive method of Jhooming cultivation should be exercised.

**Question 28:** Explain the need for Soil conservation in India. State two methods of Soil conservation.

**Answer:** A rich soil in plant food is the chief requirement of a successful agriculture. It is an essential as a support for plants.

Soil is a very important natural resource of India because agricultural production is basically dependent on the fertility of Soil. Food products like cereals, pulses, fruits and vegetables are obtained indirectly from the Soil.

Two methods:

(i) Contour ploughing. (ii) Afforestation.

**Question 29:** How does the nature of the Soil affect Soil erosion?

**Answer:** Sandy and porous Soils are subjected to least erosion by water action because they absorb a good amount of water at the time of rainfall. Impervious Soils are subjected to gradual erosion by water because they are incapable of absorbing rainwater.

**Question 30:** State any two methods of controlling soil erosion.

**Answer:** (i) Terrace farming.  
(ii) Planting shelter belts to check the speed of wind.

**Question 31:** What is soil conservation? How does reforestation help in soil conservation?

**Answer:** Soil conservation refers to the methods of protecting the soil from erosion. Roots of the trees protect the soil by holding it in place against wind and water erosion. Re-forestation means replanting trees which have been cut down. For every tree that is cut, two trees are grown. In this way forest cover is increased.

**Question 32:** Mention two ways by which soil can get nitrogen.

**Answer:** (i) Use of fertilizer.  
(ii) Crop rotation: Rotation of crops is a system in which farmers grow pulses or leguminous crops after the harvest of a soil exhausting crop. Through this method the soil retains its fertility or gets back the nitrogen.

## Long Questions

**Question 1:** Name the factors responsible for the formation of Soil.

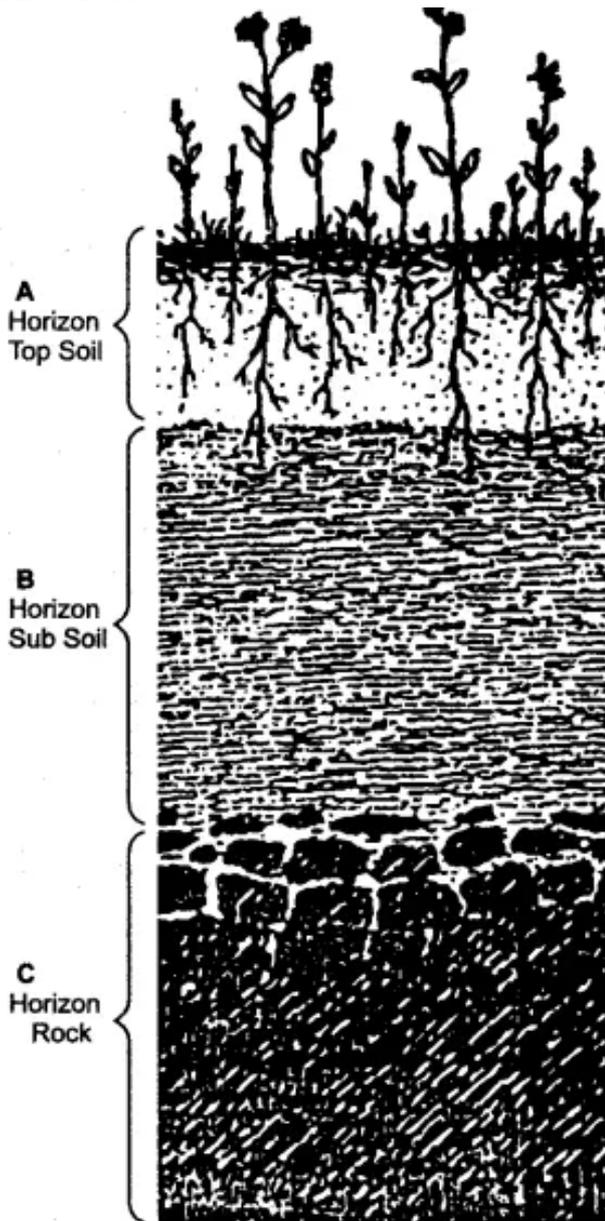
**Answer:**

- 1. Climate:** The climate in which Soil develops is the most important factor. It is responsible for the following:
  - (a) Weathering:** Extremes of temperature, freezing and thawing of ice break down rocks and favour Soil formation.
  - (b) Vegetation:** The growth and decay of vegetation determines the humus content of the Soil. Roots of plants penetrate the Soil and make it porous.
  - (c) Bio-chemical processes taking place in Soil:** Bacteria and fungi cause the decay of plants and animal remains. Some transform the atmospheric nitrogen into Soil nitrogen.
- 2. The Parent rock:** The physical and chemical composition of the parent rock determines the relative proportion of different minerals in the Soil layers.
- 3. The Topography:** The slope of the land surface is an important factor in the formation of Soil layer.
  - (a) Hills and slopes:** Steep slopes usually have a thin Soil layer because weathered particles are easily carried downslope by running water and wind.

**(b) Plains and Valleys:** On flat plains and in valleys, thick fertile Soils are developed.

**Question 2:** Draw a diagram showing the different Soil Horizons.

**Answer:**



**Question 3:** What are the main components of Soil?

**Answer: (i) Silica:** The main constituent of sand, it is present as small crystalline grains. It is mainly derived from the weathering of rocks.

**(ii) Clay:** It is a mixture of silicates and contains many minerals like iron, potassium, calcium, sodium and aluminium. Particles of clay absorb water and swell.

**(iii) Chalk:** It consists of calcium carbonate which provides the important element calcium.

**(iv) Humus:** It is the organic matter present in the Soil formed by the decomposition of

plants and animal remains and animal manure. It is the most important element that determines the fertility of the Soil.

**Question 4:** Name the varieties of Alluvial Soils. Where are they found?

**Answer:** Alluvial Soils are of two varieties: Bhangar and Khadar.

'Bhangar' is older alluvium. It is found usually higher up in the plains, and occurs at river terraces away from the river. It is found in massive beds, and is characterized by calcareous clays. It is light grey and less fertile. 'Khadar' is newer alluvium. It occurs in the lower levels near the river, and is mainly clay loamy. Its new layers are deposited year after year during the season of monsoon floods.

**Question 5:** How is Regur Soil formed? Mention four important features of Regur Soil.

**Answer:** Regur or Black Soil is formed by weathering of volcanic (basalt) rock formed by the Deccan Lava.

Four important features of Regur Soil are:

- (i) Fine grained
- (ii) Moisture retentive
- (iii) Sticky when wet
- (iv) Cracks when dry.

**Question 6:** Mention some of the properties of Red Soil.

**Or**

Mention two characteristics of Red Soil.

**Answer:** (i) Red Soils are formed in situ by weathering of the ancient crystalline and metamorphic rocks.

(ii) They are rich in iron content, hence, they are red in colour.

(iii) The productivity of the Red Soil increases with regular use of fertilizers.

(iv) Red Soils are porous in nature but not retentive to moisture.

(v) They are suited for dry farming as it does not require much moisture.

**Question 7:** What are the salient characteristics of Laterite Soils?

**Answer:** (i) Laterite Soils are leached Soils because alternating dry and wet spells cause the soluble silica to be removed.

(ii) These Soils are acidic in nature and coarse and crumbly in texture.

(iii) The proportion of lime and silica is reduced when leaching takes place.

(iv) In the upper layers, the compounds of iron and aluminium become higher giving a reddish colour to the Soil.

(v) Lack of nitrogen, potassium and organic elements make these Soils unsuitable for cultivation. These Soils support pastures and scrub forests.

(vi) With the use of manures, coffee, rubber, cashew, etc., can be grown on these Soils.

**Question 8:** For each, state one method of controlling the erosion caused.

**Answer:** Methods of Controlling Erosion:

(i) Erosion by water: During heavy downpours deep 'gullies' are made on account of water run

off. Gully erosion can be stopped by plugging it with stones and pebbles or quick growing grasses can be grown in gullies to stop its expansion.

(ii) Erosion by wind: Wind erosion reduces the productive capacity of the soil by removing the loose particles of soil with the high velocity wind. The nutrients required by the plants are taken away by the wind. Therefore more and more trees should be planted along the edges of the field, the waste land and also on the steep slopes. If it is difficult to grow trees, grass should be grown but no land should be left devoid of plants.

**Question 9:** (i) Define the term 'Soil conservation'.  
(ii) Why is it necessary?

**Answer:** (i) The protection of the top Soil, which is constantly being shifted by wind and water from one area to another is called Soil conservation. In other words, Soil conservation refers to the steps taken to protect the Soil from erosion.  
(ii) Soil is our most precious resource. It is important to our national economy as productive Soil ensures prosperity in agriculture, industrial development and general economic development.

## Give Reasons

### Give Geographical Reasons for the following:

**Question 1:** Why are Alluvial Soil agriculturally important?

**Answer:** Alluvial Soils are agriculturally important, as they are formed by the deposition of sediments brought by the rivers which gets replenished by the deposition of fresh sediment every year, and are rich in chemical nutrients.

**Question 2:** Why is deltaic alluvium more fertile than coastal alluvium?

**Answer:** Deltaic alluvium (Khadar) is more fertile than coastal alluvium (Bhangar) as new layers are deposited year after year during monsoonal floods.

**Question 3:** Why is Alluvial Soil fertile?

**Answer:** Alluvial Soil is very fertile since alluvium is rich in mineral nutrients like potash and lime.

**Question 4:** Why Black Soils are also called 'Black Cotton Soil'?

**Answer:** Black Soil is particularly suitable for cotton cultivation. Therefore it is also called 'Black cotton soil'.

**Question 5:** Why Black Soil needs to be tilled after the first rains?

**Answer:** When wet, the Soil becomes sticky and difficult to work with. So, the Soil needs to be tilled after the first rains.

**Question 6:** Why Black soil is Black in colour?

**Answer:** It is Black in colour due to high percentage of iron content.

**Question 7:** Why is the Red Soil red in colour?

**Answer:** Red Soil is red in colour because it contains a great proportion of iron-oxides. At several places, their colour has slightly changed and appears brown or grey.

**Question 8:** Name one state in India which mostly has Red Soil.

**Answer:** Tamil Nadu has Red Soil.

**Question 9:** Why is Red Soil ideal for dry farming?

**Answer:** Red Soil is ideal for dry farming as it does not require moisture.

**Question 10:** Laterite soil is not suitable for cultivation.

**Answer:** Laterite soils are acidic in nature and has low water retaining capacity. It is poor in nitrogen and lime.

**Question 11:** Why is Laterite Soil not suitable for agriculture?

**Answer:** Laterite Soil is not suitable for agriculture because of its high content of acidity and it cannot retain moisture also.

## Differentiate

**Question 1:** State two differences between Black soil and Alluvial soil.

**Answer:**

<b>Black Soil</b>	<b>Alluvial Soil</b>
1. Made by lava. Residual soil.	1. Made by alluvium. Transported soil.
2. Black in colour.	2. Yellow in colour.
3. Rich in humus.	3. Deficient in humus.

**Question 2:** Alluvial soil and red soil.

**Answer:**

<b>Alluvial soil</b>	<b>Red Soil</b>
1. Light grey in colour.	Reddish in colour as it contains Iron Oxide.
2. Very fertile, suitable for wheat, sugarcane, rice, cotton, jute, oil seed.	Rice, wheat, sugarcane, cotton and pulses can be cultivated when well watered with fertiliser.

**Question 3:** Alluvial soils found in the lower courses and the upper courses of rivers.

**Answer:** Difference between alluvial soils in the upper and lower courses of the rivers:

<b>Upper course</b>	<b>Lower course</b>
1. It is coarser i.e. particles bigger in size.	It is finer and finest in the lowest section.
2. It is dry, less compact.	It is more moist and more compact.

**Question 4:** State two differences between Khadar and Bhangar Soil.

**Answer:**

<b>Khadar Soil</b>	<b>Bhangar Soil</b>
1. The newer alluvium is called Khadar.	The older alluvium is called Bhangar.
2. It is fine textured and more fertile.	It contains pebbles and gravels. It is less fertile.

**Question 5:** Black Soil and Alluvial Soil.

**Answer:**

<b>Black Soil</b>	<b>Alluvial Soil</b>
1. Made by lava.	Made by rivers.
2. Black in colour.	Yellow in colour.
3. Rich in humus.	Rich in iron.

**Question 6:** Alluvial soil of the northern plains and the alluvial soil on the coastal plains of India.

**Answer:**

<b>Alluvial Soil of Northern Plains</b>	<b>Alluvial Soil on the Coastal Plain</b>
1. Light in colour	Dark in colour
2. Sandy	Clayey
3. Porous	Non porous
4. Coarse in texture	Fine in texture

**Question 7:** Sheet erosion and Gully erosion.

**Answer:**

<b>Sheet Erosion</b>	<b>Gully Erosion</b>
1. Occurs on even surface layer.	Occurs on steep slopes.
2. The top Soil is removed.	Steep sided valley are formed.
3. Found in Western India.	Found in Chambal ravines.
4. Sheet erosion is harmful since it removes the finer and more fertile top Soil.	Gullies cut up agricultural land and make it unfit for cultivation.

**Question 8:** Transported soil and In Situ soil, quoting a suitable example for each.

**Answer:**

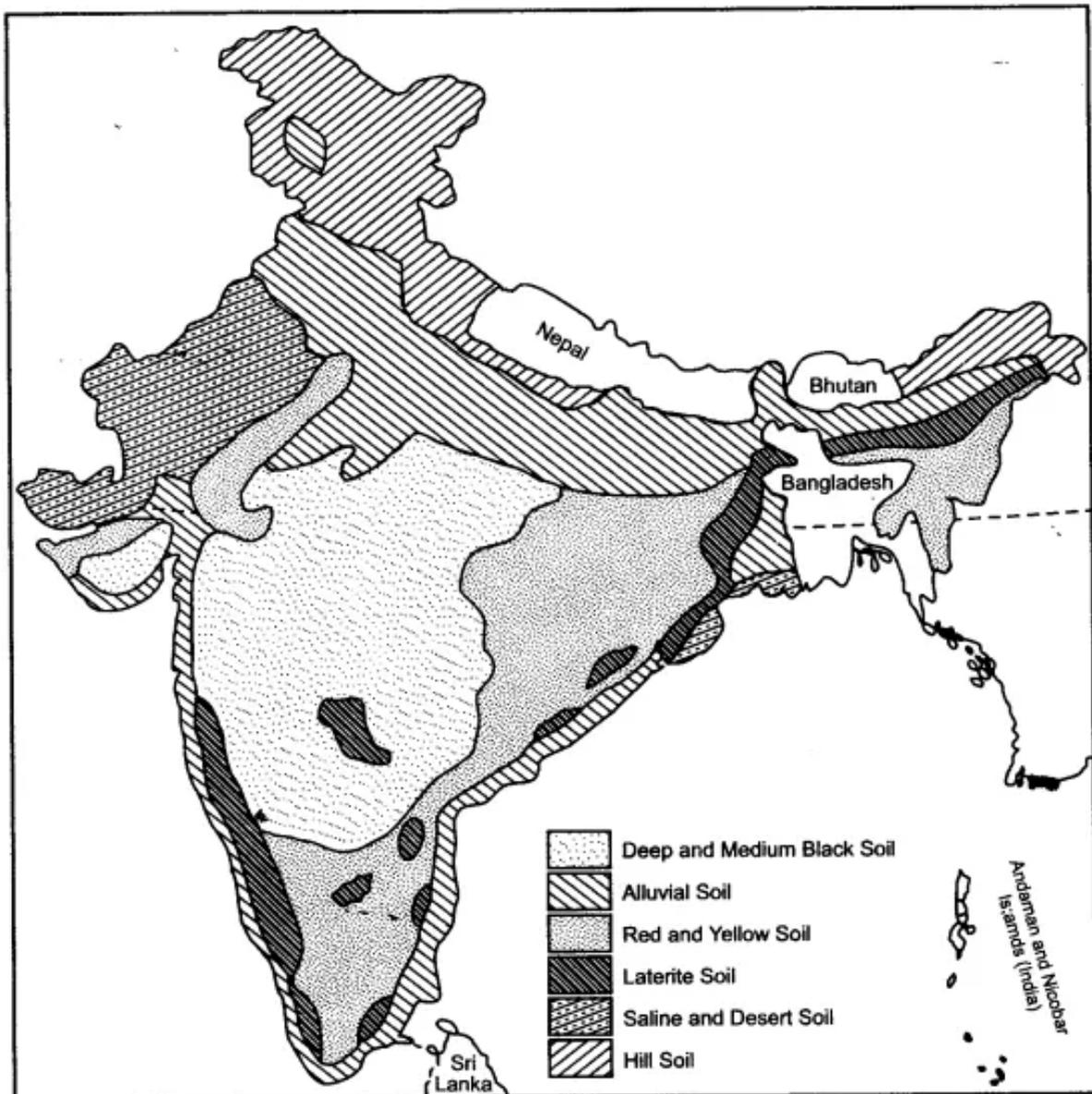
<b>Transported Soil</b>	<b>In Situ Soil</b>
If a soil is carried else where at the place of rest by the agents of gradation from the place of its origin is called transported soil, e.g. Alluvial soil.	If the soil remains at the place of its origin is called in situ, e.g. Black soil.

## Map Plotting

**Question 1:** On the map of India, shade and name an area each of:

(a) Alluvial Soil, (b) Red Soil, (c) Desert Soil and (d) Hill Soil or Mountain Soil.

**Answer:**



## Name the Following

- Question 1:** Name the soil which
- covers the summits of the Eastern Ghats.
  - makes up the delta of the River Ganga.
  - is sticky when wet and cracks when dry.

**Answer:** (i) laterite (ii) alluvial (iii) black

**Question 2:** Give a single word for each of the following:

- The loose rock material, together with humus, forming the uppermost layer of the earth's crust and serving a source of food and moisture for plants.
- The process of percolation by which valuable mineral nutrients are washed down from the top layer of the Soil only to deposit them in the lower layers, making the top Soil infertile.

**Answer:** (i) Soil (ii) Leaching

**Question 3:** Name the transported Soil most widely found in India. State the two sub-categories into which it is generally divided. What are their local names and which one of them is superior to the other.

**Answer:** Alluvial Soil; Older alluvium—Bhangar, Newer alluvium—Khadar. Khadar is superior to Bhangar.

**Question 4:** Point out the region where coastal alluvium is found.

**Answer:** The coastal alluvium occurs in the coastal strips of peninsular India and the plains of Gujrat and also some parts of Rajasthan.

**Question 5:** Name the three types of Alluvium Soil.

**Answer:** Alluvium Soils include:

- (i) Deltaic alluvium
- (ii) Coastal alluvium
- (iii) Inland alluvium.

**Question 6:** Name the crops for which Red Soils is suitable.

**Answer:** Red soil is suitable for the cultivation of wheat, rice, millet, gram, pulses and sugarcane.

**Question 7:** Name the Soil which is formed due to high temperature and heavy rainfall with alternating wet and dry periods. Name two states where this type of Soil is found?

**Answer:** Laterite Soil; Kerala and Karnataka.

**Question 8:** Name one area where Laterite Soil is found in large-scale.

**Answer:** It is found along summits of Western Ghats in Karnataka and Kerala.

**Question 9:** Name the parent rock of Laterite Soil. Name one area in India which has Laterite Soil.

**Answer:** The parent rock of Laterite Soil is Laterite rock. It is mainly found in the Malwa Plateau region.

**Question 10:** Which Soil is found suitable to grow coffee in Karnataka?

**Answer:** Laterite Soil.

**Question 11:** Name two important agents of erosion.

**Answer:** The two important agents of erosion are:  
(i) Water (ii) Wind.

**Question 12:** Name a part of India where:

- (i) Wind is the main agent of erosion.
- (ii) Water is the main agent of erosion.

**Answer:** (i) Thar Desert, western Rajasthan and south Punjab.  
(ii) In hilly regions such as the Himalayas, hills of North-east India and the Nilgiris.