IMPORTANT TERMS

- ***GROSS CROPPED AREA** : Area sown more than once in an agricultural yearplus net sown area is known as gross cropped area.*
- ***FALLOW LAND** : A land which is left without cultivation for one or less thanone agricultural year for increasing its fertility is known as the fallow land.*
- ***WASTELAND** : Land which is not suitable for cultivation is known aswasteland.*
- ***NET SOWN AREA** : Area sown once in a year is known as the net sownarea.*
- ***PASTURE** : Land covered with grass and other plants that makes it suitablefor grazing animals is known as pasture.*
- ***SOIL EROSION** : The washing away of top fertile soil by natural agents likewind, glacier and water is called soil erosion.*
- ***GULLIES** : When the running water, cutting through the clayey soil createsdeep channels. These deep channels are known as gullies.*
- ***SHEET EROSION** : When the top soil is washed away due to heavy flow ofwater down the slopes, it is known as sheet erosion.*
- ***WIND EROSION** : When the top fertile soil blows off due to wind, it is knownas wind erosion.*
- ***STRIP CROPPING** : Large fields can be divided into strips. Strips of grasses are left to grow between the crops. This breaks up the force of thewind. This method is known as strip cropping.*

- ***CONTOUR PLOUGHING** : Ploughing along the contour lines is known ascontour ploughing. Contour ploughing can slow down the flow of water down the slopes and prevent soil from erodingaway.*
- ***SHELTER BELTS** : Sometimes, trees are planted in rows to reduce the forceof wind to prevent wind erosion. Such rows of plants are known as shelter belts.*

1.Identify the type of soil from the given features.

- **These are the most important soil.**
- **These are found in the Himalayan River system.**
- **These are classified into two parts according to their age.**

a)Black soil
b)Alluvial soil
c)Laterite soil
d)Yellow soil

2. Match the items given in column 'A' with the items given in column 'B'

A	B
(i) Renewable	1)livestock
(ii) Abiotic	2)wind energy
(iii) Biotic	3)burial ground
(iv) Community owned resources	4)rocks

(a) iii-i-iv-ii
(b) i-iii-iv-ii
(c) iii-ii-iv-i
(d) iii-i-ii-iv

3. Identify the type of soil from the given features.

- **These soils are known as regur soils.**
- **These soils are also known as black cotton soil.**
- **They are known for their capacity to hold moisture**

(a) Alluvial soil
(b) Black soil
(c) Laterite soil
(d) Forest soil

4. Identify the type of resources from the given features.

- **These are the subset of the stock.**
- **They can be used in the future.**
- **They can be put into use with the help of technical 'know-how'**

(a) Biotic resources
(b) Stock
(c) Reserve

(d) International resources

5.There is enough for everybody's need and not for any body's greed,'' who among the following hasgiven the above statement?

(a) Vinoba Bhave
(b) Mahatma Gandhi
(c) Jawaharlal Nehru
(d) Atal Behari Vajpayee

6.The mountain share in the total land area is:

(a) Uttar Pradesh
(b) Bihar
(c) Rajasthan
(d) Meghalaya

8.Fossil fuels are examples of which of the following types of resources?

(a) Renewable
(b) Flow
(c) Biological
(d) Non-renewable

9.What is the main reason behind global ecological crises such as global warming andenvironmental pollution ?

(a) Depletion of resources
(b) Accumulation of resources in a few hands
(c) Indiscriminate exploitation of resources
(d) Use of resources

10.Which are the main factors that determine creation of a resource?

(a) Nature and technology
(b) Nature and human beings
(c) Nature, human beings and technology
(d) Technology and human beings

11.From which Five Year Plan has India made concerted efforts for achieving the goals of resourceplanning ?

(a) First Five Year Plan
(b) Fifth Five Year Plan
(c) Annual Plans

(d) Tenth Five Year Plan

12.What is necessary for sustained quality of life and global peace?

(a) Stopping use of resources
(b) Saving resources for future
(c) Exploitation of resources
(d) Equitable distribution of resources

13.The oceanic resources beyond 200 km of the Exclusive Economic Zone can be termed as whichof the following types of resource ?

(a) Individual resources
(b) Community owned resources
(c) National resources
(d) International resources

14.What was the main contribution of the Brundtland Commission Report, 1987?

(a) Sustainable development as means for resource conservation
(b) Advocated resource conservation for the first time
(c) Presented Gandhian philosophy
(d) All the above

15.Which of the following is the root cause for resource depletion at global level, according toGandhiji?

(a) Conservation of resources
(b) Use of resources
(c) Greedy and selfish individuals and exploitative nature of modern technology.
(d) Backward technology.

16.Which of the following method will not help in soil conservation?

(a) Contour ploughing
(b) Strip cropping
(c) Creating shelter belts
(d) Ploughing up and down the slopes

17.What is arrangement of soil in different layers or horizons known as?

(a) Soil Composition
(b) Soil Erosion
(c) Soil Profile
(d) Soil Texture

18.What is land used for grazing cattle and livestock known as?

(a) Forests
(b) Barren land
(c) Pasture land
(d) Fallow land

19. Name the following which is not a measure for soil conservation?

(a) Strip cropping
(b) Terrace cultivation
(c) Overdrawing of ground water
(d) Shelter belts

20. Which of the following is not of any importance for soil formation?

(a) Duration of the day
(b) Relief
(c) Parent rock
(d) Climate

Answers

1.b
2.a
3.b
4.c
5.b
6.a
7.d
8.d
9.c
10.c
11.a
12.d
13.d
14.a
15.c
16.d
17.c
18.c
19.c
20.a

1.“Land is a natural resource of utmost importance” – Support thatstatement.

Ans. Land is an asset of a finite magnitude .All economic activities performedon Land. It supports natural vegetation, wild life, human life, economic activities, transport and communication systems and that is why Land is a natural resource of utmost importance.

2.Why only 93 per cent land use area is available in the totalgeographical area in India?

Ans. Total geographical area of India is 3.28 million sq. km but only 93 per cent land use area is available because the land use reporting for most of thenorth-east states except Assam has not been done fully. Moreover, some areas of Jammu and Kashmir occupied by Pakistan and China have also not been surveyed.

3.What is regur soil? Write its two features. Mention two regions wherethey are found.

Ans.Regur soil is the other name of black soil. The following are the twofeatures of regur soil.

- **The regur soils are made up of clayey material. They can hold moisture andare rich in soil nutrients such as calcium carbonate, magnesium, potash and lime.**
- **They develop deep cracks during hot weather. When the soils are wet, theyare very sticky and difficult to work on unless tilled immediately.**
- **The regur soils are found in the Deccan trap region, which is spread over north-west Deccan plateau.**
- **There soils are also found in the plateaus of Maharashtra, Saurashtra, Malwa, Madhya Pradesh, Chhattisgarh and along theGodavari and Krishna Valleys.**

4.What was agenda 21?

Ans. It is the declaration signed by world leaders in 1992 at the united Nation's conference on Environment and Development (UNCED).

- **It focuses on attaining Global Sustainable Development.**
- **It's mainly aim is to fight the environmental damage, poverty, diseases throughglobal cooperation on common interest, mutual needs and shared responsibilities.**
- **An important and distinct aim of the agenda is that every local government shoulddraw its own local Agenda 21.**

5.Write a short note on Rio de Janeiro Earth Summit, 1992.

Ans. Rio de Janeiro was the meeting ground for the first International EarthSummit.

- **More than 100 heads of state met at this famous conference which was convenedin June 1992 to address the urgent problems of environmental protection and socio-economic development at the global level.**
- **A declaration on Global Climatic change and the Biological Diversity was signed bythe assembled leaders.**
- **They adopted Agenda 21 and endorsed the global forest Principles to achieveSustainable Development in the 21st century.**

6.What type of relief covers most of India's land? Explain.

Ans. India has land under a variety of relief features, namely: mountains, plateaus,plains and islands.

- **About 43 per cent of land area is plain, which provides facilities for agriculture and industry.**
- **Mountains account for 30 per cent of the total surface area of the country andensure perennial flow of rivers, provides facilities of tourism and ecological aspects.**
- **About 27 per cent of the area of the country is plateau region. It possesses richreserves of minerals, fossil fuels and forests.**

7.Why does the net sown area vary from one state to another?

Ans. There are wide variations in the pattern of net sown area from one state toanother state because:

- **If we compare Haryana and Punjab with Arunachal Pradesh, Mizoram, Manipur andAndaman and Nicobar Islands there is a great disparity.**
- **In Punjab and Haryana the net sown area is 80% of the total area but in othermentioned states it is less than 10% of the total area.**
- **The reasons for this differences are many, e.g., climate, soil, relief,irrigationfacilities.**

8.Distinguish between Khadar and Bhangar.

Ans. Difference between khaddar and bhangar are:

Khadar

- **The khadar soils are found in the low areas of valley.**
- **These soils are finer in texture.**
- **These soils are more fertile.**
- **These soils are known as New alluvial.**

Bhangar

- **The Bhangar soils are found in the higher reaches.**
- **These are coarser in texture.**
- **These soils are less fertile.**
- **These soils are known are old alluvial.**

9.Which type of soil is found in the river deltas of the eastern coast? Givethree main features of this type of soil.

Ans. Alluvial soil is found in the river deltas of the eastern coast.The three main features of alluvial soils are:

- **The alluvial soil consists of various proportions of sand, silt and clay.**
- **According to their age alluvial soil can be classified as old**

alluvial and new alluvialto well connected developers.

- Due to its high fertility, region of alluvial soils are intensively cultivated anddensely populated.

10.Suggest some ways to solve the problems of land degradation.

Ans. The problems of land degradation can be solved by following measures:

- **Afforestation and proper management of grazing can help to some extentto solve the problem of land degradation.**
- **Planting of shelter belts of plants, control on over grazing, stabilization of sanddunes by growing thorny bushes is 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 canreduce land and water degradation in industrial and suburban areas.**

11.Explain the land use pattern in India?

Ans.The land use pattern in India are as :

- **The net sown area in India has decreased from 45.26% to 43.41%. Thismeans that more and more agricultural land is being shifted to other activities.**
- **The pattern of the net sown area varies gently from one state to another. In Punjab and Haryana the net sown area is 80% of the total area but Arunachal Pradesh, Mizoram, Manipur and Andaman and Nicobar Islands, it is less than 10%of the total area.**
- **The area under forests has been increased from 18.11% in 1960-61 to 22.57%in 2000-2003 and to 23% in 2005-06 yet it is far below than the scientific norms.**
- **The land under permanent pastures is very low, i.e., only 3.45%.**
- **Area under fallow land has also decreased which shows, that subsistenceagriculture is being replaced by commercial agriculture.**

12.Explain any five proper farming techniques which can be used for soilconservation.

Ans.The five proper techniques which can be used for soil conservation are as :

- **Strip Cropping: To counter the effect of wind the practice of strip croppingis followed to stop wind erosion. Large fields are divided in strips. Grass in strips is left togrow between the crops.**
- **Contour Ploughing: Ploughing along the contour lines does not let water rundown the slopes. This technique involved ploughing along contours, so that thefurrows follow lines linking points of the same height. Such furrows halt the downward flow of water and reduce erosion.**
- **Terrace Farming: Since ancient times farmers have built terraces or steps up ahillside creating several levels of farms. Hill slopes are cut into a number of terraces having horizontal top and steep slopes on the back and front.**
- **Crop rotation: If the same crop is sown in the same field, year after year, this consumes particular nutrients from the soil making it infertile. Crop rotation cancheck the type of erosion.**
- **Shelter Belts: Planting trees to create shelter also works in a similar way. Rowsof such trees are called shelter belts. These shelter belts have contributed significantly to the stabilization of sand dunes and in establishing the desert in western India.**

Read the source given below and answer the questions that follow :

On the Basis of the Status of Development Potential Resources Resources which are found in a region, but have not been utilised For example, the western parts of India particularly Rajasthan and Gujarat have enormous potential for the development of wind and solar energy, but so far these have not been developed properly. Developed Resources Resources which are surveyed and their quality and quantity have been determined for utilisation. The development of resources depends on technology and level of their feasibility Identify at least two resources from each category. Do you know that India has got the right to mine manganese nodules from the bed of the Indian Ocean from that area which lies beyond the exclusive economic zone. Identify some other resources which are international in nature. Stock Materials in the environment which have the potential to satisfy human needs but human beings do not have the appropriate technology to access these, are included among stock. For example, water is a compound of two gases, hydrogen and oxygen. Hydrogen can be used as a rich source of energy. But we do not have advanced technical know-how' to use it for this purpose. Hence, it can be considered as stock. Reserves are the subset of the stock, which can be put into use with the help of existing technical know-how' but their use has not been started These can be used for meeting future requirements River water can be used for generating hydroelectric power but presently, it is being utilised only to a limited extent. Thus, the water in the dams, forests etc. is a reserve which can be used in the future.

(1) Which one of the following statements is true about the term resources?

(a) Resources are free gifts of nature.
(b) They are the functions of human activities.
(c)All those things which are found in nature
(d) Things which cannot be used to fulfill our needs.

(2) Identify the correct basis of the status of Development potential resoures.

Basis	Potential Resources
a). Resources	1. No appropriate technology to use
b). Stock	2. Not utilised
c). Developed resources	3. Subset of the stock
d). Reserves	4. Surveyed (quantity and quality)

Choose the correct option

a) (a)-1, (b)-3, (c)-2, (d)-4
b)(a)-2, (b)-1, (c)-4, (d)-3
c)(a)-3, (b)-1, (c)-4, (d)-2
d) (a)-4, (b)-2, (c)-3, (d)-1

(3) Resources which are surveyed and their quality and quantity have been determined for utilisation are

a) Potential Resources
b) Individual Resources
c) Developed Resources
d) Stock

(4) Resources that take long geological time for their formation are called

a) Renewable resources
b) Reserve
c) Community resources
d) Non-renewable resources

Answer

1.B 2.B
3.C 4.D