

Grade VIII – Geography

Lesson 2. Land, Soil, Water, Natural Vegetation and Wildlife Resources

Objective Type Questions

(1 Mark each)

I. Multiple choice questions

- Which one of the following is not a factor of soil formation? [NCERT]
(a) Time (b) Soil texture (c) Organic matter (d) None of these
- Which one of the following methods is most appropriate to check soil erosion on steep slopes? [NCERT]
(a) Shelter belts (b) Mulching (c) Terrace cultivation (d) None of these
- Which one of the following is not in favour of the conservation of nature? [NCERT]
(a) Switch off the bulb when not in use. (b) Close the tap immediately after using.
(c) dispose polypacks after shopping. (d) None of these
- The thin layer of grainy substance covering the surface of the earth is called
(a) water (b) oxygen (c) air (d) soil
- It determines the thickness of soil profile.
(a) parent rock (b) time (c) relief (d) climate
- It is defined as the mass movement of rock.
(a) landslide (b) volcano (c) earthquake (d) flood
- How many centimetres of soil forms in hundreds of years?
(a) 1 (b) 3 (c) 2 (d) 4
- This thing is piled up to slow down the flow of water.
(a) Mulching (b) Rock (c) River (d) Sandstone
- is a vital renewable natural resource.
(a) Water (b) Soil (c) Air (d) Forest
- How many litres of water is wasted by dripping tap in a year?
(a) 1000 (b) 1200 (c) 1100 (d) 1300
- _____ water is the most precious substance on earth.
(a) Saline (b) Colour (c) Fresh (d) Plain

12. Vegetation and wildlife are _____.
- (a) Human resources (b) Valuable resources
(c) Man-made resources (d) Invaluable resources
13. Which birds in Indian sub-continent were dying of kidney failure?
- (a) Eagle (b) Peacock (c) Vulture (d) Sparrow
14. The only planet in our solar system where life exists is
- (a) Mercury (b) Earth (c) Venus (d) Mars
15. This forest trees shed their leaves in a particular season is called
- (a) Evergreen (b) Grasslands (c) Deciduous (d) Thorny
16. The tropical grasslands called Savannah are found in
- (a) North America (b) East Africa (c) South America (d) West Africa
17. Sahara, Arabia, Gobi are
- (a) deserts (b) plateaus (c) plains (d) mountains
18. _____ are the home to animals and plants.
- (a) Caves (b) Trees (c) Forests (d) Mountains
19. It is the variety of flora and fauna in an area
- (a) Diversity (b) Biodiversity (c) Forest (d) Ecosystem

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

II. Multiple choice questions

1. Which of these resources covers about three-fourths of the total surface of earth?
- a. land (b) soil (c) air (d) water
2. What are low-lying areas very susceptible to?
- a. earthquakes (b) landslides (c) flooding (d) tsunamis
3. Which of these physical features are best suited for living?
- a. plains and river valleys (b) mountains
c. deserts (d) lakes and rivers
4. Which of these is example of community land?
- a. the Sunderban forests (b) a bungalow
c. the Parliament House (d) none of these

5. What is the majority of land in Indian used for?
 a. cultivation b. pasture c. forests d. none of these
6. Which of these countries is mainly covered with forest land?
 a. India b. Brazil c. USA d. both b and c
7. Due to what feature is ocean water unfit for human consumption?
 a. poisonous b. salinity
 c. water temperature d. none of these

1. d	2. c	3. a	4. a	5. a	6. d	7. b
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III. Multiple choice questions

PRELUDE

1. In which of the following continents is Tanzania situated?
 a. Europe b. Asia c. Africa d. South America

Land

2. Which of the following is the most important nature resource?
 a. Land b. Water c. Air d. All of these
3. The uneven distribution of population in the world is due to the varied characteristics of
 a. land and climate b. climate c. vegetation d. settlements
4. The example of common property resource is
 a. community land b. individual building c. both (a) and (b) d. none of these
5. _____ is the use of land for different purposes like agriculture, forestry, mining construction of buildings, houses, industries and road.
 a. Land degradation b. Land use c. Land filling d. Land digging
6. Which of the following determine the use of land?
 a. Soil and topography b. Climate and vegetation
 c. Availability of water d. All of these
7. Australia uses its largest portion of its area for
 a. pastures b. crop land c. forest d. other uses

Soil

8. The lowermost layer of the soil is
 a. Weathered rock b. Parent rock c. Sub soil d. None of these

9. Which of the following is used of soil conservation?

- a. Mulching b. Shelter belts c. Contour ploughing d. All of these

Water

10. Which is not example of ground water?

- a. Water flowing in rivers b. Water through wells
c. Water through hand pumps d. Water through submersible pumps

Natural Vegetation and Wildlife

11. Which of the following is a famous bird sanctuary?

- a. Kaziranga National Park b. Tiger Park at Dudhwa
c. Gir forest d. Bharatpur Sanctuary

12. Why is it necessary to increase the area under forests?

- a. To maintain ecological balance
b. Forest absorb carbon dioxide from the atmosphere
c. Forest help in raising the level of precipitation
d. All of these

13. Large scale destruction of forest cover and arable land has occurred due to the following.

- a. Growing population b. Ever growing demand of the population
c. Both (a) and (b) d. None of these

1. c	2. d	3. a	4. a	5. b	6. d	7. a
8. b	9. d	10. a	11. d	12. d	13. a	

IV. Multiple choice questions

1. Which one of the following is NOT a factor of soil formation?

- a. Time b. Soil texture c. Organic matter d. Mulching

2. Which is the most appropriate method to check soil erosion on steep slopes?

- a. Shelter belts b. Mulching
c. Terrace cultivation d. Contour barriers

3. Which one of the following is NOT in favour of the conservation of nature?

- a. Switch off the bulb when not in use b. Close the tap immediately after using
c. Dispose playpacks after shopping d. Constructing Rock Dams

4. Which one of the following determines the land use pattern?
- a. Climate b. Topography c. Minerals d. All of these
5. Kaziranga National Park is situated in
- a. West Bengal b. Manipur c. Assam d. Odisha
6. Dudhwa Tiger Park is situated in
- a. West Bengal b. Uttar Pradesh c. Assam d. Odisha
7. Bharatpur Sanctuary is a famous
- a. Bird Sanctuary b. Tiger Park c. National Park d. Zoo
8. Fallow land is a
- a. Group of plants in areas having similar climatic condition
- b. Land covered with grass shrubs on which animals graze freely
- c. Marginal lands kept fallow for a certain period to restore their fertility
- d. Breaking up and decaying of exposed rocks due to various factors.
9. Biome means:
- a. Group of plants in areas having similar climatic condition
- b. Land covered with grass shrubs on which animals graze freely
- c. Marginal lands kept fallow for a certain period to restore their fertility
- d. Breaking up and decaying of exposed rocks due to various factors
10. Which one of the following explains the term Weathering?
- a. Marginal land kept fallow for a certain period to restore their fertility
- b. Breaking up and decaying of exposed rocks due to various factors
- c. Groups of plant in areas having similar climatic condition

1. b	2. c	3. c	4. d	5. c	6. b	7. a	8. c	9. a	10. b
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Next Generation School

I. Match the Columns

Column A	Column B
1. Land use	a. Prevent soil erosion
2. Humus	b. Land suitable for agriculture
3. Rock dams	c. Productive use of land
4. Arable land	d. Organic matter deposited on top soil
5. Mountains	f. Desert
6. Thorny bushes	g. Relief feature
7. Yak	h. Wildlife Protection Act
8. 1972	i. Ladakh

1. c	2. d	3. a	4. b	5. g	6. f	7. i	8. h
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II. Match the Columns

Column I	Column II
i. Terrace farming	a. Protection from soil wash
ii. Intercropping	b. Checking wing movement
iii. Contour	c. Reducing surface run-off
iv. Shelter belts	d. Retaining soil moisture
v. Mulching	e. Prevention of water to flow down the slope

i. c	ii. a	iii. e	iv. b	v. d
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III. Match the Columns

i. Fallow land	a. Groups of plant communities in areas having similar climate conditions
ii. Biomes	b. Breaking up and decay of exposed rocks due to various factor
iii. Weathering	c. Marginal land kept fallow for a certain period to restore their fertility
iv. Pastures	d. Land covered with grass shrubs on which animals are grazed freely

i. c	2. a	3. b	4. d
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I. Fill in the blanks

- _____ should be encouraged at the regional and community level.
- _____, _____, _____, are made to protect our natural vegetation and wildlife.
- _____ is an international agreement between governments.
- _____ and _____ offer suitable land for agriculture.
- _____ and _____ is the classification of land on the basis of ownership.
- There should be increase in the _____ to arrest landslide.
- The right mix of _____ and _____ make the soil fertile.
- Parent rock, relief, time and climate are the factors of _____.
- Pangi village is in _____.

1. Vanmohatasava	2. National parks, wildlife sanctuaries, biosphere reserves	
3. CITES	4. Plains and rivers	5. private land and community land
6. vegetation cover	7. minerals, organic matter	8. soil formation
9. Himachal Pradesh		

II. Fill in the blanks

- The process responsible for soil formation is called _____.
- Soil becomes fertile due to the right mix of _____ and _____.

3. The colour, texture, etc. of soil is determined by _____.
4. Climate factors influencing rate of weathering include _____ and _____.
5. 70% of fresh water exists as _____.

i. weathering	ii. minerals, organic matter	iii. parent rock
iv. rainfall; temperature	v. ice sheets	

III. Fill in the blanks

1. Nearly 97% of the earth's total water is in the form of _____.
2. Tiger Park at Dudhwa is situated in the state _____.
3. _____ is produced with the help of running and falling water.
4. Polar areas are _____ populated areas.
5. We can _____ the supply of drinking water by installing desalination plants.
6. In _____ areas landslides have been a major and widely spread natural disaster.

1. Sea, oceans	2. Uttar Pradesh	3. Hydro-electricity
4. sparsely	5. increase	6. mountains

IV. Fill in the blanks

1. An irrigation method which is useful in dry region is _____.
2. _____ refers to the destruction of soil by wind and water.
3. Water is a vital _____ natural resource.
4. The right mix of _____ and _____ makes the soil fertile.
5. Most of the industrial effluents are _____ and reach human body through water.
6. _____ is considered as an essential cleanser of the environment.
7. The growth of vegetation depends on _____ and _____.
8. Soil is made up of _____, _____ and _____.

1. Drip irrigation	2. Soil erosion
3. Renewable	4. Humus and water

5. Harmful	6. Vulture
7. Temperature and moisture	8. Soil fragments, humus and water

I. True or False

1. Ganga-Brahmaputra plain of India is an overpopulated region.
2. Water availability per person in India is declining.
3. Rows of trees planted in the coastal areas to check the wind movement is called intercropping.
4. Human interference and changes of climate can maintain the ecosystem.
5. Black buck also needs protection.
6. Killing of lions, tigers, deers in India is legal.
7. Human activities disturb the natural habitat of many species.
8. Thorny shrubs grow in wet areas.
9. Brahma Kamal is not a medicinal herb.
10. The Earth is called 'water planet'.
11. Plants and trees constitute natural wildlife.
12. Flora refers to plants.
13. Wildlife does not include the aquatic life forms.
14. Growth of vegetation depends upon temperature and moisture.
15. The majority of land in India is used for pasture.

1. True	2. True	3. False	4. True	5. True	6. False	7. True	8. False
9. False	10. True	11. False	12. True	13. False	14. True	15. False	

II. True or False

1. Land has similar features all over the surface of the earth.
2. Plains and valleys are densely populated because of soil fertility.
3. Population and technology are important factors that determine land use pattern.
4. The earth is called the water planet because of the large amount of water available over it.
5. Forest and other vegetation promote surface run-off.

1. False	2. True	3. True	4. True	5. False
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8. What is the difference between deforestation and afforestation?

Deforestation refers to the action of cutting down trees, whereas afforestation refers to the action of planting trees.

9. What do you mean by conservation of land resources?

Conservation of land resources refers to the use of land properly and carefully, so that we can save our land resources for future generations.

10. Define landslides.

Landslides refer to the mass movement of rock, debris or earth down a slope. They often take place in conjunction with earthquakes, floods and volcanoes.

11. Write the definition of soil.

Soil is the thin layer of grainy substance covering the surface of the earth. It is made up of organic matter, minerals and weathered rocks found on the earth.

12. What is weathering?

The breaking up and decay of exposed rocks by temperature changes, frost action, plants, animals and human activity is called weathering.

13. Explain the term soil erosion.

Soil erosion refers to the removal of top soil by running waters, winds and glacier or human action.

14. What do you mean by degradation of soil?

Removal of top soil is called soil degradation. Both human and natural factors can lead to degradation of soils. Ex: Landslides, soil erosion.

15. What is the importance of water resources?

Water is a vital renewable natural resource. Humans use large amounts of water not only for drinking and washing but also in processes of production like agriculture, industries, generating electricity, etc.

16. Explain natural vegetation.

Natural Vegetation refers to the group of plants which grow in an area without the interference of human beings.

17. What is wildlife?

Wildlife includes animals, birds, insects, aquatic life forms which live in their natural habitat.

18. Describe the various types of natural vegetation.

The various types of natural vegetation are as follows:

- (i) Forest
- (ii) Grasslands
- (iii) Shrubs and Tundra

19. What is ecosystem?

In the biosphere living beings are inter-related and interdependent on each other for survival. This life supporting system is known as the ecosystem.

20. What do you understand by 'rainwater harvesting'?

It is the process of collecting rainwater from roof tops and directing it to an appropriate location where it is stored for future use.

21. What is 'biosphere'?

Natural vegetation and wildlife exists only in the narrow zone of contact between lithosphere, hydrosphere and atmosphere that is called 'biosphere'.

22. Which regions in the world face water scarcity?

Most of Africa, West Asia, South Asia, parts of Western USA, North-west Mexico, parts of South America and entire Australia are facing shortage in fresh water supply.

23. What is a 'National Park' ?

A natural area designated to protect both flora and fauna for the present and future generation is called a National Park.

24. What does 'biosphere reserve' mean?

Series of protected areas linked through a global network, intended to demonstrate the relationship between conservation and development is called biosphere reserve.

Short Answer Type Questions

1. Name any two steps that the government has taken to conserve plants and animals.

[NCERT]

The steps taken by the government to conserve plants and animals are:

- (i) Establishment of natural parks, wildlife sanctuaries, biosphere reserves.
- (ii) Ban on killing animals and birds and cutting of trees.

2. Suggest three ways to conserve water.

Three ways to conserve water are:

(i) Efficient use of water.

(ii) Rainwater harvesting.

(iii) Canals for irrigation should be checked for water losses through seepage and promoting sprinkler irrigation to check evaporation and seepage.

3. Name the factors affecting land use.

The factors affecting land use are:

(i) Physical feature

(ii) Types of rocks

(iii) Private and community land

(iv) Climate

(v) Time

(vi) Parent rock

(vii) Flora, fauna and micro-organism.

4. What are the major threats to the environment?

The major threats to the environment are:

(i) Land degradation

(ii) Landslides

(iii) Soil erosion

(iv) Desertification

(v) Overgrazing

(vi) Change in landforms

(vii) Construction activities

(viii) Expansion of agriculture

5. What are the common methods used to conserve land resources?

The common methods used to conserve land resources are:

(i) Afforestation

(ii) Land reclamation

(iii) Regulated use of chemical pesticides and fertilisers

(iv) Checks on overgrazing

6. Explain the mitigation techniques of landslides.

The mitigation techniques of landslides are:

(i) Hazard mapping to locate areas prone to landslides.

(ii) Construction of retention walls to stop land from slipping.

(iii) Increase in the vegetation covers to arrest landslide.

7. Explain the soil profile.

Soil is made up of four layers which are:

(i) Top soil: It contains humus and vegetation.

(ii) Sub soil: It is the second layer and consists of sand, silt and clay.

(iii) Fragmented rock material: It is the third layer and is made up of weathered rock material.

(iv) Parent rock: It is the solid unweathered rock.

8. Write the factors of soil formation.

The major factors of soil formation are:

- (i) Nature of the Parent rock
- (ii) Relief
- (iii) Flora, fauna and micro-organism
- (iv) Climate
- (v) Time

9. Mention the factors which lead to soil degradation?

The factors which lead to soil degradation are as follows:

- (i) Deforestation
- (ii) Overgrazing
- (iii) Overuse of chemical pesticides and fertilisers
- (iv) Rain wash
- (v) Landslides
- (vi) Floods

10. Name some methods of soil conservation.

The methods of soil conservation are:

- (i) Mulching
- (ii) Rock clam
- (iii) Inter cropping
- (iv) Shelter belts.
- (i) Contour barriers
- (iv) Terrace farming
- (vi) Contour ploughing

11. Explain 'Water Cycle'.

Water cycle includes three atmospheric processes which are evaporation condensation and precipitation of water from earth's surface. It is in constant motion, cycling through the oceans, the air, the land and back again, through the processes of evaporation, precipitation and run-off.

12. How can we conserve water?

By the following ways we can conserve water:

- (i) Efficient use of water.
- (ii) Rain water harvesting.
- (iii) Forest and other vegetation cover slow the surface runoff and replenish underground water.
- (iv) Sprinklers irrigation by checking water losses through seepage and evaporation.

(v) Canals used for irrigating fields should be lined to minimise losses by water seepage.

13. Classify land on the basis of ownership.

(i) Land can be classified on the basis of ownership as

(a) Private land

(b) Community land

(ii) Private land is owned by individuals whereas community land is owned by the community for common uses like collection of fodder, fruits, nuts or medicinal herbs.

(iii) These community lands are also called 'Common Property Resources',

Long Answer Type Questions

1. How we can conserve natural vegetation and wildlife?

We can conserve natural vegetation and wildlife by the following ways:

(i) Natural parks, and wildlife, national parks, wildlife sanctuaries and biosphere reserves are made to protect our natural flora and fauna.

(ii) Conservation of creeks, lakes and wetlands is also necessary to save the precious resource from depletion.

(iii) Encouragement of awareness programmes like social forestry and Vanmahotasava.

(iv) School children should be encouraged to bird watch and visit natural camps to appreciate the habitat of varied species.

2. Briefly describe CITES?

CITES means the Convention on International Trade in Endangered Species of wild Fauna and Flora. It is an international agreement between governments that lists that, there are several species of animals and birds in which trade is prohibited. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Roughly 5,000 species of animal and 28,000 species of plants are protected. Examples: Bears, Dolphins, Cacti, Corals, Orchids and Aloes.

3. Write a note on distribution of natural vegetation.

The distribution of natural vegetation has been classified into three types:

(i) Forests

(ii) Grasslands

(iii) Scrubs and Tundra

(i) Forests: Forests are associated with areas having abundant water supply. Forests consists of two divisions which are evergreen and deciduous.

(a) Evergreen forests do not shed their leaves simultaneously in any season of the year.

(b) Deciduous forests shed their leaves in a particular season to conserve loss of moisture through transpiration.

(ii) Grasslands: It refers to the short stunted trees and grasses that grow in the regions of moderate rainfall.

(iii) Scrubs and Tundra: Scrubs and thorny shrubs grow in dry areas of low rainfall. In these areas plants have deep roots and leaves with thorny and waxy surface that reduce loss of moisture through transpiration. They are found in dry deserts. Tundra vegetation: They are mainly found in cold polar regions and comprise of mosses and lichens. These areas are covered with snow throughout the year.

4. Elaborate the methods of soil conservation.

Some methods of soil conservation are:

(i) Mulching: The bare ground between plants is covered with a layer of organic matter like straw. It helps to retain soil moisture.

(ii) Rock Dams: Rocks are piled up to slow down the flow of water. This prevents gullies and further soil loss.

(iii) Intercropping: Different crops are grown in alternate rows and are sown at different times to protect the soil from rain wash.

(iv) Shelter belts: Rows of trees are planted to check the wind movements to protect soil cover.

(v) Contour barriers: Stones, grass, soil are used to build barriers along contours. Trenches are made in front of them to collect water.

(vi) Terrace farming: Broad flat steps or terraces are made on the steep slopes so that flat surfaces are available to grow crop. It reduces the surface runoff and soil erosion.

(vii) Contour ploughing: Ploughing parallel to the contours of a hill slope to form a natural barrier for water to flow down the slope.

5. How conservation of water resources can be done?

(i) Forest and other vegetation uses slow the surface run off and replenish underground water

(ii) Water harvesting is another method to save surface runoff.

(iii) The canals used for irrigating field should be properly lined to minimise losses through seepage and evaporation.

(iv) In dry regions with high rates of evaporation, drip or trickle irrigation is very useful.

