Resource of Development

Previous Years' CBSE Board Questions

1. Choose the correctly matched pair. (2024)
(a) Ferrous - Natural Gas
(b) Non-Ferrous - Nickel
(c) Non-Metallic Minerals - Limestone
(d) Energy Minerals – Cobalt

Answer. (c) Non – Metallic Minerals - Limestone

Development of Resources; Resource Planning

MCQ

1. Match the column-1 with column-2 and choose the correct option:

Column-1 (Resources)		Column-2 (Example)	
(I)	Biological	1.	Coal
(II)	Renewable	2.	Wildlife
(III)	Non-renewable	3.	Solar Energy

	I	II	III
(a)	1	3	2
(b)	3	2	1
(c)	2	3	1
(d)	1	2	3

(2023)

2. Which among the following is NOT a problem of resource development? (Term-1, 2021-22) R
(a) Depletion of resources for satisfying the greed of few individuals
(b) Accumulation of resources in few hands
(c) Indiscriminate exploitation of resources
(d) An equitable distribution of resources
VSA (1 mark)

3. Fill in the blanks of the following table with suitable information:
Resource on the basis of exhaustibility

Types of Resources	Examples
(A) _____	Solar and Wind energy
(B) _____	Mineral and Fossil fuels

(2020)

4. Fill in the blanks.

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

(Delhi 2020)

5. Fill in the blanks of the following table with suitableinformation.
Type of resources: On the basis of ownership

Types of Resources	Examples
A-?	Grazing grounds, ponds etc.
B-?	Cultivated land of farmer.

(2020)

6. Favourable conditions for wind energy exist in Western Rajasthan and Gujarat, but they have not been utilised and developed to the maximum. It falls in which category of resources? (2019 C)

7. Classify resources based on origin. (2018, 2015, 2014) An

8. Give one difference between renewable and non- renewable resources. (2016)

SAI (3 marks)

9. Describe the importance of judicious use of resources. (2020) Ap

10. Describe the different steps of 'resource planning'. (2020, 2017, 2014)

11. "Resource Planning is essential for sustainable existence of all forms of life." Support the statement with examples. (2020 C)

12. What is Agenda 21? List its two principles. (2016)

13. Classify the resources on the basis of exhaustibility. State two characteristics of each. (2016)

14. "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. (2016)

LA (5 marks)

15. What are the three stages of resource planning in India? Why is it essential to have resource planning? (2017, 2014)

MCQ

Land Resources; Land Utilisation; Land Use Pattern in India; Land Degradation and Conservation Measures

16. In which one of the following states overgrazing is the main reason for land degradation? (Term-1, 2021-22)
(a) Maharashtra
(b) Punjab
(c) Haryana
(d) Uttar Pradesh

17. Deforestation due to mining has caused severe land degradation in which one of the following states? (Term-1, 2021-22)
(a) Odisha
(b) Tamil Nadu
(c) Kerala
(d) Gujarat

18. Which one of the following human activities has contributed most in land degradation? (Term-1, 2021-22)
(a) Deforestation
(b) Overgrazing
(c) Mining
(d) Over-irrigation

19. Two statements are given below as Assertion (A) and Reason (R). Read the statements and choose the most appropriate option.
Assertion (A): Indian farmers should diversify their cropping pattern from cereals to high-value crops.
Reason (R): This will increase income and reduce environmental degradation simultaneously.

(a) Both A and R are correct, and R is the correct explanation of the A.
(b) Both A and Rare correct, but R is not the correct explanation of the A.
(c) A is correct, but R is incorrect.
(d) A is incorrect, but R is correct. (Term-1, 2021-22)

VSA (1 mark)

20. How much percentage of forest area is desired in a geographical area to maintain ecological balance as outlined in the National Forest Policy? (2020 C)

21. How is over irrigation responsible for land degradation in Punjab? (Delhi 2019)

22. How is cement industry responsible for land degradation? (Delhi 2019)

23. In which states has mining caused severe land degradation? (2014)

SAI (3 marks)

24. Explain with examples, the ways to solve the problem of land degradation in the Himalayan region.(2020 C)

25. 'Land is a natural resource of utmost importance'. Justify the statement with appropriate arguments.
(2014)

SA II (4 marks)

26. Read the source given below and answer the questions that follow:
Mining sites are abandoned after excavation work is complete leaving deep scars and traces of over- burdening. In states like Jharkhand, Chhattisgarh, Madhya Pradesh and Odisha, deforestation due to mining have caused severe land degradation. In states like Gujarat, Rajasthan, Madhya Pradesh and Maharashtra, overgrazing is one of the main reasons for land degradation. In the states of Punjab, Haryana, Western Uttar Pradesh, over-irrigation is responsible for land degradation due to water logging leading to increase in salinity and alkalinity in the soil. The mineral processing like grinding of limestone for cement industry and calcite and soapstone for ceramic industry generates huge quantity of dust in the atmosphere. It retards the process of infiltration of water into the soil after it settles down on the land. In recent years, industrial effluents as waste have become a major source

of land and water pollution in many parts of the country. Answer the following MCQs by choosing the most appropriate option:

(1) In which one of the following states isovergrazing the main reason for 'land degradation'?
(a) Gujarat
(b) Himachal Pradesh
(c) Punjab
(d) Madhya Pradesh

(ii) Which one of the following is a major source of water pollution?
(a) Rainfall
(b) Landslide
(c) Over-irrigation
(d) Industrial waste

(iii) Why is 'over-irrigation' responsible for land degradation?
(a) Increases the salinity of soil
(b) Decreases the water absorption capacity of soil
(c) Increases landslides
(d) Decreases the fertility of soil

(iv) Which one of the following is the main reason of 'land degradation' in Jharkhand?
(a) Overgrazing
(b) Over-irrigation
(c) Industrial waste
(d) Mining (2021 C)

LA (5 marks)

27. Discuss the factors responsible for land degradation in India. (2015, 2014)
Soil as a Resource; Classification of Soils; Soil Erosion and Soil Conservation

MCQ

28. Which of the following is correctly matched? (2023)
(a) Alluvial Soil - Gangetic plain
(b) Black Soil - Himalayan Region
(c) Arid Soil -Western Ghats
(d) Laterite Soil - Desert Area

29. Which of the following is correctly matched? (2023)
(a) Alluvial Soil - Consist of sand and silt
(b) Black Soil - Salt content is high
(c) Arid Soil - Diffusion of iron in crystalline
(d) Laterite Soil - Made up of Lava flows
30. Identify the soil which ranges from red to brown in colour and saline in nature. (Term-1, 2021-22)
(a) Red soil
(b) Laterite soil
(c) Arid soil
(d) Alluvial soil

31. Which one of the following forces leads to maximum soil erosion in plains? (Term-1, 2021-22)
(a) Wind
(b) Glacier
(c) Running water
(d) Earthquake

VSA (1 mark)

32. Read the following features of a soil and name the related soil:
(a) Develops in high rainfall area
(b) Intense leaching process takes place.
(c) Humus content is low. (2020)

33. Give one example of the main commercial crop cultivable in laterite soil. (2020)

34. Highlight the importance of contour ploughing. (AI 2019)

35. Which type of soil is most suitable for growing the crop of cashew nut? (2019)

36. Which soil type is the most widely spread and important soil in India? (2019, 2015)

37. Which soil types is made up of lava flows? (2014)

SAI (3 marks)

38. Describe any three main features of 'Alluvial soil' found in India. (2019)

39. Describe any three main features of 'Black soil' found in India. (2019)

40. Name the soil type which is widely found in Western Rajasthan. Explain two important characteristics of this soil type which makes it unsuitable for cultivation. (2017)

41. Distinguish between red soil and laterite soil stating any three points of distinction. (2015)

LA (5 marks)

42. Explain the two types of soil erosion mostly observed in India. Explain three human activities responsible for soil erosion. (2016)

43. Describe any five distinct characteristics of 'Arid soils'. (2015)

44. Why is soil considered as a resource? Explain with five arguments. (2015)

45. What type of soil is found in the river deltas of the eastern coast? Give four main features of this type of soil. (2014)

CBSE Sample Questions

Development of Resources; Resource Planning

MCQ

1. Match the following:

	Resources		Examples
A.	Renewable Resources:	I.	Forests and wildlife
B.	Non -Renewable Resources:	II.	The oceanic resources
C.	National Resources:	III.	Roads, canals and railway
D.	International Resources:	IV.	Minerals and fossil fuels

(a) A-1, B-IV, C-III, D-II
(b) A-II, B-I, C-IV, D-III

(c) A-IV, B-I, C-III, D-II
(d) A-I, B-IV, C-II, D-III (2022-23)

2. Which one of the following conferences was convened to discuss environmental protection and socio-economic development at the global level in 1992?
(a) Kyoto Protocol
(b) Montreal Protocol
(c) Rio de Janeiro Earth Summit
(d) World Summit on Sustainable Development (Term-1, 2021-22) R

3. Which of the following categories of resources can we put tidal energy in?
(a) Renewable resources
(b) Non-renewable resources
(c) Actual resources
(d) Potential resources (Term-1, 2021-22)

Land Resources; Land Utilisation; Land Use Pattern in India; Land Degradation and Conservation Measures

MCQ

4. The piece of land left uncultivated for the past 1 to 5 agricultural years is called Choose the correct option. (Term-1, 2021-22)
(a) Barren land
(b) Forest land
(c) Grazing land
(d) Fallow land

5. Which one of the following human activities has contributed significantly in land degradation? (Term-1, 2021-22)
(a) Deforestation
(b) Crop rotation
(c) Shelter belts
(d) Ploughing

SAI (3 marks)

6. Suggest and explain any three ways to protect land from degradation in various states of India. (2020-21)
Soil as a Resource, Classification of Soils; Soil Erosion and Soil Conservation

MCQ

7. Identify the soil with the help of clues given below: develops in areas with high temperature and heavy rainfall is low in humus content found in the hilly areas of Karnataka, Kerala and Tamil Nadu (Term-1, 2021-22)
(a) Forest soil
(b) Yellow soil
(c) Black soil
(d) Laterite soil

VSA (1 mark)

8. Identify the soil with the help of the following features.
•Red to brown in colour
•Sandy in texture and saline in nature
• Lacks humus and moisture (2020-21)

ANSWERS

Previous Years' CBSE Board Questions

1. (c):1-2, 1-3, III-1

2. (d): Equitable distribution of resources is necessary for resource development.

3. (A)-Renewable
(B)-Non-renewable

4. (A)-Fishery, Water
(B)-Water, Fossil fuels

5. (A)-Community owned resources
(B)-Individual resource

6. Potential resources or stock.

7. Resources can be categorised on the basis of origin:
(i) Abiotic resources comprise non-living things (e.g., land, water, air and

minerals).
(ii) Biotic resources are obtained from the biosphere. These have life such as humans, flora and fauna.

8. Renewable: Replenished by nature e.g., crops and plants. Non-renewable Resources which get exhausted after years of use, e.g., crude oil.

9. The importance of judicious use of resources are:
(i) It maintains the sustainability of the resources.
(ii) Resources are available only in limited quantity.
(iii) Resources are vital for any developmental activity.

10. The different steps of resource planning are:
(i) Identification and inventory of resources across the regions of the country.
(ii) Evolving a planning structure endowed with appropriate technology, skill and institutional set-up.
(iii) Matching the resource development plans with overall national development plans.

11. Resource planning is essential for sustainable existence of all forms of life. It is so, because of following reasons.
(a) It helps to identify the various resources present in different regions of the country.
(b) It helps to reducing wastage of resources.
(c) It helps in equal distribution of resources among the regions that have acute shortage of it.

12. Agenda 21 was adopted at first International Earth Summit held in 1992 at Rio de Janeiro, Brazil. The two principles are as follows:
(i) To combat environment damage, poverty, disease through global cooperation on common interests, mutual needs and shared responsibilities.
(ii) Every local government should draw its own local Agenda 21.

13. (i) Renewable Resources Resources that can be replenished after a short period of time are called renewable resources. For example - agricultural crops, wind energy, water, forest, wildlife, etc.
(ii) Non-renewable Resources: Resources which take million years of time to replenish are called non-renewable resources. For example - fossil fuels. We must remember that some resources like metals are recyclable.

14. Yes, there are regions which are rich in certain types of resources but are deficient in some other resources.
(i) Jharkhand, Chhattisgarh and Madhya Pradesh are rich in minerals and coal deposits.
(ii) Arunachal Pradesh has abundance of water resources but lacks in infrastructural development.
(iii) Rajasthan is endowed with solar and wind energy but lacks in water resources.
(iv) Ladakh has rich cultural heritage but lacks in water resources and infrastructure.

15. Stages of resource planning are:
- Identification and inventory of resources across the regions of the country. This involves surveying, mapping and qualitative and quantitative estimation and measurement of the resources.
- Evolving a planned structure endowed with appropriate technology, skill and institutional set-up for implementing resource development plans.
- Matching the resource development plans with overall national development plans. Resource planning is a technique or skill for proper utilisation of resources.
(i) As resources are limited, their planning is necessary so that we can use them properly and also save them for our future generation.
(ii) Resources are not only limited but they are distributed over different parts of the country.
(iii) Resource planning is also essential for production of resources and to protect them from over exploitation.

16. (a): Overgrazing is the main cause of land degradation in states like, Maharashtra, Madhya Pradesh, Rajasthan and Gujarat.

17. (a) Mining sites are abandoned after excavation work is complete leaving deep scars and traces of over- burdening. This is a major cause of land degradation in Odisha.

18. (a) Deforestation has contributed most in land degradation. It makes the soil infertile for use therefore it causes droughts and land pollutions.

19. (a) Indian farmers should diversify their cropping pattern from cereals to high-value crops. This will increase income and reduce environmental

degradation simultaneously. Because fruits, medicinal herbs, flowers, vegetables, bio-diesel crops like jatropha and jojoba need much less irrigation than rice or sugarcane. India's diverse climate can be harnessed to grow ranges of high-value crops.

20. 33%

21. Over irrigation in Punjab causes the lowering in fertility rate of the soil because of water logging leading to increased salinity and alkalinity of the soil.

22. Grinding and crushing of limestone for the cement industry generate a large amount of dust. As the dust settles down on the soil it reduces the process of infiltration of water into the soil.

23. Jharkhand, Chhattisgarh, Madhya Pradesh and Odisha.

24. Ways to solve the problem of land degradation in Himalayan region.
(i) Afforestation is the solution for any kind of land degradation.
(ii) Proper management of grazing. It is the one of the main reasons of land degradation in hilly areas.
(iii) Adopting terrace farming in hilly areas, as it increase water retention capacity of soil.

25. (i) We live on land, we perform our economic activities on land and we use it in different ways.
(ii) It supports natural vegetation, wildlife, human life, economic activities, transports and communication system.
(iii) It is an asset of a finite magnitude.

26. (1) (a): Gujarat
(ii) (d): Industrial waste
(iii) (d): Decreases the fertility of soil
(iv) (d): Mining

27. The important factors responsible for land degradation in India are as follows:
(i) Deforestation: By an estimate over one million hectares of forest is lost every year in India.
(ii) Erosion: Loss of vegetation cover makes land more susceptible to erosion. Wind and water have left vast
tracts of land barren. Water erodes top soil to an extent of around 12,000

million tons per annum.
(iii) Over-irrigation: Successive cropping and over- irrigation, leads to water-logging and consequent salinisation and alkalisation. This situation mainly arises due to poor drainage.
(iv) Floods and Droughts: Drought is both man-made and environment-induced. Man has played a key role in the creation of drought-prone areas by over-exploitation of natural resources like forests, degradation by grazing, excessive withdrawal of ground water, silting of tanks, rivers, etc. Floods, on the other hand, are caused by heavy rains in a very short period. Each situation could have been altered had there been good vegetation cover. Vegetation helps in reducing run-off, increasing infiltration and reducing soil erosion.
(v) Over-grazing: India has the worlds largest cattle population, but not enough pasture land. This has led to serious problems as animals have encroached into forest lands and even agricultural lands. Land degradation due to over-grazing leads to desert like conditions.
(vi) Pollution: Pollution of land is caused by disposal of solid waste, leftover from domestic, industrial and agricultural sectors. Another major source of land pollution is the creation of derelict land due to mining particularly due to surface and underground mining activities. (any five)

28. (a) Alluvial soil - Gangetic plain

29. (a): Alluvial soil - Consist of sand and silt.

30. (c): Arid soil is red to brown in colour and saline in nature. It is sandy in texture and lacks humus and moisture.

31. (c) Running water leads to the maximum soil erosion in plains. It is of different types like gully erosion and sheet erosion.

32. Laterite soil

33. Tea, coffee and Cashew nut

34. Contour ploughing, the practice of tilling sloped land along lines of consistent elevation in order to conserve rainwater and to reduce soil losses from surface erosion.

35. Laterite soil

36. Alluvial soil

37. Black soil

38. (i) This soil type is most important and widely spread.
(ii) The entire northern plains are made of alluvial soil. Mostly these soils contain adequate proportion of potash, phosphoric acid and lime which are ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops.
(iii) Due to its high fertility, regions of alluvial soils are intensively cultivated and densely populated. Soils in the drier areas are more alkaline and can be productive after proper treatment and irrigation.

39. (i) These are black in colour and are also known as 'regur' soils. Ideal for growing cotton these are also known as black cotton soil.
(ii) The black soils are made up of extremely fine i.e., clayey material. They are well-known for their capacity to hold moisture.
(iii) They develop deep cracks during hot weather, which helps in the proper aeration of the soil.

40. The soil type in Western Rajasthan is arid soil, following are its characteristics:
(i) It consists very high Kankar nodules due to increasing calcium content downwards.
(ii) It is brown - red in its colour. It is generally sandy in texture and saline in nature.
(iii) Salt content is very high and it lacks humus and moisture.
(iv) It is difficult to cultivate anything on this type of soil, but cultivation can be encouraged after proper irrigation as in Western Rajasthan.

41. Red soil:
(i) Red soil is formed due to weathering of igneous and metamorphic rocks.
(ii) It is highly porous and less fertile but where it is deep it is fertile.
(iii) It is less crystalline.
(iv) It is red in colour due to presence of iron in it. It is found in parts of Tamil Nadu, Karnataka, Andhra Pradesh, Odisha and Jharkhand. Laterite soil:
(i) It is formed by the leaching process in the heavy rainfall areas of tropical India.
(ii) It is less fertile, only grass grows on it in abundance.

(iii) It is crystalline.
(iv) It is found in hills of the Deccan, Karnataka, Kerala, Odisha, Assam and Meghalaya.

42. Types of soil erosion:
(i) Gullies: The running water cuts through the clayey soil and makes deep channels/gullies. The unfit land caused by gullies is called badland or ravines.
(ii) 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. Three human activities which are responsible for the process of soil erosion are deforestation over-grazing, mining and construction, etc.

43. (i) Arid soils range from red to brown in colour.
(ii) Sandy in texture and saline in nature.
(iii) Evaporation from this soil is faster, soil lacks humus and moisture.
(iv) Soil occupied by Kankar.
(v) Kankar restricts the infiltration of water.

44. (i) Soil is considered as a resource because it is used to satisfy our needs.
(ii) It is the most important renewable natural resource.
(iii) It is the medium of plant growth. It consists of organic (humus) and inorganic materials.
(iv) It supports different types of living organisms on the earth.
(v) It is the base of our life.

45. Alluvial soil is found in the entire northern plain, it is the most widely spread soil of India. Main features of alluvial soil:
(i) It is formed by the deposition of materials brought down by the Himalayan rivers.
(ii) It is highly fertile. Due to its high fertility, regions of alluvial soils are intensively cultivated and densely populated.
(iii) It consists of various proportion of sand, silt and clay.
(iv) It is rich in potash, phosphoric acid and lime but deficient in organic matter.
(v) It is ideal for the growth of sugarcane, paddy, wheat and other cereal and pulse crops.

CBSE Sample Questions

1. (a) : A-1, B-IV, C-III, D-II (1)

2. (c) In June 1992, more than 100 heads of states met in Rio de Janeiro in Brazil for the first International Earth Summit. The summit was convened for addressing urgent problems of environmental protection and socio- economic development at the global level. (0.80)

3. (a): Tidal energy is renewable resource because it can be reproduced or renewed by mechanical process. (0.80)

4. (d): The piece of land left uncultivated for the past 1 to 5 agricultural years is called fallow land. Land left without cultivation for one or less than one agricultural year is known as current fallow land. (0.80)

5. (a): Deforestation has contributed significantly in land degradation. In states like Jharkhand, Chhattishgarh, Madhya Pradesh and Odisha deforestation due to mining has caused severe land degradation. (0.80)

6. (i) Afforestation.
(ii) Proper management of grazing.
(iii) Planting of shelter belts of plants.
(iv) Stabilisation of sand dunes by growing thorny bushes.
(v) Control of mining activities.
(vi) Proper discharge and disposal of industrial effluents and wastes after treatment. (3x1)

7. (d) Laterite soil develops in areas with high temperature and heavy rainfall. Humus content of the soil is low. This soil is mainly found in Karnataka, Kerala, Tamil Nadu, Madhya Pradesh and hilly areas of Odisha and Assam.

8. Arid soil (0.80) (1)