Resources and Development

ONE MARK QUESTIONS

1. Classify resources on the basis of origin.

Ans: [2018]

On the basis of origin resources are classified as biotic and abiotic resources.

2. Give one difference between renewable and non-renewable resources. [2017]

Ans:

Renewable: Replenished by nature and may be overused e. g., crops and plants.

Non-renewable: which get exhausted after years of use. e.g, crude oil.

 ${f 3.}$ Give an example of non-renewable resources. [2017]

Ans:

Coal/Minerals.

4. What are resources which are found in a region but have not been utilised called? [2015]

Ans:

Potential resources.

5. Which resources are surveyed and determined on the basis of their quantity and quality for utilisation?

Ans: [2014]

Developed resources.

6. Give examples of abiotic resources. [2014]

Ans:

Rocks and metals.

7. Give examples of biotic resources. [2014]

Ans:

Human beings, flora, fauna, fisheries, livestock, etc.

8. Which relief features of India has 30 percent of the total surface area of country? [SR 2014]

Ans:

Mountain.

9. Which cold desert is relatively isolated from the rest of the country? [SR 2014]

Ans:

Ladakh

10. Which regions of India have well developed terrace farming? [2015]

Ans:

Western and central Himalayas

11. Which soil types is made up of lava flows? [2014]

Black soil.

12. In which states has mining caused severe land degradation? [2014]

Ans:

Jharkhand, Chhattisgarh, Madhya Pradesh and Odisha.

13. What is the percentage share of plains in the total land area?

Ans: [2014]

43%.

Ans:

14. What is the main cause of land degradation in Punjab?

Over irrigation.

15. In which states is black soil found?

Ans: [S.P. 2014, 2015]

[2014]

Maharashtra, Saurashtra, Malwa, Madhya Pradesh and Chhattisgarh.

16. Which soil is ideal for growing cotton?

Ans: [S.R 2014, 2015]

Regur soil.

17. In which states overgrazing is responsible for land degradation? [2015]

Ans:

Madhya Pradesh, Rajasthan, Gujarat and Maharashtra.

18. In which states laterite soil is found? [2015]

Ans:

Karnataka, Kerala, Tamil Nadu, Madhya Pradesh, and hilly areas of Odisha and Assam.

19. Which soil type is the result of intense leaching due to

heavy rainfall? [2015]

Ans:

Laterite soil.

20. Name the land with deep channels that is unfit for cultivation. [2016]

Ans:

Bad land.

21. Which state has the largest area under black soil?

Ans: [2016]

Maharashtra.

22. What are the methods of checking soil erosion?

Ans: [2017]

Strip cropping, terrace farming and contour ploughing.

23. Gully erosion is common in which basin?

Ans: [2017]

Chambal Basin.

THREE MARKS QUESTIONS

24. What is Agenda 21? List its two principles. [2017]

Ans

Agenda 21 was adopted at first International Earth Summit held in 1992 at Rio de Janerio Brazil.

The two principles are as follows:

- a. To combat environmental damage, pov¬erty, disease through global cooperation on common interests, mutual needs and shared responsibilities.
- b. Every local government should draw its own local Agenda 21.
- **25.** Why is it essential to have resource planning? Explain any three reasons. [2017]

Ans:

- a. If the present trend of resource depletion by few individuals continues, the future of our planet is in danger.
- b. Planning is essential for sustainable existence of all forms of life.
- c. Indiscriminate exploitation of resources has led to global ecological crises.
- 26. In India, some regions are rich in certain types of resources but deficient in some other resources". Do you agree with the statement? Support your answer with any three examples. [2017]

Ans:

Yes, there are regions which are rich in certain types of resources but are deficient in some other resources.

- a. Jharkhand, Chhattisgarh and Madhya Pradesh are rich in minerals and coal deposits.
- b. Arunachal Pradesh has abundance of water resources but lacks in infrastructural development.
- c. Rajasthan is endowed with solar and wind energy but lacks in water resources.
- d. Ladakh has rich cultural heritage but lacks in water resources and infrastructure.
- 27. Distinguish between red soil and laterite soil stating

any three points of distinction.

Ans:

	I	
	Red soil	Laterite soil
1.	Red soil develops on crystalline igneous rocks in areas of low rainfall.	Laterite soil develops in areas with high temperature and heavy rainfall.
2.	Red soil is found in parts of Odisha and Chhattisgarh, southern parts of the middle of Ganga plain and along the piedmont zone of the Western ghats.	found in Karnataka,
3.	Red soil develops a reddish colour due to diffusion of iron in crystalline and metamorphic rocks	In laterite soil, humus content is very low.

28. Which is the main cause of land degradation in Gujarat, Rajasthan and Madhya Pradesh? How can it be checked? Explain. [2015]

Ans:

The main cause of land degradation is large scale overgrazing

Measures to check include:

- a. Afforestation and proper management of grazing.
- b. Planting of shelter belts of plants.
- Stabilization of sand dunes by growing thorny bushes.
- d. Control on overgrazing.
- **29.** Describe any three measures of controlling land degradation. [2015, 2014, 2012]

or

Explain any three steps taken to solve the problem of land degradation in India. [2011]

Ans:

- a. Afforestation and proper management of grazing can help to some extent.
- b. Planting of shelter belts, control on over-grazing, stabilisation of sand dune by growing thorny bushes.
- c. Proper management of wastelands, control of mixing activities, proper discharge and disposal of industrial effluents and wastes after treatment can reduce land and water degradation in industrial and sub-urban areas are some of the methods to check land degradation.
- **30.** Mention any three features of arid soils. [2014]

Ans:

Features of arid soils:

- 1. Arid soils range from red to brown in colour.
- 2. They are generally sandy in texture and saline in nature.
- 3. Due to dry climate, high temperature, evaporation is faster and the soil lacks humus and moisture.
- 4. The lower horizons of the soil are occupied by Kankar because of the increasing calcium content downwards.

[2015]

(Any three).

31. 'Land is a natural resource of utmost importance'. Justify the statement with appropriate arguments. [2014]

Ans:

- a. We live on land, we perform our economic activities on land and we use it in different ways.
- b. It supports natural vegetation, wildlife, human life, economic activities, transport and communication systems.
- c. It is an asset of a finite magnitude.
- **32.** Indiscriminate use of resources had led to numerous problems.' Justify this statement. [2014, 2012, 2011]

Ans:

Resources are vital for human survival and it was believed that resources are free gift of nature. The indiscriminate use of resources led to the following problems:

- To satisfy the greed of few individuals, depletion of resources has continued.
- b. Due to the accumulation of resources in few hands, the society gets divided into two segments, e.g., rich and poor.
- c. Indiscriminate use of resources has ' led to ecological crises, e.g., ozone layer depletion, land degradation, global warming and environmental pollution.

33. How can you contribute to minimize the pollution. Explain. [2014]

Ans:

We can contribute to minimize the pollution by:

- a. Planting more plants and trees.
- b. Using non-conventional sources of energy such as solar and wind energy.
- c. Using public transport instead of personal car/motor bike etc.
- d. Saving water and electricity.
- **34**. Define the following terms:
 - a. Current fallow land
 - b. Other than current fallow
 - c. Cultural waste land

[2013]

Ans:

- a. Current fallow land: Left uncultivated / for one or less than one agricultural year.
- b. Other than current fallow: Left uncultivated for past 1 to 5 agricultural years.
- c. Cultural waste land: Left uncultivated for more than 5 agricultural years.

35. Explain any three human activities responsible for land degradation in India. [2013, 2012]

or

How are human activities responsible for the degradation of land? [2012]

Ans:

- a. Mining: Mining sites are abandoned after excavation work is complete leaving deep scars in states such as Jharkhand, Chhattisgarh, Madhya Pradesh and Odisha. Deforestation due to mining has caused severe land degradation.
- b. Over irrigation: Over irrigation in the states of Punjab, Haryana, western Uttar Pradesh, has caused water logging and increase in salinity of soil.
- c. Overgrazing: Overgrazing in states such as Gujarat, Rajasthan, Madhya Pradesh and Maharashtra is a huge cause due to cattle population
- d. Industries: Mineral processing industry like grinding of limestone for cement industry and calcite and soapstone for ceramic industry generate huge quantity of dust. This retards the process of infiltration of water into the soil.
- e. Industrial waste: Industrial effluents also have become a major source of land degradation.
- **36.** Suggest any three methods of soil conservation suitable to Indian conditions. [2012]

or

What steps can be taken to control soil erosion in hilly areas? [2012]

Ans:

Methods of soil conservation:

- a. Ploughing along the contour lines can decrease the speed of water flow down the slopes.
- b. Step or terrace cultivation on slopes restricts erosion. Western and Central Himalayas have well-developed terrace farming.
- c. Strip cropping: Here large fields can be divided into strips. Strips of grass are left to grow between the crops. This breaks up the force of the wind.
- d. Shelter belt plantation: Trees are planted in rows.

 These shelter belts have led to the stabilisation of sand dimes and in stabilising the desert in western India.
- **37.** What is meant by the term "resource"? List the types of resources classified on the basis of its ownership. [2012]

Ans:

- a. Resource: Everything available in our environment which can be used to satisfy our needs, provided, it is technologically accessible, economically feasible and culturally acceptable is known as a resource.
- b. Types of resources on the basis of ownership are: Individual, community, national and international.
- **38.** Distinguish between the renewable and nonrenewable resources. [2012]

Ans:

a. Renewable resources: Resources which can be renewed or reproduced by mechanical, physical or chemical processes are known as renewable or replenishable resources, e.g., solar and wind

- energy, water, forests and wildlife, etc.
- b. Non-renewable resources: These occur over very long geological times. Minerals and fossil fuels are examples of such resources. These resources take millions of years in their formation. Some of the resources like metals are recyclable and some of them such as fossil fuels cannot be recycled and get exhausted with their use.
- 39. Distinguish between stock and potential resource.Give one example of each. [2012]

Ans:

	Stock	Potential resources:
1.	They are found in the environment.	They are found in a region.
2.	They are not accessed due to the lack of technology.	They have not been utilized or developed.
3.	Example: Water is a compound of two 1 inflammable gases—hydrogen and oxygen, which can be used as a rich source of energy. But we do not have the required technical knowhow to use them for this purpose.	Example: Rajasthan and Gujarat have enormous potential for the development of wind and solar energy but they are yet to be developed for various reasons.

 Distinguish between Khadar and Bangar soil. [2012, 2011]

Ol

How are alluvial soils formed? How is Bangar different from Khadar? [Marking Scheme, 2012]

Ans:

Alluvial soil: It is soil formed by the sediments deposited by river water.

S.No	Khadar soil	Bangar soil
1.	It is a new alluvial soil.	It is an old alluvial soil.
2.	Lower concentration of kankar nodules.	Higher concentration of kankar nodules.
3.	It has more fine particles.	It has less fine particles.
4.	It is more fertile.	It is less fertile.

41. Explain any three factors responsible for soil formation. ${\bf [2012,2011]}$

Ans:

- a. The parent rock is the first factor which provides the basic material for the formation of soil.
- b. Climate breaks the parent rock into small pieces.
- c. Vegetation: Plant and animal organisms help in the weathering of the rocks slowly but continuously
- d. Various forces of nature such as change in temperature, actions of running water, wind and glaciers, activities of decomposers, etc., contribute to the formation of soil.
- c. Chemical and organic changes take place in the soil.

42. Which geographical factors are responsible for the evolution of black soil? Why is it considered the most suitable for growing cotton? [2012]

Ans:

- a. Climatic conditions along with present rock material are important factors for making of black soil. The parent rock is volcanic rock.
- b. It is ideal for growing cotton because of the following reasons:
- c. It has capacity to hold moisture.
- d. It is rich in soil nutrients such as calcium carbonate and potash.
- e. Deep cracks in the soil help in aeration.

43. Mention any two human activities which are responsible for the process of soil erosion. Explain the two types of soil erosion mostly observed in India? [2012]

Ans:

Two human activities which are responsible for the process of soil erosion are deforestation and overgrazing, mining, construction, etc.

Types of Soil Erosion:

- a. Gullies: The running water cuts through the clayey soil and makes deep channels/gullies. The unfit land caused by gullies is called bad land or ravines.
- b. **Sheet erosion:** water flows as a sheet over large areas down a slope. The top soil is washed away .This process is known as sheet erosion.
- **44.** Differentiate between stock and reserve stating two points of difference. [2011]

Ans:

- a. Stock: Materials, which have the potential to satisfy human beings but human do not have the appropriate technology to access these, are termed as stock. We do not have the required technical 'know-how' to use them for a specific purpose, e.g., water which is a compound of two inflammable gases hydrogen and oxygen and can be a rich source of energy. We do not know how to use them.
- b. Reserves: These are subset of the stock. They can be put into use with existing know-how but their use has not been started. For e.g., river water is used as a source of hydroelectricity but to a limited extent. Thus, the water in the dams, forests, etc., are reserves which can be used in the future.
- 45. Explain the types of resources on the basis of

[2011]

Ans:

- a. Renewable resources: Resources which can be renewed or reproduced by mechanical, physical or chemical processes are known as renewable or replenishable resources, e.g., solar and wind energy, water, forests and wildlife, etc.
- b. Non-renewable resources: These occur over very long geological times. Minerals and fossil fuels are examples of such resources. These resources take millions of years in their formation. Some of the resources like metals are recyclable and some of them such as fossil fuels cannot be recycled and get exhausted with their use.
- **46.** What are the three stages of resource planning in India?

Ans:

[2012, 2011]

- a. Identification and inventory of resources across the regions of the country.
- b. Evolving a planning structure endowed with appropriate technology, skill and , institutional set up for implementing resource development plans.
- c. Match the resource development plans with overall national development plans.
- **47.** Enumerate any three features of 'regur' soil. [2011] **Ans:**

Feature of 'regur' soil:

- a. Regur soil is also known as black soil.
- b. It is ideal for growing cotton, so it is also known as 'black cotton soil'.
- c. It is made up of extremely fine clayey material.
- d. It is rich in soil nutrients, calcium carbonate, magnesium, potash and lime.
- e. It develops cracks in hot weather. It can hold moisture and is sticky when wet.
- **48.** Describe any five distinct characteristics of 'Arid soils'. [2015]

Ans:

- a. Arid soils range from red to brown in colour.
- b. Sandy in texture and saline in nature.
- Evaporation is faster, soil lacks humus and moisture.
- d. Soil occupied by Kankar.
- e. Kankar restricts the infiltration of water.
- **49.** Why is soil considered as a resource? Explain with five arguments. [2015]

Ans:

Soil is considered as a resource because :

- a. It is used to satisfy our needs.
- b. It is the most important renewable natural resource.
- c. It is the medium of plant growth.
- d. It supports different types of living organisms on the Earth.
- e. It is the base of our life.
- **50.** What type of soil is found in the river deltas of the eastern coast? Give four main features of this type of

soil.

Ans: [2013]

Alluvial soil is found in the entire northern plain It is the most widely spread soil of India. Main features of alluvial soil:

- a. It is formed by the deposition of materials brought down by the Himalayan rivers.
- b. It is highly fertile.
- It consists of various proportions of sand, silt and clay.
- d. It is rich in potash, phosphoric acid and lime but deficient in organic matter.

FIVE MARKS QUESTIONS

51. Explain resource planning. What are the steps involved in resource planning? [2014]

or

Why is resource planning essential in India? [2015]

or

What is resource planning? Why is resource planning essential? Explain it with three reasons. [2015]

Ans:

Resource planning is a procedure of proper utilisation of resources. Resource planning is important because:

- a. Resources in India are not evenly distributed. Some parts of the county are rich in one resource but deficient in other important resources which are essential. For example, Rajasthan is rich in solar and wind energy but lacks water resource. Jharkhand is rich in minerals and coal deposits but lack in industrialisation. This is the reason why resource planning is essential. An effective resource planning will help in effective use of the resources available in the environment.
- b. Secondly, most of the resources present in our environment are limited. Therefore, if these resources are not preserved or not used rationally we will be in great trouble. For example: Petrol is a limited resource and it cannot be renewed. Exhaustion of petrol will create huge chaos in the country as we are extensively dependent on the petrol.
- c. Thirdly, resource planning is important because it minimises the wastage or over utilisation of resources. The very first step of resource planning is to make a list of resources available in the environment. This helps us to assess which resources should be used and how much it should be used to prevent over utilisation and minimise wastage.
- **52.** Provide a suitable classification for resources on the basis of ownership. Mention main features of any three types of such resources.

Ans: [2014]

On the basis of ownership resources can be classified into the following categories :

 a. Individual resources: Resources owned by a person or an individual are called individual resources.
 For example-land owned by farmers, and houses are individual resources.

- b. Community resources: Resources owned by a particular community or a society are called community owned resources. For example-Graveyard, grazing land, ponds, burial grounds and park ark community owned resources.
- c. National resources : Resources owned by an individual nation are called national resources. For example -Government land, roads, canals and railways are national resources.
- d. International resources: Resources regulated or governed by an international body are called international resources. For example-Ocean and sea beyond 200 km of the exclusive economic zone belongs to open sea or ocean. No individual country can utilise these resources without the permission of international bodies.
- **53.** Explain the resources on the basis of origin and exhaustibility.

Ans:

Resources on the basis of origin:

- a. Biotic resources: Resources obtained from the environment are called biotic resources. For example-trees, animals and insects.
- b. Abiotic resources: Resources obtain from non-living things present in our environment are termed as abiotic resources. For example-earth, air, water, metals, rocks, etc.

Resources on the basis of exhaustibility:

- a. Renewable resources: The resources which have the ability to renew them over period of time or can be reproduced by physical, chemical or mechanical processes are known as renewable resources. For example-solar and wind energy, water, forest and wildlife, etc.
- b. Non-renewable resources : Resources which cannot be renewed or reproduced by any physical, chemical or mechanical process are known as nonrenewable resource. For example- water, wind, tidal energy, etc.
- **54.** List the problems caused due to indiscriminate use of resources by human beings.

Ans :

Resources are essential for human survival. Initially, people believed that the resources are the free gift of nature. Therefore, they continuously exhausted the resources available in the environment without taking any preventive measures. As a matter of fact, they faced economic, social and ecological problems.

The major problems that cropped up due to over-exploitation, irrational consumption and indiscriminate use of resources are :

- a. Exhaustion of resources: Due to over exploitation and irrational consumption, the resources exhausted at a rapid pace leaving very little or nothing for the future generation.
- b. Concentration of resources: Concentration of resources in a few hands is also a major issue. The people with the maximum resources will use them for their own benefits leaving others empty handed. This will create a situation of have and have nots. This situation of have and have nots

- is unfavourable for the growth of the country as a whole.
- c. Global ecological crisis: Global warming, depletion of ozone layer, population and land degradation are global ecological crises. This crisis situation is also an after effect of irrational or over utilisation of resources.
- **55.** How do technical and economical developments led to more consumption of resources?

Ans:

These days, technical and economical developments gain a colossus space. The government is also focusing more on technical and economical growth to make our county a fully developed country. In this process of technical and economical growth, the resources of our country are exhausting rapidly. Technological and economical developments have led to such rapid consumption of resources because of the following reasons:

- a. New and improved equipments are introduced with the development of technology, which ultimately lead to an increase in the use of natural resources.
- b. The technological advancement is attributed to the growth of a developing country. People of an economically developing nation consume more resources. Hence, we can safely say that an improvement in economic development of a nation will directly result in the increase of its people's consumption of resources.
- c. Development of new technologies is widely seen in developing economies. Due to economic development, the bright minds get an opportunity to experiment with their ideas. As a matter of fact, various materials are converted in to useful resources. This creates an atmosphere, which will see a steady increase in consumption of such available resources.

56. 'Consumption of energy in all forms has been rising all over the country. There is an urgent need to develop a sustainable path of energy development and energy saving'. Suggest and explain any three measures to solve this burning problem.

Ans:

Energy is an essential requirement for economic development. The strategy of economic development that India has adopted since independence necessarily required increasing amount of energy consumption. As a result, consumption of energy in all forms has been rising. To take care of this concern, various measures that need to be adopted are as follows:

- a. We need to increase the use of renewable energy resources like solar, wind power, biogas, tidal energy and geothermal energy. This will decrease the dependence on non-renewable sources.
- b. We have to adopt a cautious approach for judicious use of our limited energy resources. F or example, as a concerned citizen we can use public transport system in place of an individual vehicle.
- c. Another measure that needs to be adopted is promotion of energy conservation, e.g., switching off electrical devices when not in use, using power saving devices. Thus, consumption of energy in all forms has been rising all over the country.
- 57. What is meant by 'Land Resource'?

Ans .

We live on land and it satisfies our needs in all the possible ways. Land resource, thus is, of much importance for us which includes forests, mountains, plains, plateaus and islands. These support natural vegetation, wild life, economic activities, and transport and communication systems. Therefore, it is necessary for us to use these resources in a wise manner and with careful planning, we should develop holistic and ecological approach towards economic development without compromising the ability of resources to future generations to meet their needs. Though we have the right to meet our present needs by consuming natural resources, we should not deprive the future generations from it.

58. Explain land use pattern in India and why the land under forest not increased much since 1960-61.

Ans:

Land in India has been divided into different categories with reference to usage. Different categories of land are:

- a. Farming land which is used for farming.
- b. Forest land which comes under forest area
- c. Land meant for grazing
- d. Non-farming land which is used for industrialization
- e. Waste lands, such as rocky areas and deserts

The irrational use of forest land has degraded the available land area, and has made conservation of forests difficult. Human actions such as deforestation, mining and quarrying have contributed to the slow growth rate of forests. Thus, land under forest has increased by only about 4% since 1960-61.

- a. The use of natural resources has been increased with the development of the technology in the country.
- b. Over utilisation of soil due to development in technology.
- c. Growth in the quality of production and better services to the people.
- d. Improvement in the process of mining.
- e. Demand for more resources due to urbanisation.
- 59. What do you understand by the term 'land degradation'? Which human activities lead to land degradation? What are the measures to solve the problems of land degradation?

Ans:

Land resource is fixed and cannot be increased. Land resource has been used since the ancient time. This continuous usage of land over a long period of time, without taking necessary steps to conserve and manage it has resulted in land degradation. As a matter of fact, the quality of the land has become inferior due to regular loss of fertility and irregular usage.

Human activities have also contributed towards land degradation. There are :

- a. Deforestation i.e., cutting down of forests.
- b. Over grazing.
- Mining i.e., extraction of valuable minerals from the soil.
- d. Mineral processing like grinding of limestone.
- e. Faulty methods of cultivation and over-irrigation.

These damages can be prevented with the help of these measures :

- a. Afforestation and proper management of grazing.
- b. Plantation of shelter and stabilisation of sand dunes by growing thorny bushes in windy and arid areas like the deserts of Rajasthan.
- c. Proper management of wasteland and control of mining activities.
- d. Proper discharge and disposal of industrial effluents and waste after treatment in industrial and suburban areas.
- $\pmb{60}$. How can the problem of land degradation be solved ?

Ans:

Land degradation has become a major problem today. We have shared our land with the past generations and will have to do with the future generations. There are many ways to solve the problem of land degradation. Afforestation and proper management of grazing can help in solving the problem of land degradation. Planting shelter belts of plants, control on over grazing, stabilisation of sand dunes by growing thorny bushes are also some of the methods to check land degradation. Proper management of waste lands, control of mining activities, proper discharge and disposal of industrial effluents and wastes after treatment can reduce land and water degradation in industrial and suburban areas.

61. What is the purpose of 'Land Utilisation'?

Ans :

Land resources are used for the following purposes :

- a. Forests.
- b. Land not available for cultivation:
 - (1) Barren and waste land.
 - (2) Land put to non-agricultural uses, e.g., buildings, roads, factories, etc.
- c. Other uncultivated land:
 - (1) Permanent pastures and grazing land.
 - (2) Land under miscellaneous tree crops groves.
 - (3) Cultural waste land'left uncultivated for more than 5 years.
- d. Fallow lands:
 - (1) Current fallow land left without cultivation for one or less than one agricultural year.
 - (2) Other than current fallow land, left uncultivated for the past one to five years.
- e. Net sown area, sown more than once in an

agricultural year plus net sown area is known as gross cropped area.

62. What are the main types of soil found in India? Which type of soil is the most widespread and important soil of India? Describe in detail about this soil type.

Ans:

The main types soil found in various parts of India are as follows:

- a. Alluvial soil
- b. Black soil
- c. Red and vellow soil
- d. Laterite soil
- e. Arid or Desert soil
- f. Forest and Mountainous soil.

Alluvial Soil:

Alluvial soil is the most fertile and extensively found soil in India. This type of soil is found near the river banks and is deposited by the rivers of India. The Indus, the Ganga and the Brahmaputra are the three main rivers which are responsible for its deposition and have created the entire northern plains. These soils also extend in Rajasthan and Gujarat through a narrow corridor. Alluvial soil is also found in the eastern coastal plains particularly in the deltas of the Mahanadi, the Godavari, the Krishna and the Kaveri rivers. Alluvial soil is more common in pediment plains such as Duars, Chos and Terai.

Alluvial soil is very fertile because it contains potash, phosphoric acid and lime in adequate amount. This is why the areas where alluvial soil is found are densely populated, for example, the northern plains and the eastern coastal plain are densely populated and the most productive regions of India. The mineral content of the alluvial soil makes it ideal for the growth of paddy, wheat, other cereals and pulses and sugarcane. The alluvial soil consists of various proportions of sand, silt and clay. They are coarse in the upper reaches of the river valley especially near the break of slope and in pediment plains like Duars, Chos and Terai. Every year during annual floods alluvial soils are renewed. The Alluvial soil is of two types-Khadar and Bangar.

63. What are the four main factors which help in the formation of soil?

Ans:

The main factors that help in soil formation are:

- a. Parent rock: It influences the colour and texture of the soil. The mineral content of the soil also depends on the parent rock from which it is formed.
- b. Climate: It influences the rate and types of weathering and erosion of the rocks. Weathering of the parent rocks due to climatic factors and natural forces leads to disintegration of rocks. Subsequently, this leads to the formation of soil.
- c. Time: It determines the maturity of the soil. Soil is a living system. It takes millions of years to form soil upto a few centimetres in depth.
- d. Relief: This refers to the landscape position and the slopes. Steep and long slopes mean water will run down faster and potentially erode the surfaces

of the slopes. The effect will be poor soils on the slopes, and richer deposits at the foot of the slopes.