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GEOGRAPHY
RESOURCES AND DEVELOPMENT



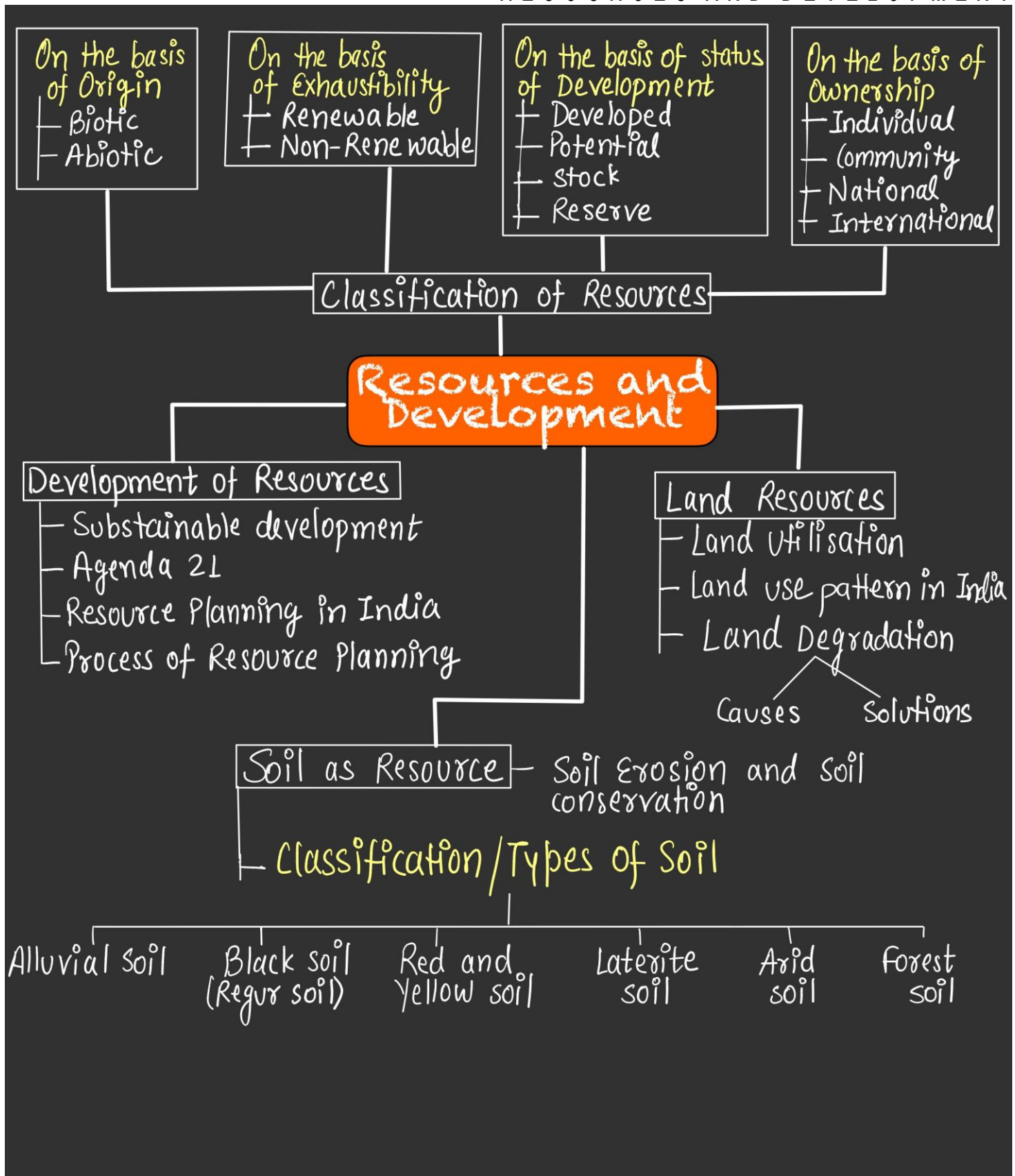
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GEOGRAPHY
RESOURCES AND DEVELOPMENT



Everything available in our environment which can be used to satisfy our needs, provided, it is technologically accessible, economically feasible and culturally acceptable can be termed as **Resources**.

Classification of Resources

On the basis of Origin: [cbse 2018]

- **Biotic**: Resources which are obtained from biospheres and have life such as human beings, flora and fauna, fisheries etc
- **Abiotic**: Resources which are composed of non-living things such as rocks, minerals etc.

On the basis of Exhaustibility:

- **Renewable**: Resources which can be renewed or reproduced by physical, mechanical and chemical process. such as solar and wind energy, forest, water etc.
- **Non-Renewable**: Resources which take millions of years in their formation. They may exhaust by excessive use such as petrol, coal, fossil fuels etc.

On the basis of the Status of Development:

- **Developed**: Resources which are surveyed and their quantity and quality is determined for utilization. eg: Coal mines.
- **Potential**: Resources which are found but yet not utilized. eg: Sun and wind energy in deserts.
- **Stock**: These have potential to satisfy human needs but humans don't have technology to access these. eg: Extracting H_2 and O_2 from H_2O .
- **Reserve**: These resources can be utilised with help of existing technology but are kept for future requirements. eg: Water can be used to generate more hydroelectricity.

On the basis of Ownership:

- **Individual**: Resources owned privately by individuals. eg: plot, house, car, wells etc.
- **Community**: Resources which are accessible to all the members of the community eg: public parks, playgrounds, picnic spots etc.
- **National**: Technically, all resources available in the country are national resources eg: forests, wildlife, land division and political territories.
or, Resources which are within the political boundary and oceanic area upto 12 nautical miles from the coast belong to the nation.

- **International**: Resources which are regulated by International institutions. eg:- Oceanic resources beyond 200 nautical miles of the Exclusive zone belongs to open ocean and no individual country can utilize them without the concurrence of these International institutions.

Development of Resources

Resources of different kinds are vital for human survival and also for maintaining the quality of life. Earlier the resources were taken as free gifts of nature and were used indiscriminately because of which some major problems arise:

- Depletion of resources for satisfying the greed of few individuals.
- Accumulation of resource in few hands have divided the society into two segments i.e. haves and have nots or rich or poor.
- Indiscriminate exploitation of resources has led to global ecological crisis such as global warming, ozone layer depletion, environmental pollution and land degradation.

Therefore, a fair distribution of resources therefore is essential for a sustained quality of life and global peace. This can be achieved through proper planning.

- # **Sustainable Development**: It means development should take place without damaging the environment and development in the present should not compromise with the needs of future generations.
- # **Agenda 21**: It is a declaration signed by the world leaders in 1992 at UNCED, which took place at Rio de Janeiro. It aims at achieving global sustainable development.
- # **Resource Planning in India**:
 - Resource Planning means identification and quantification of the available resources along with their development.
 - It is important in a country like India, which has an enormous diversity in availability of resources.
 - There are regions which are rich in certain types of resources but are deficient in other resources. This calls for balanced resources planning at national, state, regional and local levels.
 - Arunachal Pradesh has abundances of water but lacks in infrastructural development. Rajasthan is endowed with solar and wind energy but lacks in water resources. Cold deserts of Ladakh have rich heritage but lacks in water, infrastructural development and other vital minerals.

Process of Resource Planning:

This is a technique or skill of proper utilization of resources. Resource planning consists of three stages -

- Identification and inventory of resources - Involves surveying, mapping and measurement of characteristics and properties and properties of resources.
- Evolving a planning structure endowed with appropriate - Technology, skill and institutional set up for implementing resource development plans.
- Matching - The resources development plans with overall national development plans.

Land Resources

India's geographical area comprises:

- Plains (43%) provide facilities for agriculture and industries.
- Mountains (30%) ensure perennial flow of rivers. It provides facilities for tourism and ecological aspects.
- Plateau (27%) possesses rich reserves of minerals, fossil fuels and forests.

Land Utilisation:

Land resources are used for the following purposes:

- Forest
- Land put to non-agricultural uses: eg. buildings, roads, factories etc.
- Net sown area: Area sown more than once in an agricultural year plus net sown area is known as gross cropped area.
- Fallow lands: Land left without cultivation for one or more than one agricultural year.
- Other cultivated land: Permanent pastures and grazing land, Land under miscellaneous tree crops groves (not included in net sown area), Culturable waste land (left uncultivated for more than 5 agricultural years).

(K³B) ⇒ The land use pattern in India is determined by both physical factors such as topography, climate, soil types as well as human factors such as population density, technological capability, culture and traditions etc.

Land Degradation

The decrease in the quality of land due to human and natural activities which makes it unfit for cultivation is known as land degradation.

Causes of Land degradation:

- Overgrazing in states like Gujarat, Rajasthan, MP etc.

- Over irrigation in states like Punjab, Haryana and UP due to water logging leading to increase in salinity and alkalinity in the soil.
- Mining sites are unused after excavation work is complete leaving deep scars and traces of over burdening.
- Mineral processing like grinding of limestone for cement industry and calcite & soapstone for ceramic industry generate huge amount of dust in atmosphere. It retards the process of infiltration of water into soil after it settles down on land.
- Industrial effluents as waste has become major source of land and water pollution.

Measures for land conservation / Solutions :

- Afforestation and proper management of grazing can help to some extent.
- Control on overgrazing.
- Control on mining activities.
- Planting of shelter belts
- Proper discharge and disposal of industrial effluents.

Soil as a Resource

A most important renewable natural resource but takes millions of years to form soil upto a few centimeter in depth. Types of soil:

Alluvial Soil :

- This soil type is most important and widely spread. The entire northern plains are made of alluvial soil. (eg:- parts of Gujarat, Rajasthan etc)
- On the basis of age, alluvial soil can be classified into:-
 - (a) Bangar: old alluvial, more concentration of kanker nodules and is less fertile.
 - (b) Khadar: New alluvial, less concentration of kanker nodules and is more fertile.
- Alluvial soil consists of potash, phosphoric and lime.
- Ideal for sugarcane, paddy, wheat and other cereal and pulse crops.

Black Soil (Regur Soil):

- Black in colour and ideal for growing cotton. So also called black cotton soil.
- Covers the north-western Deccan Plateau, plateau of Maharashtra, Saurashtra, Malwa, Madhya Pradesh and Chhattisgarh.
- It is rich in soil nutrients such as calcium carbonate, magnesium, potash and lime.
- It is made up of extremely fine clayey material and is known for their capacity to hold moisture.

Red and Yellow Soil :

- Develops on crystalline igneous rocks in areas of low rainfall.
- It covers southern and eastern part of Deccan plateau, parts of Chhattisgarh

- and Odisha and piedmont zone of Western Ghats.
- Soil develops a red colour on diffusion with iron in crystalline and meta-morphic rocks. Yellow in hydrated form.

Laterite Soil:

- In the areas of heavy rainfall and high temperature
- Humus content is low as bacteria die in high temperature.
- Suitable for cultivation with adequate doses of manures and fertilizers.
- Found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh and hilly areas of Odisha and Assam.
- After adopting appropriate soil conservation techniques in hilly areas of Karnataka, Kerala and Tamil Nadu this soil is very useful for growing Tea and coffee. Red Laterite Soil in Tamil Nadu, Kerala and Andhra Pradesh is suitable for growing cashew nut.

Arid Soil:

- Ranges from red to brown in colour. Sandy in texture and saline in nature
- Due to dry climate and high temperature, soil lacks in humus and moisture content. After proper irrigation facilities, it is cultivable.
- Lies in the western part of Rajasthan.

Forest Soil:

- Found in hilly and mountainous areas where sufficient rain forests are available.
- The soil texture varies according to mountain environment where they are formed. They are loamy and silty in valley sides and coarse grained in the upper slopes.
- In the snow-covered areas, soil experience denudation and are acidic with low humus content. Soil found in the lower parts of the valleys on river terraces and alluvial fans are fertile.

Soil Erosion: Causes and Solutions

The denudation of the soil cover and subsequent washing down is called Soil Erosion. Caused due to:

- Deforestation & Overgrazing
- Construction & Mining
- Water flows as a sheet over large areas down the slope. This causes washing away of top. This is called sheet erosion.
- Wind blows loose soil off flat or sloping land. This is called wind erosion
- Land unfit for cultivation is called as Bad Land.

Conservation / Solution:

- Steps can be cut out on the slopes making terraces. Terrace cultivation restricts erosion.
- Afforestation.
- Ploughing along the contour lines can decelerate the flow of water down the slopes. This is contour ploughing.
- Planting lines of trees to create shelter belts to break the force of wind. Rows of such trees is called shelter belts.
- Large fields are divided into strips. Strips of grass are left to grow between the crops. This breaks the force of wind; this method is known as strip cropping.

-- PREVIOUS YEAR QUESTIONS --

1 MARK QUESTIONS

Q1. Being a tropical country, India has enormous possibilities of tapping solar energy. Suggest any one way to popularize its maximum use. [1M, 2021 Sample Paper]

A1. Making people aware about renewable energy resources/use of rooftop solar panels/solar street lighting system/any other relevant point.

Q2. A concerted effort has to be made for sustainable development. Suggest any one step in conserving our mineral resources for the future. [1M, 2021 Sample Paper]

A2. Improved technologies/ Recycling of metals/ Using scrap metals and other substitutes / Any other relevant point

Q3. Define Sustainable development. [1M, 2020]

A3. Present generation fulfils its needs while considering the needs of the future generation as well.

Q4. Classify resources on the basis of origin [1M, 2018]

A4. Resources classification on the basis of origin:

(i) Biotic resources: All living organisms in our environment are known as biotic resources.

Example: Tree, animal, insects etc.

(ii) Abiotic resources: All non-living things present in our environment are known as abiotic resources.

Example: earth, air, water, metals, rocks etc.

Q5. What do you understand by a 'Resource'? Give examples [1M, 2015]

A5. Everything available in our environment which can be used to satisfy our needs, is called a resource. It should be technologically accessible, economically feasible and culturally acceptable. Only then, it can be termed as a 'Resource'. Examples are: minerals, forests, fossil fuels etc

Q6. Give any two examples of non-renewable resources. [1M, 2015]

A6. Non-renewable resources are resources which once get exhausted, cannot be remade. They take a long geological period of time, i.e., millions of years, in their formation, e.g., minerals, fossil fuels, etc.

Q7. Which factor is mainly responsible for maximum land degradation in India? [1M, 2015]

A7. Over-grazing is one of the main reasons for land degradation. States where over-grazing has resulted in land degradation are Gujarat, Rajasthan, Madhya Pradesh and Maharashtra.

Q8. In what broad category do the soils of Maharashtra fall? [1M, 2014]

A8. Black soil region also known as regur soils.

3 MARKS QUESTIONS

Q9. Suggest and explain any three ways to protect land from degradation in various states of India. [3M, 2021 Sample Paper]

A9. The ways are :

- I. Afforestation.
- II. Proper management of grazing.
- III. Planting of shelter belts of plants.
- IV. Stabilization of sand dunes by growing thorny bushes.
- V. Control of mining activities. (Any 3)

Q10. Write the classification of resources on four different bases. [3M, 2015]

A10. Resources can be classified in the following four ways:

(a) On the basis of Origin:

- Biotic
- Abiotic

(b) On the basis of exhaustibility:

- Renewable
- Non-renewable

(c) On the basis of ownership:

- Individual (Personal)
- Community
- National
- International

(d) On the basis of status and development:

- Potential
- Developed
- Reserve
- Stock

Q11. Explain three stages of 'resource planning.' [3M, 2015]

A11. Three stages of resource planning:

1. Identification and inventory of resources across the regions of the country. This involves surveying, mapping and the qualitative and quantitative estimation and measurement of the resources.
2. Evolving a planning structure endowed with appropriate technology, skill and institutional set up for implementing resource development plans.
3. Matching the resource development plans with overall national development plans.

Q12. Give the distribution of black/regur Soil. [3M, 2015]

A12. This soil is typical of the Deccan Trap region.

- It is spread over north west Deccan plateau and is made up of lava flows.
- This soil covers the plateaus of Maharashtra, Saurashtra, Malwa, Madhya Pradesh and Chattisgarh and extends along the Godavari and Krishna Valleys.

Q13. "Planning is the widely accepted strategy for judicious use of resources in a country like India". Justify this statement with two relevant points and an example. [3M, 2013]

A13.

1. There are regions which are rich in certain types of resources but are deficient in some other resources. For example: Arunachal has abundance of water but lacks in infrastructural development.
2. There are some regions which can be considered self sufficient in terms of availability of resources. For example: The states of Jharkhand, Chhattisgarh and

Madhya Pradesh are rich in minerals and coal deposits.

3. There are some regions which have acute shortage of some vital resources. For example: The state of Rajasthan is well endowed with solar and wind energy but lacks in water resources.

Q14. Explain the concept of resource conservation as voiced by Gandhiji. [3M, 2014]

A14. Gandhiji voiced his concern about resource conservation in these Words: "There is enough for everybody's need and not for anybody's greed." He placed the greedy and selfish individuals as the root cause for resource depletion at the global level. He was against 'mass production' and wanted to replace it with 'production by the masses'.

1. Indiscriminate use of resources by human beings has led to the depletion of resources for satisfying the greed of few individuals.
2. Irrational consumption and over-utilization of resources leads to socio-economic and environmental problems.

Q15. Explain three types of soil erosion mostly observed in India. Mention human activities that are responsible for soil erosion. [3M, 2013]

A15.

1. Gully erosion: The running water cuts through the clayey soils and makes deep channels, called gullies. They make the land unfit for cultivation. Such lands are called 'Badlands'.
2. Sheet erosion: Sometimes water flows as a sheet over large areas down a slope. In this case top layer of the soil is washed away.
3. Wind erosion: Wind blows off loose and dry soil from flat and sloping land causing erosion.

5 MARKS QUESTIONS

Q16. 'The challenge of sustainable development requires control over industrial pollution.'

Substantiate the statement with examples. [5M, 2020]

A16. i. On one hand Industries lead to extensive industrial growth and expansion, other hand these are also the cause of environmental degeneration which prompt to the different type of air, water pollution.

ii. There is an increasing requirement to use a further sustainable model.

iii. Industries must produce eco-friendly products and dump wastes responsibly.

iv. Use of latest technology can help industries to control pollution and lead towards sustainable mode of operation.

v. Industries use: Reuse-Recycle-Refuse approach.

Q17. Write six characteristics of regur soils (black soils) [5M, 2015]

A17. 1. They are made up of extremely fine, i.e. clayey material.

2. They have capacity to hold moisture that makes them ideal for growing cotton.

3. They are rich in soil nutrients such as calcium carbonate, magnesium, potash and lime.

4. These soils are generally in poor in phosphoric contents.

5. They develop deep cracks during dry hot weather, which helps in the proper aeration of soil.

6. These soils are sticky when wet and difficult to work unless tilled immediately after the first shower.

Q18. Explain four types of resources based on ownership and give one example of each type.

[5M, 2014]

A18. On the basis of ownership, there are four types of resources:

1. Individual Resources : Resources, which are owned privately by individuals, e.g., farmers own pieces of land or houses. Plantation. pasture lands, water in wells are some resources owned by individuals.
2. Community Owned Resources : These resources are accessible to all the members of the community, e.g., village ponds, public parks, playgrounds in urban areas are accessible to all the residents of that area.
3. National Resources :All the resources within the political boundary of a nation including the territorial water (oceanic area upto 12 nautical miles from the coast) extending into the ocean and resources therein belong to the nation, e.g., all minerals, forests, wildlife, water resources, land etc.
4. International Resources :There are international institutions which own and regulate some resources, e.g., The oceanic resources beyond 200 km of the Exclusive Economic Zone belong to the open ocean and no individual country can utilise these without the concurrence of international institutions.

Q19. Write some measures/ways to solve problems of land degradation. [5M, 2014]

A19. Measures to conserve land:

1. Afforestation.
2. Proper management of grazing to control over-grazing.
3. Planting of shelter belts of plants.
4. Stabilisation of sand dunes by growing thorny bushes.
5. Control of mining activities.

Q20. Write the main characteristics of arid soils. [5M, 2014]

A20. 1. Arid soils range from red to brown in colour.

2. They have a sandy texture.
 - 3 They are saline in nature. In areas where salt content is high, common salt is obtained by evaporation.
 4. Arid soil lacks humus and is moisture deficient.
 5. The lower horizons of the soil have kankars because of high calcium content which restrict infiltration of water.
 6. Proper irrigation helps make these soils cultivable, e.g., Western Rajasthan
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Q21. "The future generation may not have sufficient resources as compared to the present generation". Justify the statement by giving suitable examples. [5M, 2012]

A21. Present sources of energy in India are coal, petroleum, natural gas, solar energy, wind energy, hydel power, electricity, wood for fire, cow dung etc. Most of these are non-renewable sources of energy which may get exhausted after some time. These are available in limited quantities. The present rate of consumption is higher than the rate at which these resources are being replenished and should be preserved for our future generations.

In fifty years' time, India may depend largely on non conventional sources of energy which are available in abundance such as solar energy, hydel energy, wind energy etc. The total hydel power potential in India is estimated at 1,50,000 MW of which only one-sixth has been developed so far.

1. Development of a country needs to be continuous. Every country would like to have the level of development go up further.

2. Many scientists have warned that the present levels of development cannot be sustained for the future as the present rate of consumption of both renewable and non-renewable resources is very high. Rapid industrialisation has led to environment degradation.
3. Sustainability development aims at development without damaging the environment and at the same time conserving for the future.
4. Sustainability of development is essential not only for the present generation but also for future generations to ensure a good life.

 Objective Section _____ (1 mark each)

Q. 1. Read the following features of a soil and name the related soil :

[CBSE OD, Set 1, 2020]

- (a) Develops in high rainfall area
- (b) Intense leaching process takes place.
- (c) Humus content is low.

Ans. Laterite soil.

Q. 2. Read the features of a soil given below and name the related soil.

[CBSE OD, Set 2, 2020]

- (i) It consists of properties of sand, silt and clay.
- (ii) It is described on the basis of age.
- (iii) It is very fertile.

Ans. Alluvial soil.

Q. 3. Read the features of a soil given below and name the related soil.

[CBSE OD, Set 3, 2020]

- (i) This soil range from red to brown in colour.
- (ii) Generally sandy in Texture and saline.
- (iii) Soil lacks humus and moisture.

Ans. Arid soil.

Q. 4. Fill in the blanks.

[CBSE Delhi, Set 1, 2020]

Types of Resources	Examples
A ?	Biotic and Abiotic Renewable and non-renewable
B ?	

Ans. (A) On the basis of origin (B) On the basis of exhaustibility.

 Very Short Answer Type Questions _____ (1 mark each)

Q. 1. How is over irrigation responsible for land degradation in Punjab?

OR

How is cement industry responsible for land degradation?

[CBSE Delhi, Set 1, 2019]

Ans. Over irrigation is responsible for land degradation due to water logging which leads to increase in salinity and alkalinity in the soil.

OR

Mineral processing like grinding of limestone for cement industry generates heavy amount of dust which is released in the atmosphere. Later, it settles down in the surrounding areas which slows the process of infiltration of water into the soil. This is how land gets degraded due to cement industries.

Q. 2. Classify resources on the basis of origin.
 [CBSE, 2018]

Ans. Resources classification on the basis of origin:

- (i) **Biotic resources:** All living organisms in our environment are known as biotic resources. Example: Tree, animal, insects etc.
- (ii) **Abiotic resources:** All non-living things present in our environment are known as abiotic resources. Example: earth, air, water, metals, rocks etc.

Q. 3. Give any two examples of non-renewable resources.


[CBSE, Term 1, 2015]

Ans. Coal and minerals are the two examples of non-renewable resources.

Q. 4. Which factor is mainly responsible for maximum land degradation in India?

[CBSE, Term 1, 2015]

Ans. Over-grazing is one of the main reason for land degradation. States, where over-grazing has resulted in land degradation are, Gujarat, Rajasthan, Madhya Pradesh and Maharashtra.

 Short Answer Type Questions-II _____ (3 marks each)

Q. 1. Describe the importance of judicious use of resources.

OR

Describe the different steps of 'resource planning.' [CBSE Delhi, Set 1, 2020]

Ans. The importance of judicious use of resources are given below :

- (i) Resource planning : The planning is an important step in country like India where resources are enormously diverse for judicious use of resources. It provides economically viable and sustainable solution to the issues related to resources and serves efficiently and effectively.
- (ii) Management resources : The proper management is vital for the efficient and sustainable use of resources. The proper management of resources successfully links the human and resources resulting in its judicious use.
- (iii) Awareness : The awareness plays an important role in planning, management and use of resources. It is the responsibility of an individual to affectionately plan and manage their local resources and should manage and harness them in the sustainable and best possible way like a vacant piece of community land that can be brought under use by building parks, garden, etc.

OR

Resource planning is consisting of complex processes which are given below :

- (i) Identification and inventory of resources across the regions of the country. This involves surveying mapping, qualitative and quantitative estimation and measurement of the resources.
- (ii) Evolving a planning structure endowed with appropriate technology, skill and institutional set up for implementing resource development plans.

(iii) Matching the resource development plans with overall national development plans.

Q. 2. Describe any three main features of 'Alluvial soil' found in India.

OR

Describe any three main features of 'Black soil' found in India.

[CBSE OD, Set 1, 2019]

Ans. Major characteristics of Alluvial Soil are:

- (i) Alluvial soil is considered as one of the most fertile soils amongst all soil types. Alluvial soil covers the entire northern plains in India.
- (ii) Alluvial soil contains sand, silt and clay mainly due to silt deposited by the Indo-Gangetic-Brahmaputra rivers. According to age, it is classified into Bhangar (old alluvial) and Khadar (new alluvial).
- (iii) Alluvial soil contains an ample amount of potash, phosphoric acid and lime. This soil is ideal for the growth of crops like sugarcane, wheat and rice etc.

OR

Major characteristics of Black soil are:

- (i) Black soil is fine textured and clayey in nature. It is suitable for growing cotton.
- (ii) Black soil has high amount of lime, iron, magnesium and generally low quantities of Phosphorus, Nitrogen and organic matter.
- (iii) It is formed from weathered lava rocks, thus is black in colour and also know as Regur Soil.
- (iv) It has a high clay content and therefore is highly retentive of water. It is extremely fertile in most of the places where it is found.

Q. 3. How is the issue of sustainability important for development? Explain with examples. [CBSE, 2018]

 Topper's Answers

Introduction: Sustainable development means the development that takes place without damaging the environment or compromising the ability of the future generations to meet their own needs.

(a) The resources are not free gifts of nature. Their exploitation will lead to their depletion and thus halt on development. e.g:- resources like Petroleum are exhaustible resource, their reckless exploitation will lead to their deficiency.

(b) Resources are vital for development. Industries, Agriculture, etc all depend on resources. Economic development depends on resource availability.

(c) Millions of people earn their livelihood and sustain on resources. Resources like minerals, coal are pre-requisite for development. Water, food, etc are necessary for survival. To protect future generations.

Conclusion: Hence, we need to use the resources judiciously to sustain development.

- Ans. (i) Sustainable use of natural resources is the process by which economic, industrial and social needs are met but the resources are to be managed and exploited in such a way that the biodiversity, balance in the ecosystem, and the biological cycle like carbon, nitrogen and water cycle are not destroyed.
- (ii) Coal, oil and natural gas are chiefly used to provide electricity and to power vehicles. We should take advantage of the abundance of solar, wind, wave, tidal and thermal energy that is free, renewable and sustainable. These resources will provide more than enough green electricity which can then power all the industries, homes and transport that we need.

(iii) Sustainability lays emphasis on environmental protection and check environmental degradation, moreover, to stop over exploitation and over use of resources.

Q. 4. Why has the land under forests not increased much from 1960-61?
 [CBSE, Term 1, 2016]

Ans. (i) Land resources in India are primarily divide into agricultural land, forest land, land meant for pasture and grazing land for other non-agricultural use and waste land. Waste land includes rocky, arid and desert areas. Land is also used for other non-agricultural purpose such as housing, roads and industry. According to the data for 2002-03, about 54% of the total land area is cultivable or follow, 22.5% is covered

by forests and 3.5% is used for grazing. The rest is waste land, with traces of miscellaneous cultivation. The improper use of forest land has degraded the available land area and has made conservation of forests difficult. Human activities 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.

- (ii) (a) Technological development has led to industrialization which has increased the use of natural resources. (b) Technological development has converted the subsistence agriculture to commercial agriculture and this has led to the over utilization of soil. (c) The development of technology contributed to increased production of quality goods and provision of better services to the people. (d) Technological development has also improved the process of mining. (e) Economic development has led to increasing urbanization and modernization which demands more resources.

Q. 5. How is the mining activity injurious to the health of the miners and environment? Explain.

[CBSE Delhi, Term 2, Set 1, 2015]

Ans. Mining affects the environment by exposing radioactive elements, removing topsoil, increasing the risk of contamination of the nearby ground and surface water sources, and acidification of the surrounding environment. Mining affects and disrupts the aquatic habitats, terrestrial habitats and wetlands that contains diverse ecosystems and organisms that rely on these areas for survival. A mine's large consumption and release of water, manipulation of topography and landscape, as well as the release of particulates and chemicals affects various habitats directly and indirectly.

Mining is dependent on the fossil fuels, which are non-renewable, to generate the energy needed for its operations. Dust released during the break up of materials causes lung problems and poses health risks for miners and people that live in the surrounding areas.



Long Answer Type Questions _____ (5 marks each)

Q. 1. What is meant by 'resources'? Mention the four basis to classify the resources.

[CBSE, Term 1, 2015]

Ans. Everything available in our environment which can be used to satisfy our needs is called a Resource. Resources are technological accessible, economically feasible and culturally acceptable. Examples are coal, minerals, forest, land, water, fossil fuels etc.

Resources are classified as follows:

- (i) On the basis of origin
- Biotic: living resources like plants etc.
 - Abiotic: Non living resources like solar energy, land etc.
- (ii) On the basis of exhaustibility
- Renewable: Which can be recreated like solar energy etc.
 - Non Renewable: Which cannot be recreate like fossil fuels.

(iii) On the basis of ownership

- Individual (Personal): Owned by an individual person.
- Community: Owned by the whole community.
- National: Owned by a country.
- International: Accessed by all nations.

(iv) On the basis of status of development.

- Potential: Resources which are found in a region, but have not been utilized.
- Developed: Which are surveyed and quality and quantity shows the utilization.
- Reserve: Which can be used for meeting future requirements.
- Stock: Which can not be used due to the lack of appropriate technology to used these resources.