

NCERT Solutions For Class 7 Geography

<http://freehomedelivery.net/Social Science Chapter 1 Environment>

Question 1. Answer the following questions briefly.

- (i) What is an ecosystem?
- (ii) What do you mean by natural environment?
- (iii) Which are the major components of the environment?
- (iv) Give four examples of human-made environment.
- (v) What is lithosphere?
- (vi) Which are the two major components of biotic environment?
- (vii) What is biosphere?

Answer: (i) All plants, animals and human beings depend on their immediate surroundings. They are also interdependent on each other. This relation between the living organisms as well as the relation between the organism and their surroundings form an ecosystem.

(ii) Natural environment consists of land, water, air, plants and animals. Thus, natural environment refers to both biotic (plants and animals) and abiotic (land) conditions that exist on the earth.

(iii) The major components of the environment are—natural (land, air, water, living things), human made (buildings, parks, bridges, roads, industries, monuments, etc.) and human (individual, family, community, religion, educational, economic, etc).

(iv) Four examples of human-made environment—buildings, parks, bridges and roads.

(v) Lithosphere is the solid crust or the hard top layer of the earth. It is made up of rocks and minerals and covered by a thin layer of soil. It is an irregular surface with various land forms such as mountains, plateaus, plains, valleys, etc.

(vi) Plants and animals are the two major components of biotic environment,

(vii) Biosphere is a narrow zone of the earth where land, water and air interact with each other to support life. Thus, plant and animal kingdom together make biosphere, i.e., the living world.

Question 2. Tick the correct answer.

(i) Which is not a natural ecosystem?

- (a) Desert
- (b) Aquarium
- (c) Forest.

(ii) Which is not a component of human environment?

- (a) Land
- (b) Religion
- (c) Community.

(iii) Which is a human made environment?

- (a) Mountain
- (b) Sea
- (c) Road.

(iv) Which is a threat to environment?

- (a) Growing plant (b) Growing population
- (c) Growing crops.

Answer: (i)—(b), (ii)—(a), (iii)—(c), (iv)—(b).

Question 3. Match the following:

- (i) Biosphere (a) blanket of air which surrounds the earth
- (ii) Atmosphere (b) domain of water
- (iii) Hydrosphere (c) gravitational force of the earth
- (iv) Environment (d) our surroundings
- (e) narrow zone where land, water and air interact

Answer: (i)—(e), (ii)—(a), (iii)—(b), (iv)—(d).

Question 4. Give reasons:

(a) Man modifies his environment

(b) Plants and animals depend on each other. .

Answer: (a) Man modifies his environment to fulfil his needs and make his life comfortable. He also modified his environment to adopt himself to the natural surroundings.

(b) Plants and animals depend on each other for their own sake. Plants release oxygen that animals breathe and absorb carbon dioxide that animals release.

Question 5. Activity

Imagine an ideal environment where you would love to live. Draw the picture of your ideal environment.

Answer: Students are expected to do this activity themselves. However, a sample is given below:

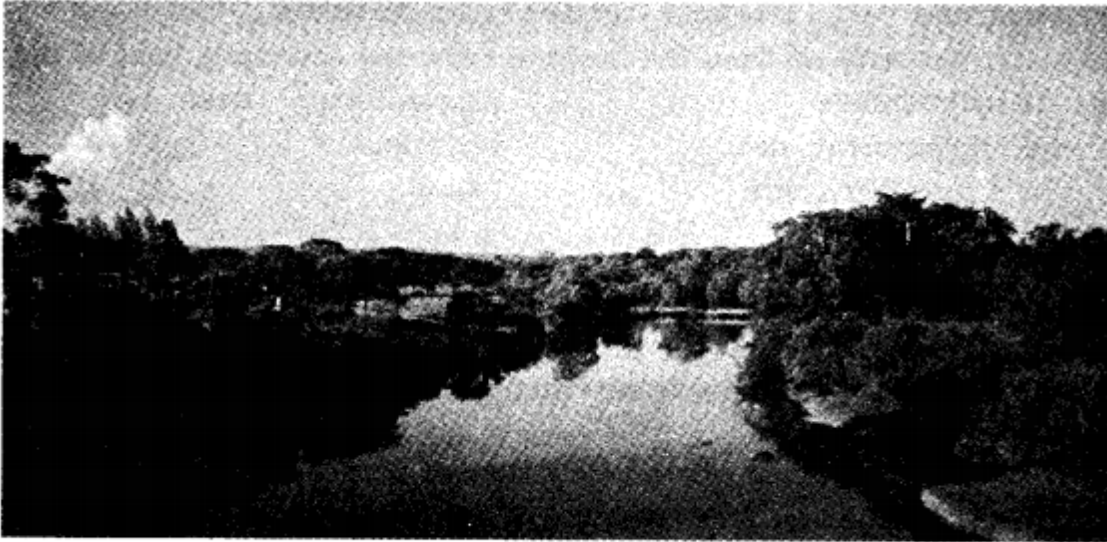


Fig. 1.1. Ideal Environment.

Very Short Answer Type Questions <http://freehomedelivery.net/>

Question 1. What is environment? ‘ [Imp.]

Answer: Everything that we see in our surroundings forms environment. It is our basic life support system. It provides us air, water, food and land—the basic needs of our life.

Question 2. Why is our environment changing?[V. Imp.]

Answer: Our environment is changing because our needs are increasing day by day. To fulfil these needs we often don't think about the environment and start modifying it.

Question 3. What are the basic components of natural environment?

Answer: The basic components of natural environment are—land, water, air, plants and animals.

Question 4. What does lithosphere provide us? [Imp.]

Answer: Lithosphere provide us forests, grasslands for grazing land for agriculture and human settlements. It is a rich source of minerals.

Question 5. Name different types of water bodies.

Answer: Rivers, lakes, seas, oceans, etc.

Question 6. How is atmosphere important for us? [Imp.]

Answer: Atmosphere protects us from the harmful rays and scorching heat of the sun.

Question 7. What do you see in the deserts? Name some animals.

Answer: We see camels, snakes, lizards and insects.

Question 8. What is barter system?

Answer: Barter system is a method of trade in which goods are exchanged without the use of money.

Question 9. Distinguish between biotic and abiotic environment with examples.

Answer: The world of living organisms is known as biotic environment. Example: plants and animals. The world of non-living element is known as abiotic environment. Example: land.

Question 10. How is environment important for us?

Answer: It is important for us because it is the provider of air, water, food and land— the basic necessities of life.

Short Answer Type Questions <http://freehomedelivery.net/>

Question 1. Write a note on lithosphere. [Imp.]

Answer: Lithosphere is the solid crust or the hard top layer of the earth. It is made up of rocks and minerals. It is covered by a thin layer of soil. It is an irregular surface with various landforms such as mountains, plateaus, desert, plains, valleys etc. Lithosphere plays an important role in our life. It provides us forests, grassland for grazing, land for agriculture and human settlements. It is also a treasure of various minerals.

Question 2. Give an account of atmosphere.

Answer: Atmosphere is the thin layer of air that surrounds the earth. It is made up of various gases such as oxygen, nitrogen, carbon dioxide, dust particles and water vapour. The gravitational force of the earth holds the atmosphere around it. It protects us from harmful rays and scorching heat of the sun. The changes in atmosphere produce changes in the weather and climate.

Question 3. How do human beings modify natural environment? [V. Imp.]

Answer: The needs of human beings are increasing day and day. Hence, they modify natural environment to fulfil these needs. Sometimes they even destroy their environment. Human beings have made cars for their convenience. These cars release fumes which pollute the air. They have established factories on land. These factories manufacture various items such as containers. This is how they modify natural environment.

Long Answer Type Questions <http://freehomedelivery.net/>

Question 1. Give an account of various domains of the environment.

Answer: Various domains of the environment are:

1. Lithosphere
2. Atmosphere
3. Hydrosphere
4. Biosphere
5. It is the solid crust or the hard top layer of the earth. It is made up of rocks and minerals and covered by a thin layer of soil. It provides us forests, grasslands and land. It is a source of mineral wealth.
6. It is the thin layer of air that surrounds the earth. The gravitational force of the earth holds the atmosphere around it. It protects us from harmful rays and scorching heat of the sun. It consists of various gases, dust and water vapour.
7. It refers to various water bodies such as rivers, lakes, seas, oceans, etc. that exist on the earth.
8. Biosphere or the living world is comprised of plant and animal kingdom. It is a narrow zone of the earth where land, water and air interact with each other to support life.

Question 2. How have human beings adapted to the environment to fulfil their needs?

Answer: Human beings from the early times have been interacting with the environment and modifying it according to their needs. Early humans adapted themselves to the natural surroundings. They led a simple life and fulfilled their requirements from the nature around them. But their needs kept on increasing. They became varied also. To fulfil these varied needs, humans learnt to grow crops, tamed animals and began a settled life. The wheel was invented, surplus food was produced, barter system emerged, trade started and commerce developed. Industrial revolution made possible

large scale production. By and by transportation became faster. Information revolution made communication easier and speedy across the world. In this way human beings adapted to the environment in order to fulfil their needs.

NCERT Solutions For Class 7 Geography

<http://freehomedelivery.net/Social Science Chapter 2 Inside Our Earth>

Question 1. Answer the following questions briefly.

(i) What are the three layers of the earth?

(ii) What is a rock?

(iii) Name three types of rocks.

(iv) How are extrusive and intrusive rocks formed?

(v) What do you mean by a rock cycle?

(vi) What are the uses of rocks?

(vii) What are metamorphic rocks?

Answer: (i) The three layers of the earth are:

- Crust
- Mantle
- Core

(ii) A rock is a natural mass of mineral matter that makes up the earth's crust.

Rocks can be of different colour, size and texture.

(iii) Three types of rocks are:

- Igneous rocks also known as primary rocks.
- Sedimentary rocks.
- Metamorphic rocks.

(iv) When the molten lava comes on the earth's surface, it rapidly cools down and becomes solid. Rocks formed in this way on the crust are extrusive igneous rocks.

Sometimes the molten magma cools down deep inside the earth's crust. Solid rocks so formed are actually intrusive igneous rocks.

(v) One type of rock changes to another type under certain conditions in a cyclic manner. This process of transformation of the rock from one to another is known as the rock cycle. Let's understand it through example—Igneous rocks change into sedimentary rocks. When the igneous and sedimentary rocks are subjected to heat and pressure, they change into metamorphic rocks. The metamorphic rocks which are still under great heat and pressure meet down to form molten magma. This molten magma again can cool down and solidify into igneous rocks.

(vi) Hard rocks are used for making roads, houses and buildings. Stones are used in many games, such as seven stones (pitthoo), hopscotch (stapu/kitkit), Five stones (gitti).

(vii) When the igneous and sedimentary rocks are subjected to heat and pressure they change into metamorphic rocks. For example, clay changes into slate and limestone into marble.

Question 2. Tick the correct answer.

(i) The rock which is made up of molten magma is

(a) Igneous (b) Sedimentary

(c) Metamorphic.

(ii) The innermost layer of the earth is

(a) Crust (b) Core

(c) Mantle.

(iii) Gold, petroleum and coal are example of

(a) Rocks (b) Minerals

(c) Fossils.

(iv) Rocks which contain fossils are

- (a) Sedimentary rocks (b) Metamorphic rocks
(c) Igneous rocks.

(v) The thinnest layer of the earth is

- (a) Crust (b) Mantle
(c) Core.

Answer: (i)—(a), (ii)—(b), (iii)—(b), (iv)—(a), (v)—(a).

Q. 3. Match the skill:

- | | |
|---------------|---|
| (i) Core | (a) Earth's surface |
| (ii) Minerals | (b) Used for roads and buildings |
| (iii) Rocks | (c) Made of silicon and alumina |
| (iv) Clay | (d) Has definite chemical composition |
| (v) Sial | (e) Innermost layer |
| | (f) Changes into slate |
| | (g) Process of transformation of the rock |

Ans. (i)—(e), (ii)—(d), (iii)—(b), (iv)—(f), (v)—(c).

Question 4. Give reasons:

- (i) We cannot go to the centre of the earth.
(ii) Sedimentary rocks are formed from sediments.
(iii) Limestone is changed into marble.

Answer: (i) To reach the centre of the earth one will have to dig a hole 6000 km. deep on the ocean floor. This is quite impossible and therefore we cannot go to the centre of the earth.

(ii) Rocks break down into small fragments known as sediments. These sediments are transported and deposited by wind, water, etc. These loose sediments are compressed and hardened to form layers of rocks known as sedimentary rocks.

(iii) Limestone is changed into marble because igneous and sedimentary rocks change into metamorphic rocks under a great heat and pressure.

Very Short Answer Type Questions <http://freehomeelivery.net/>

Question 1. What is called the uppermost layer of the earth? [Imp.]

Answer: It is called the crust.

Question 2. What is the special feature of this layer? [Imp.]

Answer. It is the thinnest of all the layers

Question 3. Name the main mineral constituent of the continental mass.

Answer: Silica and alumina

Question 4. Name the constituents of the oceanic crust. [V. Imp.]

Answer: Silica and magnesium.

Question 5. What is the radius of the core?

Answer: The radius of the core is about 3500 km.

Question 6. What are the main constituents of the core?

Answer: The main constituents of the core are nickel and iron. It is usually known as nife.

Question 7. What is the earth's crust made of? [V. Imp.]

Answer: It is made up of different types of rocks.

Question 8. What are called igneous rocks?

Answer: When the molten magma cools, it becomes solid. Rocks formed in this way are called igneous rocks.

Question 9. What are fossils?

Answer: The remains of the dead plant and animals trapped in the layers of rocks are called fossils.

Question 10. What happens when igneous and sedimentary rocks go under great heat and pressure?

Answer: They change into metamorphic rocks.

Short Answer Type Questions <http://freehomedelivery.net/>

Question 1. What are minerals? How are they useful for mankind?

[V. Imp.]

Answer: Minerals are naturally occurring substances which have certain physical properties and definite chemical composition.

Minerals are very useful for mankind. Some minerals like coal, natural gas and petroleum are used as fuels. They are also used in industries. Iron, aluminium, gold, uranium etc. are used in medicine, in Fertilizers etc.

Long Answer Type Questions <http://freehomedelivery.net/>

Question 1. Mention various types of rocks IV. Imp.]

Answer: Rocks are of the three types:

1. Igneous rocks
 - Sedimentary rocks
 - Metamorphic rocks
 - Igneous rocks. When the molten magma cools, it becomes solid. Rocks formed in this way are called igneous rocks. They are also called primary rocks. They are of two types—intrusive rocks and extrusive rocks.
2. Extrusive rocks. When molten lava comes on the earth's surface, it rapidly cools down and becomes solid. Rocks formed in this way on the crust are called extrusive igneous rocks. For example, basalt.
3. Intrusive rocks. Sometimes the molten magma cools down deep inside the earth's crust. Solid rocks so formed are called intrusive igneous rocks. Since they cool down slowly they form large grains. For example, granite.
4. Sedimentary rocks. Small fragments of rocks are called sediments. These sediments are transported and deposited by wind, water, etc. These loose sediments are compressed and hardened to form sedimentary rocks. For example, sandstone is made from grains of sand.
5. Metamorphic rocks. When igneous and sedimentary rocks are subjected to great heat and pressure they change into metamorphic rocks. For example, clay changes into slate and limestone into marble.

Question 2. What do you know about the interior of the earth? [V. Imp.]

Answer: Our earth is made up of several concentric layers with one inside another. These layers are three in number—crust, mantle and core.

Crust. It is the uppermost layer over the earth's surface. It is the thinnest of all the layers. It is about 35 km on the continental masses and only 5 km on the ocean floors.

The continental masses are made up of silica and alumina. It is thus called sial (si-silica and al-alumina). The oceanic crust mainly consists of silica and magnesium. It is thus called sima (si-silica and ma-magnesium).

Mantle: It is just beneath the crust. It extends up to a depth of 2900 km below the crust.

Core: It is the innermost layer. Its radius is about 3500 km. It is mainly made up of nickel and iron and is known as nife (ni-nickel and fe-ferrous, i.e., iron). The central core has very high temperature and pressure.

NCERT Solutions For Class 7 Geography

<http://freehomedelivery.net/Social Science Chapter 3 Our Changing Earth>

Question 1. Answer the following questions briefly:

- (i) Why do the plates move?
- (ii) What are exogenic and endogenic force?
- (iii) What is erosion?
- (iv) How are flood plains formed?
- (v) What are sand dunes?
- (vi) How are beaches formed?
- (vii) What are ox-bow lakes?

Answer: (i) The plates move because of the movement of the molten magma inside the earth.
(ii) **Exogenic forces.** The forces that work on the surface of the earth are called as exogenic forces. **Endogenic forces.** The forces that act in the interior of the earth are called as endogenic forces.
(iii) Erosion is the wearing away of the landscape by different agents like water, wind and ice.
(iv) During floods, layers of fine soil and other material called sediments are deposited on the river bank. This leads to the formation of a flat fertile flood plains.
(v) Sand dunes are low hill-like structures formed by the deposition of sand in the deserts.
(vi) Beaches are formed when the sea waves deposit sediments along the shores of the sea.
(vii) When the meander loop is cut off from the main river, it forms a cut-off lake. As its shape is like an ox bow, it is also known as ox-bow lake.

Question 2. Tick the correct answer:

(i) Which is not an erosional feature of sea waves ?

- (a) Cliff
- (b) Beach
- (c) Sea cave.

(ii) The depositional feature of a glacier is

- (a) Flood plain
- (b) Beach
- (c) Moraine.

(iii) Which is caused by the sudden movements of the Earth ?

- (a) Volcano
- (b) Folding
- (c) Flood plain.

(iv) Mushroom rocks are found In

- (a) Deserts
- (b) River valleys
- (c) Glaciers.

(v) Ox bow lakes are found In

- (a) Glaciers
- (b) River valleys
- (c) Deserts.

Answer: (i) – (a), (ii) – (c), (iii)-(a) , (iv) -(a), (v)-(b)

Q. 3. Match the skill:

- | | |
|-----------------|-------------------------|
| (i) Glacier | (a) Sea shore |
| (ii) Meanders | (b) Mushroom rock |
| (iii) Beach | (c) River of ice |
| (iv) Sand dunes | (d) Rivers |
| (v) Waterfall | (e) Vibrations of earth |
| (vi) Earthquake | (f) Sea cliff |
| | (g) Hard bed rock |
| | (h) Deserts |

Ans. (i)–(c), (ii)–(g), (iii)–(a), (iv)–(h), (v)–(d), (vi)–(e).

Question 4. Give reasons:

- (i) Some rocks have a shape of a mushroom.
- (ii) Flood plains are very fertile.
- (iii) Sea caves are turned into stacks.
- (iv) Buddings collapse due to earthquakes.

Answer: (i) In deserts, winds usually erode the lower section of the rock more than the upper part. Therefore, such rocks have narrower base and wider top, which take the shape of a mushroom.

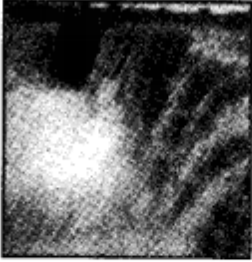


(ii) Flood plains are formed by the deposition of fine soil and other material called sediments on the river banks. As the soil and sediments are brought by flood water, they are very fertile.

(iii) Sea waves strike at the rocks. As a result cracks develop which become bigger over time and hollow like caves are formed on the rocks. They are called sea caves. These cavities become bigger and bigger and a time comes when only the roof of the caves remain to form sea arches. Further erosion breaks the roof and only walls are left. These wall like features are called stacks. In this way, sea caves are turned into stacks.

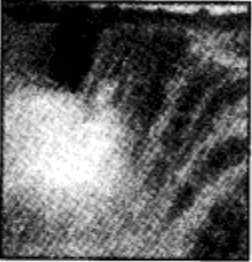
(iv) Most of the buildings are not safe enough to resist the vibrations of the earthquakes. They are not made earthquake-proof. They collapse tearing apart due to shallow foundation and lack of adequate steel in the interior design.



Question 5. Activity

Observe the photographs given below. These are various features made by a river. Identify them and also tell whether they are erosional or depositional or landforms formed by both.

<i>Photograph</i>	<i>Name of the Feature</i>	<i>Type (Erosional or Depositional or Both)</i>
		
		
		

Ans.

Photograph	Name of the Feature	Type (Erosional or Depositional or Both)
	Waterfall	Erosional and depositional both

	Meander	Erosional and depositional both
	Flood plain	Depositional

Very Short Answer Type Questions <http://freehome.delivery.net/>

Question 1 What do you know about the lithospheric plates?

Answer: The earth's crust consists of several large and some small, rigid, irregularly—shaped plates, i.e., slabs which carry continents and the ocean floor.

Question 2. How do the lithospheric plates move?

Answer: They move around very slowly, just a few millimeters each year.

Question 3. What is a volcano?

Answer: A volcano is a vent or opening in the earth's crust through which molten material erupts suddenly.

Question 4. Define 'focus' and 'epicentre'. [Imp.]

Answer: The place in the crust where the movement starts is called the 'focus'. The place on the surface above the focus is called the 'epicentre'.

Question 5. Name the three types of earthquake waves.

Answer:

1. P waves or longitudinal waves
2. S waves or transverse waves
3. L wave or surface waves.

Question 6. What is a seismograph? [V. Imp.]

Answer: A seismograph is a machine which measures an earthquake.

Question 7. Name the scale on which the magnitude of the earthquake is measured.

Answer: Richter scale.

Question 8. Which earthquake is classified as a major earthquake?

Answer: An earthquake of 7.0 magnitude is classified as a major earthquake.

Question 9. Where is Victoria Falls located? [Imp.]

Answer: Victoria Falls is located on the borders of Zambia and Zimbabwe in Africa.

Question 10. What is a delta?

Answer: The collection of sediments from all the mouths forms a delta. It is triangular shaped landmass.

Question 11. Name some coastal landforms.

Answer: Sea caves, sea arches, stacks and sea cliff.

Question 12. How are glacial moraines formed? [V. Imp.]

Answer: The material carried by the glacier such as rocks big and small, sand and silt gets deposited. These deposits form glacial moraines.

Question 13. Name the two processes which wear away the landscape.

Answer: Weathering and erosion.

Question 14. What does the process of erosion and deposition create?

Answer: The process of erosion and deposition create different landforms on the surface of the earth.

Question 15. Name a few rivers of the world that form a delta?

Answer: Nile, Zaire, Ganga-Brahmaputra, Hwangotto, Murray-Darling, Amazon, etc.

Short Answer Type Questions <http://freehomedelivery.net/>

Question 1. Mention the work of ice.

Answer: Glaciers are rivers of ice which erode the landscape by destroying soil and stones to expose the solid rock below. Glaciers carve out deep hollows. As the ice melts they get filled up with water and become beautiful lakes in the mountains. The material carried by the glacier such as rocks big and small, sand and silt gets deposited. These deposits form glacial moraines.

Question 2. What is earthquake? What are some common earthquake prediction methods?[V. Imp.]

Answer: When the lithospheric plates move, the surface of the earth vibrates. The vibrations can travel all round the earth. These vibrations are called earthquakes. Some common earthquake prediction methods include studying animal behaviour, fish in the ponds get agitated, snakes come to the surface.

Question 3. Give an account of earthquake preparedness. [V. Imp.]

Answer: Earthquake is a natural calamity which we cannot stop. But we can minimise its impact if we are prepared before-hand.

During an earthquake, we should shift to some safe spot. We should hide under a kitchen counter, table or desk against an inside corner or wall. We should stay away from fire places, areas around chimneys, windows that shelter including mirrors and picture frames. Moreover, we should spread awareness amongst our friends and family members.

Long Answer Type Questions <http://freehomedelivery.net/>

Question 1. Explain the work of a river. [V. Imp.]

Answer: The running water in the river erodes the landscape. When the river tumbles at steep angle over very hard rocks or down a deep valley side it forms a waterfall. While entering the plain the river twists and turns and forms large bends which are known as meanders. Due to continuous erosion and deposition along the sides of the meander, the ends of the meander loop come closer and closer. In -due course of time the meander loop cuts off from the river and forms a cut-off lake, which is also called ox-bow lake. Sometimes, the river overflows its banks causing flood in the neighboring areas. As it floods, it deposits layers of fine soil and other material called sediments along its banks. As a result—fertile floodplain is formed. The raised banks are called levees.

As the river approaches the sea, the speed of the flowing water decreases and the river begins to break up into several streams known as distributaries. Then a time comes when the river becomes very slow and it begins to deposit its load. Each distributary forms its own mouth. The collection of sediments from all the mouths forms a delta, which is a triangular landmass.

Question 2. Give an account of the work of wind. [V. Imp.]

Answer: Wind is an active agent of erosion and deposition in the deserts. In deserts we often notice rocks in the shape of a mushroom, known as mushroom rocks. Winds erode the lower section of the rock more than the upper part. Therefore, such rocks have narrower base and wider top. When the wind blows, it lifts and transports sand from one place to another. When the wind stops blowing the sand falls and gets deposited in low hill-like structures. These are called sand dunes. When the

grains are very fine and light, the wind can carry it over long distances. When such sand is deposited in large area, it is called loess.

NCERT Solutions For Class 7 Geography

<http://freehomedelivery.net/Social Science Chapter 4 Air>

Question 1. Answer the following questions briefly.

- (i) What is atmosphere?
- (ii) Which two gases make the bulk of the atmosphere?
- (iii) Which gas creates greenhouse effect in the atmosphere?
- (iv) What is weather?
- (v) Name three types of rainfall
- (vi) What is air pressure?

Answer:

- (i) Atmosphere is a thin blanket of air that surrounds the earth. It protects us from the harmful rays of the sun. It consists of several gases in which nitrogen and oxygen occupy the major portion.
- (ii) Nitrogen (78%) and oxygen (21%) make the bulk of the atmosphere.
- (iii) Carbon dioxide creates greenhouse effect in the atmosphere.
- (iv) Weather is hour-to-hour, day-to-day condition of the atmosphere.
- (v)

- Convectional rainfall
- Orographic rainfall
- Cyclonic rainfall.

- (vi) The pressure exerted by the weight of air on the earth's surface is known as air pressure.

Question 2. Tick the correct answer:

(i) Which of the following gases protects us from harmful sun rays?

- (a) Carbon dioxide
- (b) Nitrogen
- (c) Ozone.

(ii) The most important layer of the atmosphere is

- (a) Troposphere
- (b) Thermosphere
- (c) Mesosphere.

(iii) Which of the following layers of the atmosphere is free from clouds?

- (a) Troposphere
- (b) Stratosphere
- (c) Mesosphere.

(iv) As we go up the layers of the atmosphere, the pressure

- (a) Increases
- (b) Decreases
- (c) Remains the same.

(v) When precipitation comes down to the earth in the liquid form, it is called

- (a) Cloud
- (b) Rain
- (c) Snow.

Answer: (i)—(c), (ii)—(a), (iii)—(b), (iv)—(b), (v)—(b).

9. 3. Match the skill:

- | | |
|-----------------|--------------------------------|
| (i) Trade winds | (a) Incoming solar energy |
| (ii) Loo | (b) Seasonal wind |
| (iii) Monsoon | (c) Horizontal movement of air |
| (iv) Wind | (d) Layer of ozone gas |
| | (e) Permanent wind |
| | (f) Local wind |

Ans. (i)—(e), (ii)—(f), (iii)—(b), (iv)—(c).

Question 4 Give reasons:

(i) Wet clothes take longer time to dry on a humid day.

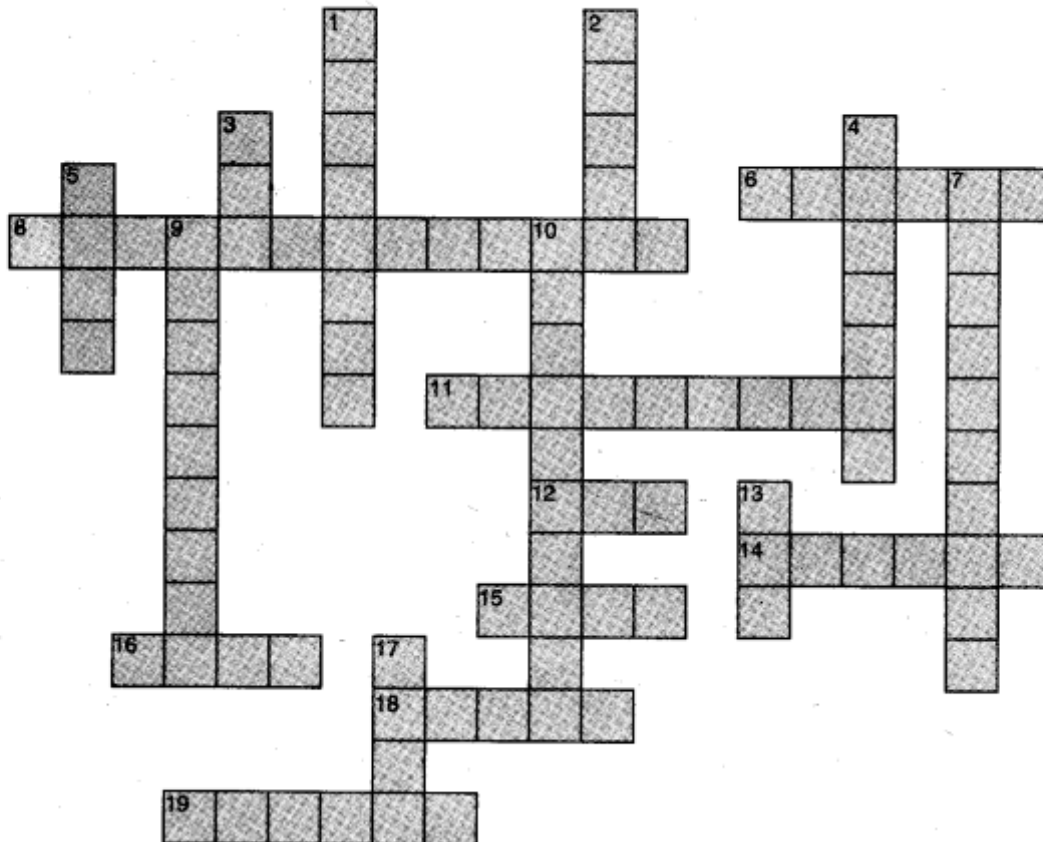
(ii) Amount of insolation decreases from equator towards poles?

Answer: (i) On a humid day the air is full of water vapour. Hence, evaporation is very slow. This is the reason why wet clothes take longer time to dry on a humid day.

(ii) Insolation comes through vertical rays on equator. Thus, it covers up less space but we feel more heat there when it goes up from equator towards poles, the sun rays become slanting. Needless to say that slanting rays come on the earth covering longer distance. Although these slanting rays heat up more space, the degree of hotness is felt less. This is the reason why amount of insolation decreases from equator towards poles.

9. 5. For Fun

(i) Solve this crossword puzzle with the help of given clues:

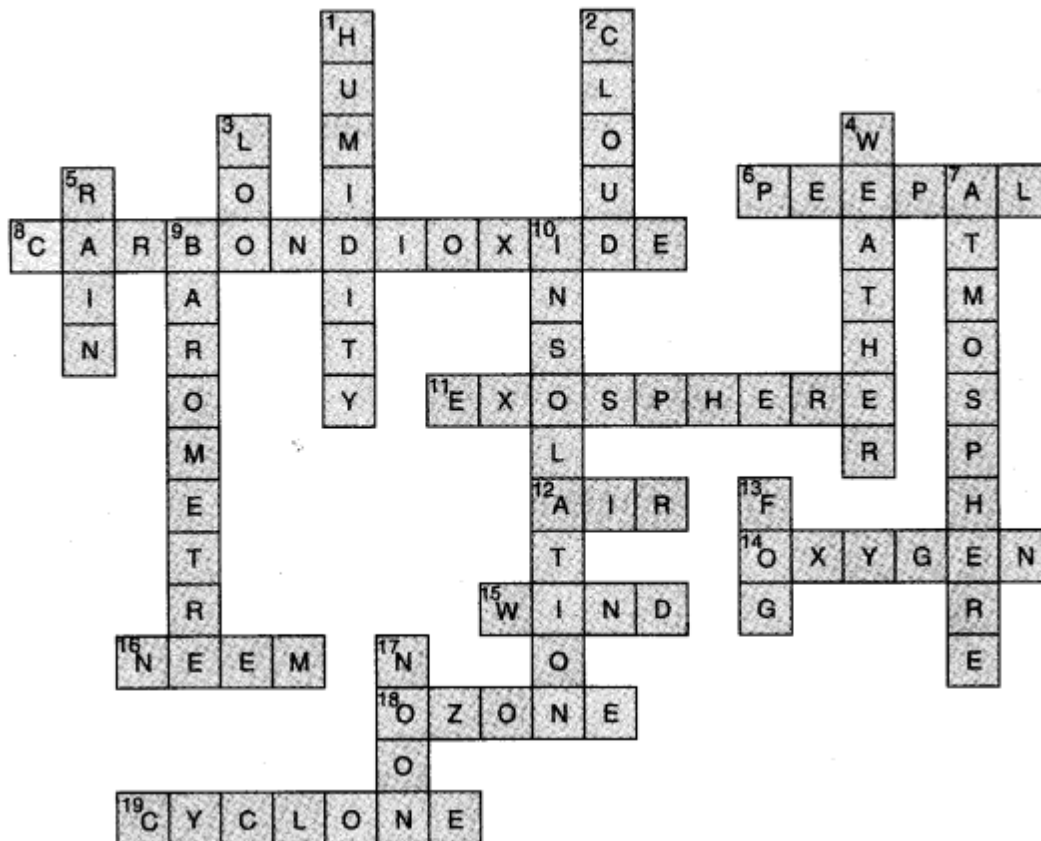


Across


6. An Indian tree having extraordinary quality of providing oxygen round the clock
8. Gas present in atmosphere occupying only 0.03% by volume
11. Outermost layer of atmosphere
12. Mixture of many gases
14. Life giving gas
15. Air in motion
16. An indian tree valued highly for medicinal properties
18. Gas protecting us from harmful sunrays
19. Low pressure area

Down




1. Amount of water vapour in air
2. Condensation of water vapour around dust particles in atmosphere
3. Example of local wind blowing in summer in northern India
4. Short term changes in atmosphere
5. Precipitation in liquid form
7. Blanket of air around the earth
9. Instrument of measure pressure
10. Incoming solar radiation
13. Reduces visibility in winters
17. It is time when sun is overhead



Ans.

(ii) Make a weather calendar for one week. Use pictures or symbols to show different types of weather. You can use more than one symbol in a day, if the weather changes. For example the sun comes out when rain stops. An example is given below:

<i>Day</i>	<i>Weather</i>
1. 	Sunny day
2.	
3.	
4.	
5.	
6.	
7.	

Ans.

Day	Weather
1. 	Sunny day
2. 	Cloudy day
3. 	Rainy day

<p>4.</p> 	<p>Stormy day</p>
<p>5.</p> 	<p>Calm day</p>

Very Short Type Questions <http://freehomedelivery.net/>

Question 1. How does carbon dioxide create green house effect? [V. Imp.]

Answer: Carbon dioxide creates greenhouse effect by trapping the heat radiated from the earth.

Question 2. What is the significance of greenhouse gas?

Answer: Without the greenhouse gas the earth would have been too cold to live in.

Question 3. What happens when air is heated?

Answer: When air is heated, it expands, becomes lighter and goes up.

Question 4. What is the nature of cold air?

Ans. It has tendency to go down.

Question 5. Why do green plants use carbon dioxide? [Imp.]

Answer: Green plants use carbon dioxide to make their food and release oxygen.

Question 6. What is an important feature of Stratosphere?

Answer: Stratosphere contains a layer of ozone gas.

Question 7. How is ozone important for us? [Imp.]

Answer: It protects us from the harmful effect of the sunrays.

Question 8. What is temperature?

Answer: The degree of hotness and coldness of the air is known as temperature.

Question 9. What is insolation?

Answer: Insolation is the incoming solar energy intercepted by the earth.

Question 10. Why is there no air pressure on the moon?

Answer: There is no air on the moon and therefore no air pressure.

Question 11. Where is air pressure highest?

Answer: Air pressure is highest at the sea level.

Question 12. How does air move?

Answer: Air moves from high pressure areas to low pressure areas.

Question 13. Name three types of winds.

Answer:

1. Permanent winds
2. Seasonal winds
3. Local winds.

Question 14. What is the hot and dry wind of northern plains of India called?

Ans. It is called loo.

Q.15 What is called humidity? [V. Imp.]

Ans. Moisture in the air at any time is called humidity.

Q.16 Why do we feel uncomfortable on a humid day?

Ans. It is because sweat from our body does not evaporate easily.

Q.17 How is flooding of low lying areas caused? [V. Imp.]

Ans. When trees on hill sides are cut, rainwater flows down the bare mountains. This causes flooding of low lying areas.

Q.18 Name various forms of precipitation.

Ans.

1. Rain
2. Snow
3. Sleet
4. Hail

Q.19 How is a wind named?

Ans. A wind is named after the direction from which it blows.

SHORT ANSWER TYPE QUESTIONS [HTTP://FREEHOMEDELIVERY.NET/](http://FREEHOMEDELIVERY.NET/)

Q.1 Give an account of the composition of the atmosphere. [V. Imp.]

Ans. Our atmosphere is composed of mainly two gases—nitrogen (78%) and oxygen (21%). Other gases like carbon dioxide, helium, ozone, argon and hydrogen are found in lesser quantities. Apart from these gases, tiny dust particles are also present in the air.

Q.2 How do Bacteria help plants use nitrogen? [V. Imp.]

Ans. Nitrogen is essential for the survival of plant. But plants cannot take nitrogen directly from the air. Bacteria, that live in the soil and roots of some plants, take nitrogen from the air and change its form so that plants can use it.

Q.3 How does nature balance our life? What is the result if this balance is disturbed?[V. Imp.]

Ans. Green plants use carbon dioxide to make their food and release oxygen. Humans or animals release carbon dioxide. The amount of carbon dioxide released by humans or animals seems to be equal to the amount used by the plants which make a perfect balance. But this balance is disturbed by burning of fuels, which add billions of tons of carbon dioxide in the atmosphere. As a result, the increased volume of carbon dioxide is affecting the earth's weather and climate.

Q.4 Why is temperature in cities much higher than that of villages ?

Ans. In cities we find high rise buildings. The concrete and metals in these buildings and the asphalt of roads get heated up during the day. This heat is released during the night.

Another reason is that the crowded high rise buildings of the cities trap the warm air and thus raise the temperature of the cities.

Q.5 Write a short note on the distribution of air pressure in atmosphere. [Imp.]

Ans. Air pressure is the pressure exerted by the weight of air on the earth's surface. As we go up the layers of atmosphere, the pressure falls rapidly. The air pressure is highest at the sea level and decreases with height. Horizontally the distribution of air pressure is influenced by temperature of air at a given place. In areas where temperature is high the air gets heated and rises. This creates a low pressure area. In areas having lower temperature, the air is cold, hence, it is heavy. Heavy air sinks and creates a high pressure area.

Q.6 Why do astronauts wear special protective suits when they go to the moon?

Ans. Astronauts wear special protective space suits filled with air when they go to the moon. If they did not wear these space suits, the counter pressure exerted by the body of the astronauts would make the blood vessels burst. The astronauts would bleed.

Q.7 How is rainfall important for us ? What happens when there is excess rain? [V. Imp.]

Ans. Rainfall is very important for the survival of plants and animals. It brings fresh water to the

earth's surface. If rainfall is less, there is water scarcity which sometime causes drought like situation. If there is excess rain, floods take place which make the life of the affected people miserable.

LONG ANSWER TYPE QUESTIONS [HTTP://FREEHOMEDELIVERY.NET/](http://freehomedelivery.net/)

Q.1 Give an account of the different layers of the atmosphere. [V. Imp.]

Ans. Our atmosphere has five different layers. They are:

1. **Troposphere:** This is the most important layer of the atmosphere with average height of 13 km from the earth. It is in this layer that we find the air that we breathe. Almost all the weather phenomena such as rainfall, fog and hailstorm occur here.
2. **Stratosphere:** This layer extends up to a height of 50 km. It presents the most ideal conditions for flying aeroplanes. It contains a layer of ozone gas which protects us from the harmful effect of the sunrays.
3. **Mesosphere:** This layer extends up to the height of 80 km. Meteorites burn up in this layer on entering from the space.
4. **Thermosphere:** In this layer temperature rises very rapidly with increasing height. Ionosphere is a part of this layer. It extends between 80—400 km. This layer helps in radio transmission. Radio waves transmitted from the earth are reflected back to the earth by this layer.
5. **Exosphere:** It is the uppermost layer where there is very thin air. Light gases such as helium and hydrogen float into the space from here.

Q.2 What is wind? Mention its different types.

Ans. Wind is the movement of air from high pressure area to low pressure areas. It is divided into three types:

1. Permanent winds
2. Seasonal winds
3. Local winds

1. Permanent winds. The trade winds, westerlies and easterlies are the permanent winds. These blow constantly throughout the year in a particular direction.

2. Seasonal winds. These winds change their direction in different seasons. For example: monsoons in India.

3. Local winds. These winds blow only during a particular period of the day or year in a small area. For example: land and sea breeze. Loo is a local wind which hot and dry and blow in the northern plains of India during summers.

NCERT Solutions For Class 7 Geography

<http://freehomedelivery.net/Social Science Chapter 5 Water>

Q. 1. Answer the following questions briefly.

(a) What is precipitation?

(b) What is water cycle?

(c) What are the factors affecting the height of the waves?

(d) Which factors affect the movement of ocean water?

(e) What are tides and how are they caused?

(f) What are ocean currents?

Ans. (a) Falling of moisture in the form of rainfall, snow, fog, sleet and hailstone is termed as precipitation.

(b) The water cycle is the process by which water continually changes its form and circulates between oceans, atmosphere and land.

(c) Winds, earthquakes, volcanic eruption or under water landslides are the factors affecting the height of the waves. The stronger the wind blows, the bigger the wave becomes.

(d) Temperature, winds, gravitational pull of the sun, the earth and the moon; warm and cold currents are the factors that affect the movement of ocean water.

(e) Tides are the rhythmic rise and fall of ocean water that occur twice in a day. The strong gravitational pull exerted by the sun and the moon on the earth's surface causes the tides.

(f) Ocean currents are streams of water flowing constantly on the ocean surface in definite directions.

Q. 2. Give reasons:

(a) Ocean water is salty.

(b) The quality of water is deteriorating.

Ans. (a) The water of the oceans is salty as it contains large amount of dissolved salts.

(b) Water is being used injudiciously. Whatever potable water is available, its quality is not good. It is because industrial effluents and untreated water of industries get mixed into streams and rivers.

Swerage water also gets mixed into these water bodies. As a result, the quality of water is deteriorating day by day.

Q. 3. Tick the correct answer.

(a) The process by which water continually changes its form and circulates between oceans, atmosphere and land

(i) Water cycle (ii) Tides (iii) Ocean currents.

(b) Generally the warm ocean currents originate near

(i) Poles (ii) Equator (iii) None of these.

(c) The rhythmic rise and fall of ocean water twice in a day is called

(i) Tide (ii) Ocean current (iii) Wave

Ans. (a)—(i), (b)—(ii), (c)—(i)

Q. 4. Match the following.

(i) Caspian Sea

(ii) Tide

(iii) Tsunami

(iv) Ocean currents

(a) Largest lake

(b) Periodic rise and fall of water

(c) Strong seismic waves

(d) Streams of water moving
along definite paths

(e) Water cycle

Ans. (i)—(a), (ii)—(b), (iii)—(c), (iv)—(d).

Q. 5. For Fun

Be a Detective

1. The name of one river is hidden in each of the sentences below. Spot it. Example: Mandira, Vijayalaxhmi and Surinder are my best friends

Ans. Ravi

(a) The snake charmer's bustee, stables where horses are housed, and the piles of wood, all caught fire accidentally. (Hint: Another name for River Brahmputra)

(b) The conference manager put pad, material for reading and a pencil for each participant. (Hint: A distributary on the Ganga-Brahmputra delta)

(c) Either jealousy or anger cause a person's fall (Hint: Name of a juicy fruit!)

(d) Bhavani germinated the seeds in a pot (Hint: Look for her in West Africa)

(e) "I am a zonal champion now" declared the excited athlete. (Hint: The river that has the biggest basin in the world)

(f) The tiffin box rolled down and all the food fell in dusty potholes. (Hint: Rises in India and journeys through Pakistan)

(g) Malini leaned against the pole when she felt that she was going to faint. (Hint: Her delta in Egypt is famous)

(h) Samantha mesmerised everybody with her magic tricks. (Hint: London is situated on her estuaiy)

(i) "In this neighbourhood, please don't yell! Owners of these houses like to have peace. Warned my father when we moved into our new flat". (Hint: colour!)

(j) 'Write the following words', Marc! "On", "go", "in" said the teacher to the little boy in KG Class. (Hint: Rhymes with 'bongo')

Now make some more on your own and ask your classmates to spot the hidden name. You can do this with any name: that of a lake, mountains, trees, fruits, school items etc.

TAns. eesta, (b) Padma, (c) Orange, (d) Niger, (e) Amazon, (f) Indus, (g) Nile, (h) Thames, (i) yellow, (j) Conga.

Carry on Detective

2. With the help of an atlas, draw each river which you discovered in For fun (0, on an outline map of the world.

Ans. Do yourself.

VERY SHORT ANSWER TYPE QUESTIONS [HTTP://FREEHOMEDELIVERY.NET/](http://FREEHOMEDELIVERY.NET/)

Q.1. What is terrarium?

Ans. It is an artificial enclosure for keeping small house plants. .

Q.2. Which type of water do the ocean bodies and the seas contain?

Ans. They contain salty water.

Q.3. What do you mean by salinity? [V. Imp.]

Ans. Salinity is the amount of salt in grams present in 1000 grams of water.

Q.4. What is the average salinity of the oceans?

Ans. The average salinity of the oceans is 35 parts per thousand.

Q.5. What is the salinity of Dead sea?

Ans. The salinity of Dead sea is 45 parts per thousand.

Q.6. Why do swimmers float in Dead Sea?

Ans. Swimmers float in Dead sea because the increased salt content makes it dense.

Q.7. What is the significance of World Water Day?

Ans. On the occasion of World Water Day (22nd March) the need to conserve water is reinforced in different ways.

Q. 8. What is Tsunami? [V. Imp.]

Ans. Tsunami is a Japanese word that means 'Harbour Waves' as the harbours get destroyed whenever there is Tsunami.

Q.9- What happens during high tide? [Imp.]

Ans. During high tide waves rise high and water covers much of the shore.

Q. 10. What happens during low tide?

Ans. During low tide water falls to its lowest level and recedes from the shore.

Q. 11. How are tides caused?

Ans. The strong gravitational pull exerted by the sun and the moon on the earth's surface causes tides.

Q.12. Name one warm current and one cold current.

Ans. Warm current — The Gulf Stream

Cold current — The Labrador Ocean current.

Q. 13. What happened to the Indira point during the tsunami of 2004?

Ans. It got submerged.

SHORT ANSWER TYPE QUESTIONS [HTTP://FREEHOMEDELIVERY.NET/](http://FREEHOMEDELIVERY.NET/)

Q.1. How are spring and neap tides formed. [V. Imp.]

Ans. During the full moon and new moon days, the sun, the moon and the earth are in the same line and the tides are highest. These tides are called spring tides. But when the moon is in its first and last

quarter, the ocean waters get drawn in diagonally opposite directions by the gravitational pull of sun and earth resulting in low tides. These tides are called neap tides.

Q.2. How are high tides important?[V. Imp.]

Ans. High tides are important for various reasons:

- They help in navigation
- They raise the water level close to the shores. This helps the ships to arrive at the harbour more easily.
- The high tides also help in fishing. Many more fish come closer to the shore during the high. This enables the fisherman to get a plentiful catch.
- The rise and fall of water due to tides is being used to generate electricity in some places.

Q.3. What are waves? Write a short note on it

Ans. Waves are the rise and fall of the water on the surface of the ocean. Waves are formed when winds scrape across the ocean surface. The stronger the wind blows, the bigger the wave becomes. During the storm, the winds blow at very high speed and therefore huge waves are formed. These waves are very strong, hence very destruction. They may cause huge devastation.

Q.4. Write a brief note on Tsunami. [Imp.]

Ans. Tsunami is a Japanese word that means 'harbour waves' as the harbours get destroyed whenever there is tsunami. An earthquake, a volcanic eruption or underwater landslides can shift large amounts of ocean water. As a result tsunami occurs which may be as high as 15 m. The tsunami of 2004 is still in our mind. It caused huge death and destruction in the coastal areas of India. The Indira point in the Andaman and Nicobar Islands got submerged after the tsunami.

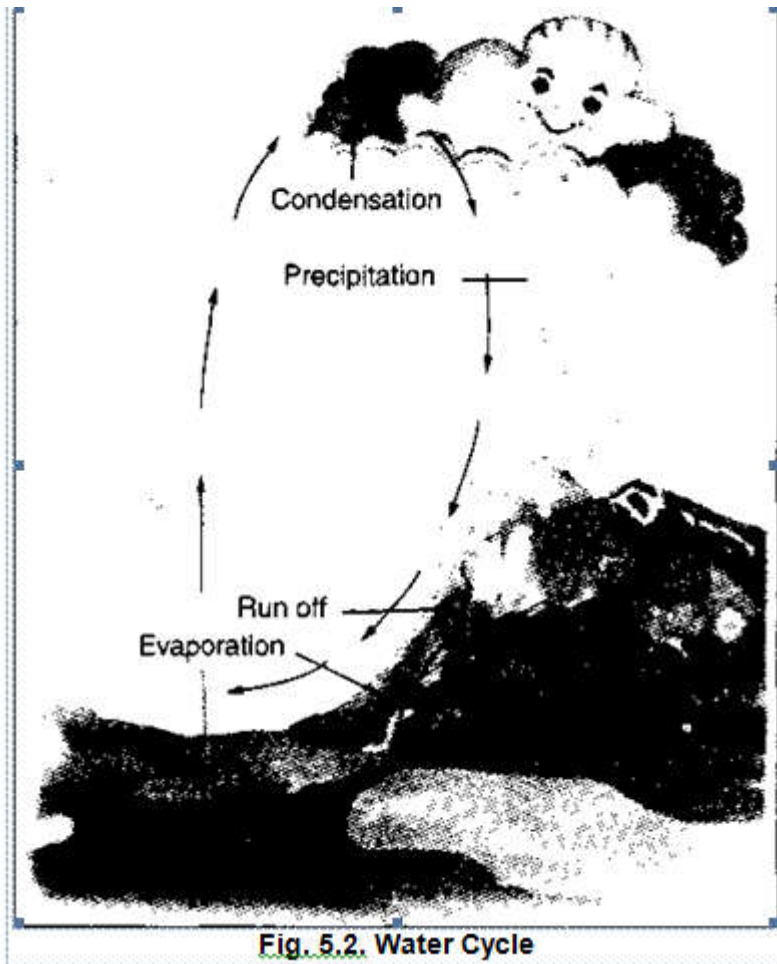
Q.5. Write a note on the importance of water. [V. Imp.]

Ans. Water is life. Without water, we can not think of life. Its scarcity may create numerous problems but its absence would definitely lead to non-existence of all the living beings on the earth. It is a precious resource of the nature. We drink water whenever we feel thirsty. We use water in numerous activities such as washing clothes, cleaning house floors, watering garden etc. Industries also need water for their functioning. Thus, water is very essential and therefore we must conserve it. Our careless use of water has created several problems. Whatever water is there, it is not of good quality. We should think about the ways of its conservation for our own sake.

Q.6. Explain water cycle with a neat and labelled diagram. [V. Imp.]

Ans. The sun's heat causes evaporation of water, flowing down to stream or drains into water vapour. When the water vapour cools down, it condenses and forms clouds. These clouds, when become too heavy to float, start falling on the land or sea in the form of rain, snow or sleet. Thus, the process by which water continuously changes its form and circulates between oceans, atmosphere and land is known as the water cycle.

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LONG ANSWER TYPE QUESTIONS [HTTP://FREEHOMEDELIVERY.NET/](http://FREEHOMEDELIVERY.NET/)

Q.1. Give an account of ocean currents. [Imp.]

Ans. Ocean currents are streams of water flowing constantly on the ocean surface in definite directions. The ocean currents may be warm or cold. The warm ocean currents originate near the equator and move towards the poles. The cold current carry water from polar or higher latitudes to tropical or lower latitudes. For example the Labrador Ocean current is cold current while the Gulf Stream is a warm current. The ocean current influence the temperature conditions of the area.

Warm currents bring about warm temperature over land surface. The areas where the warm and cold currents meet provide the best fishing grounds of the world. For example seas around Japan and the eastern coast of North America. The areas where a warm and cold current meet also experience foggy weather and therefore navigation becomes difficult.

Q.2. How do we classify ocean movements? Explain. [V. Imp.]

Ans. Ocean movements can be classified into waves, tides and currents.

- When the water on the surface of the ocean rises and falls alternately, they are called waves. Waves are formed when winds scrape across the ocean surface. The stronger the wind blows, the bigger the wave becomes.
- The rhythmic rise and fall of ocean water twice in a day is known as a tide. Tides may be high or low. It is high tide when water covers much of the shore by rising to its highest level. It is low tide when water falls to its lowest level and recedes from the shore. Tides are caused due to the strong gravitational pull exerted by the sun and

moon on the earth's surface. High tides help in navigation and fishing. The rise and fall of water due to tides is being used to generate electricity in some places.

- Ocean currents. These are streams of water flowing constantly on the ocean surface in definite directions. The ocean currents may be warm such as the Gulf Stream and cold such as the Labrador Ocean current. The areas where the warm and cold currents meet provide the best fishing ground of the world. For example, seas around Japan and the eastern Coast of North America.

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