



CALCERT! CALCERT! CALCERT! SOLUTION'S

(GEOGRAPHY)

CONTENT

Chapter 1 Environment

Chapter 2 Inside Our Earth

Chapter 3 Our Changing Earth

Chapter 4 Air

Chapter 5 Water

Chapter 6 Human Environment Interactions
The Tropical and the Subtropical Region

Chapter 7 Life in the Deserts

Chapter 1 Environment

- 1. Answer the following questions.
- (i) What is an ecosystem?

Ans.

All plants, animals and human beings depend on their immediate surroundings. Often they are also interdependent on each other. This relation between the fiving organisms, as well as the relation between the organisms and their surroundings forms an ecosystem.

(ii) What do you mean by natural environment? Ans.

Land, water, air, plants and animals comprise the natural environment.

(iii) Which are the major components of the environment?

Ans.

The major component of environment are

- a) Natural Environment
- b) Human made Environment
- (iv) Give four examples of human made

environment.

Ans.

Building, dam, parks and bridges are example of human made environment.

(v) What is lithosphere?

Ans.

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 landforms such as mountains, plateaus, plains, valleys, etc. Landforms are found over the continents and also on the ocean floors.

(vi) Which are the two major components of biotic environment?

Ans.

Plant and Animals are the two major component of biotic

Plant and Animals are the two major component of biotic environment.

(vii) What is biosphere?

Ans.

Plant and animal kingdom together make biosphere or the living world. It is a narrow zone of the earth where land, water and air interact with each other to support life.

- 2. Tick the correct answer.
- (i) Which is not a natural ecosystem?

- (a) Desert (b) Aquarium (c) Forest Ans.
- (b) Aquarium
- (ii) Which is not a component of human environment?
- (a) Land (b) Religion (c) Community Ans.
- (a) Land
- (iii) Which is a human made environment?
 (a) Mountain (b) Sea (c) Road
 Ans.
 (c) Road
- (iv) Which is a threat to environment?
- (a) Growing plant
- (b) Growing population
- (c) Growing crops

- (b) Growing population
- 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
	(f) relation between the
	organisms and their
	surroundings

Ans.	
(i) Biosphere	(e) narrow zone where land
	water and air interact
(ii) Atmosphere	(a) blanket of air which
	surrounds the earth
(iii) Hydrosphere	(b) domain of water
(iv) Environment	(d) our surroundings
(IV) ENVIRONMENT	(u) but surt drings

4. Give reasons.

(i) Man modifies his environment Ans.

Man modifies his environment to fulfil its basic needs. Forests were cut down radically for firewood, construction, furniture and paper manufacture. Land was cleared to set up industries, an increase in cultivable land to feed teeming millions and provide housing. Human killed animals in large numbers for food, entertainment and to make various things from their skin, bones, meat and teeth. Minerals and fossils for their own development harmed the physical and biological environment.

(ii) Plants and animals depend on each other.

Ans.

Group of Plants and Animals depend on each other for shade, support and food requirement. The two interact with one another in the biosphere, exchanging matter and energy.

Chapter 2 Meideloun Eanth

- 1. Answer the following questions.
- (i) What are the three layers of the earth?

 Ans.

The three layers of the earth are crust, mantle and core.

(ii) What is a rock?

Ans.

Any natural mass of mineral matter that makes up the earth's crust is called a rock. Rocks can be of different colour, size and texture.

(iii) Name three types of rocks.

Ans.

There are three major types of rocks: igneous rocks, sedimentary rocks and metamorphic rocks.

(iv) How are extrusive and intrusive rocks formed? Ans.

When molten lava comes on the earth's surface, it rapidly cools down and becomes solid. Rocks formed in such a way on the crust are called extrusive igneous rocks. For example: basalt. The Deccan plateau is made up of basalt 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. Granite is an example of such a rock.

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

Ans.

The process of transformation of the rock from one to another is known as the rock cycle.

Igneous rocks change into sedimentary rocks which in turn change into metamorphic rocks. During volcanic eruption, the metamorphic rocks come up as magma and solidify to make the igneous rocks. This completes the rock cycle.

(vi) What are the uses of rocks? Ans.

- a) The hard rocks are used for making roads, houses and buildings.
- b) Stones are used in many games.

- c)They are also used in industries iron, aluminium, gold, uranium, etc.
- d) They are used in medicines, fertilisers etc.

(vii) What are metamorphic rocks? Ans.

Igneous and sedimentary rocks can change into metamorphic rocks under great heat and pressure. For example, clay changes into slate and limestone into marble.

- 2. Tick the correct answer.
- (i) The rock which is made up of molten magma is
- (a) Igneous (b) Sedimentary (c) Metamorphic

 Ans.

 (a) Igneous

 (ii) The innermost layer of the earth is

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

 Ans.
- (b)Core
- (iii) Gold, petroleum and coal are examples of
- (a) Rocks (b) Minerals (c) Fossils Ans.
- (b) Minerals
- (iv) Rocks which contain fossils are
- (a) Sedimentary rocks
- (b) Metamorphic rocks

(c) Igneous rocks

Ans.

- (a) Sedimentary rocks
- (v) The thinnest layer of the earth is
- (a) Crust (b) Mantle (c) Core Ans.
- (a) Crust

3. Match the following.

(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) Core	(e) Innermost layer
(ii) Minerals	(d) Has definite chemical composition
(iii) Rocks	(b) Used for roads and buildings
(iv) Clay	(f) Changes into slate
(v) Sial	(c) Made of silicon and alumina

4. Give reasons.

(i) We cannot go to the centre of the earth. Ans.

It is not humanly possible to go inside the Earth below the depth of about 2000m. Temperature increases with depth in the interior of the Earth. The approximate rate of increase in temperature is 1°C for every 32m – 40m of depth. It is estimated that the temperature at the centre of the Earth is as high as 6000°C.

(ii) Sedimentary rocks are formed from sediments.

Ans.

Sedimentary rocks are formed from sediments accumulated over long periods in seas, lakes, streams and glaciers.

Sedimentary rocks have distinct layers of sediments from their parent rocks. The sediments from the parent rock are originally soft but become hard and compact over a period of time due to the pressure of their own weight.

Agencies such as rain, wind, ice or moving water disintegrates the parent rock The loose and broken fragments of parent rocks get deposited and cemented together to form mechanically formed Sedimentary rocks.

(iii) Limestone is changed into marble.

Ans.

Limestone changed into marble is an example of metamorphic rocks. High temperatures and tremendous pressure sometimes alters igneous and sedimentary rocks in both their appearance and composition.

Chapter 3 Our Changing Earth



The movement of the molten magma inside the earth causes movement of plate.

(ii) What are exogenic and endogenic forces? Ans.

The forces which act in the interior of the earth are called as Endogenic forces and the forces that work on the surface of the earth are called as Exogenic forces.

(iii) What is erosion?

Ans.

Erosion is the wearing away of the landscape by different agents like water, wind and ice. The eroded material is carried away or transported by water, wind, etc. and eventually deposited. This process of erosion and deposition create different landforms on the surface of the earth.

(iv) How are flood plains formed? Ans.

At times the river overflows its banks. This leads to the flooding of the neighbouring areas. As it floods, it deposits layers of fine soil and other material called sediments along its banks. This leads to the formation of a flat fertile floodplain.

(v) What are sand dunes?

Ans.

When the wind blows, it lifts and transports sand from one place to another. When it stops blowing the sand falls and gets deposited in low hill—like structures. These are called sand dunes.

(vi) How are beaches formed? Ans.

The erosion and deposition of the sea waves gives rise to coastal landforms. The sea waves deposit sediments along the shores forming beaches.

(vii) What are ox bow lakes? Ans.

As the river enters the plain it twists and turns forming large bends known as meanders. In due course of time the meander loop cuts off from the river and forms a cut-off lake, also called an ox-bow lake.

- 2. Tick the correct answer.
- (i) Which is not an erosional feature of sea waves?
- (a) Cliff (b) Beach (c) Sea cave Ans.
- (a)Cliff
- (ii) The depositional feature of a glacier is:
- (a) Flood plain (b) Beach (c) Moraine Ans.
- (c) Moraine
- (iii) Which is caused by the sudden movements of the earth?

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

 Ans.

 (a) Volcano
- (iv) Mushroom rocks are found in:
- (a) Deserts (b) River valleys (c) Glaciers Ans.
- (a) Deserts
- (v) Ox bow lakes are found in:
- (a) Glaciers (b) River valleys (c) Deserts Ans.

(b) River valleys

3. Match the following.

(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) Glacier	(c) River of ice	_
(ii) Meanders	(d) Rivers	
(iii) Beach	(a) Sea shore	
(iv) Sand duries	(h) Deserts	7
(v) Waterfall	(g) Hard bed rock	
(vi) Earthquake	(e) Vibrations of earth	Ī

4. Give reasons.

(i) Some rocks have a shape of a mushroom.

Ans.

An active agent of erosion and deposition in the deserts is wind. In deserts we can see rocks in the shape of a mushroom, commonly called mushroom rocks. Winds erode the lower section of the rock more than the upper part. Therefore, such rocks have narrower base and wider top.

(ii) Flood plains are very fertile.

Ans.

Floods, deposits layers of fine soil and other material called sediments along its banks. This leads to the formation of a flat fertile floodplain.

(iii) Sea caves are turned into stacks.

Ans.

When the cavities in sea caves become bigger and bigger only the roof of the caves remain, thus forming sea arches. Further, erosion breaks the roof and only walls are left. Then the Sea caves are turned into stacks.

(iv) Buildings collapse due to earthquakes. Ans.

The earthquakes are dangerous for people because they cause the ground to shake violently, making the walls of buildings crack, bulge or even tumble down. Whole settlements have been destroyed, sometimes with great loss of life and property.

Chapter 4

Air

- 1. Answer the following questions.
- (i) What is atmosphere?

Ans.

Our earth is surrounded by a huge blanket of air called atmosphere. All living beings on this earth depend on the atmosphere for their survival. It provides us the air we breathe and protects us from the harmful effects of the sun's rays.

(ii) Which two gases make the bulk of the atmosphere?

Ans.

Nitrogen 78% and Oxygen 21%

(iii) Which gas creates greenhouse effect in the atmosphere?

Ans.

Carbon dioxide gas creates greenhouse effect in the atmosphere.

(iv) What is weather?

Ans.

Weather indicates the conditions of the atmosphere over a day or small periods.

(v) Name three types of rainfall?

Ans.

The three types of rainfall are Cyclonic, Relief and Conventional rainfall.

(vi) What is air pressure?

Ans.

Air pressure is defined as the pressure exerted by the weight of air on the Earth surface. As we go up the layers of atmosphere, the pressure talls rapidly. The air pressure is highest at sea level and decreases with height.

4. Give reasons.

(i) Wet clothes take longer time to dry on a humiday?

Ans.

On a humid day, clothes take longer time to dry because the amount of water present in air is more. As the rate of evaporation decreases, so air does not soaks water easily.

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

Ans.

An important factor that influences the distribution of temperature is insolation. Insolation is the incoming solar energy intercepted by the earth. The amount of insolation decreases from the equator towards the poles.

Chapter 5 Water

- 1. Answer the following questions.
- (i) What is precipitation?

Ans.

The sun's heat causes evaporation of water into vapour. When the water vapour cools down, it condenses and forms clouds. From there it may fall on the land or sea in the form of rain, snow or sleet is called precipitation.

(ii) What is water cycle?

Ans.

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

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

Ans.

- (i) An earthquake, a volcanic eruption or underwater landslides are the factor affecting the height of the waves.
- (ii) During a storm, the winds blowing at very high speed form huge waves.

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

Ans.

Factor that affects the movement of ocean water are

- (i) Temperature
- (ii) Gravitational pull of the sun and the moon
- (iii) Warm and Cold currents
- (iv) Wind

(v) What are tides and how are they caused? Ans.

The rhythmic rise and fall of ocean water twice in a day is called tides. The strong gravitational pull exerted by the sun and the moon on the earth's surface causes the tides.

(vi) What are ocean currents?

Ans.

Ocean currents are streams of water flowing constantly on the ocean surface in definite directions. The ocean currents may be warm or cold.

Give reasons. Ocean water is salty.

Ans.

The water of the oceans is salty or saline as it contains large amount of dissolved salts.

(ii) The quality of water is deterioting.

Ans.

The quality of water is deterioting because of human activities like throwing garbage, cutting down of trees, increase in use of fertilisers and pesticides, smoke released from industries. All these are directly released in water bodies so it deteriote the water quality.

- 3. Tick the correct answer.
- (i) The process by which water continually changes its form and circulates between oceans, atmosphere and land
- (a) Water cycle (b) Tides (c) Ocean currents

- (a) Water cycle
- (ii) Generally the warm ocean currents originate near
- (a) Poles (b) Equator (c) None of these Ans.
- (b) Equator
- (iii) The rythmic rise and fall of ocean water twice in a day is called
- (a) Tide (b) Ocean current (c) Wave Ans.

(a) Tide	
4. Match the following.	
(i) Caspian Sea	(a) Largest l <mark>a</mark> ke
(ii) Tide	(b) Periodic rise and fall of water
(iii) Tsunami	(c) Strong seismic waves
(iv) Ocean currents	(d) Streams of water moving along definite paths
	(e) Water cycle

Ans.

(i) Caspian Sea	(a) Largest lake
(ii) Tide	(b) Periodic rise and fall of water
(iii) Tsunami	(c) Strong seismic waves
(iv) Ocean currents	(d) Streams of water moving
	along definite paths

Chapter 6 Human Environment Interactions The Tropical and the Subtropical Region 1. Answer the following questions: (i) Name the continent in which the Amazon Basin is located.

Ans.

The Amazon Basin is located in South America.

(ii) What are the crops grown by the people of the Amazon Basin.

Ans.

The crops grown by the people of the Amazon Basin are tapioca, pineapple and sweet potato.

(iii) Name the birds that you are likely to find in the rainforests of the Amazon.

Ans.

The rainforest is rich in fauna. Birds that are likely to found in rainforest of Amazon are toucans, humming birds, macaw with their brilliantly coloured plumage.

(iv) What are the major cities located on the River Ganga.

Ans.

The Ganga-Brahmaputra plain has several big towns and cities. The cities of Allahabad, Kanpur, Varanasi, Lucknow, Patna and Kolkata etc. are the major cities located on the River Ganga.

(v) Where is the one-horned rhinoceros found? Ans.

The one-horned rhinoceros is found in the Brahmaputra plain.

- 2. Tick the correct answer. (i) Toucans are a type of (a) Birds (b) animals (c) crops Ans. (a) Birds
- (ii) Manioc is the staple food of
- (a) Ganga Basin (b) Africa (c) Amazon Ans.
- (c) Amazon
- (iii) Kolkata is located on the river
- (a) Orange (b) Hooghly (c) Bhagirathi Ans.
- (b) Hooghly
- (iv) Deodars and firs are a type of
- (a) Coniferous trees (b) Deciduous trees (c) shrubs Ans.
- (a) Coniferous trees

- (v) Bengal tiger is found in
- (a) Mountains (b) delta area (c) Amazon Ans.
- (b) Delta area

3. Match the following.

(i) Cotton textile	(a) Assam	
(ii) Maloca	(b) Terrace farming	
(iii) Piranha	(c) Sericulture	
(iv) Silk worm	(d) Slanting roof	
(v) Kaziranga	(e) Ganga plain	
	(f) Varanasi	
	(g) Fish / /	
Ans.	KWIIV	
(i) Cotton textile	(f) Var <mark>an</mark> asi	
(ii) Maloca	(d) Slanting roof	
(iii) Piranha	(g) Fish	
(iv) Silk worm	(c) Sericulture	
(v) Kaziranga	(a) Assam	

4. Give reasons.

(i) The rainforests are depleting.

Ans.

The developmental activities are leading to the gradual destruction of the biologically diverse rainforests. It is estimated that a large area of the rainforest has been disappearing annually in the Amazon basin. As a result of this topsoil is washed away as the rains fall and the lush forest turns into a barren landscape.

(ii) Paddy is grown in the Ganga-Brahmaputra plains.

The main crop that is grown in Ganga- Brahmaputra plains is paddy. Since cultivation of paddy requires sufficient water, it is grown in the areas where the amount of rainfall is high.

Chapter 7 Life in the Deserts

- 1. Answer the following questions.
- (a) What are the two types of deserts found in the

world?

Ans.

There are two types of deserts found in the world hot deserts or cold deserts.

(b) In which continent is the Sahara desert

located?

Ans.

The Sahara Desert is located in the continent of Africa. Sahara desert covers a large part of North Africa. It is the world's largest desert.

(c) What are the climatic conditions of the Ladakh desert?

Ans.

Due to its high altitude, the climate is extremely cold and dry. The air at this altitude is so thin that the heat of the sun can be felt intensely. The day temperatures in summer are just above zero degree and the night temperatures well below -30°C. It is freezing cold in the winters when the temperatures may remain below -40°C for most of the time.

(d) What mainly attracts tourists to Ladakh?

Tourism is a major activity with several tourists streaming in from within India and abroad. Visits to the gompas, treks to see the meadows and glaciers, witnessing ceremonies and festivities are important activities.

(e) What type of clothes the people of the Sahara desert wear?

Ans.

The people of Sahara desert wear long, heavy robes which protect them from winds and dust storms.

(f) Name the trees that grow in Ladakh.

Ans.

The trees that grow in ladakh are Groves of willows and poplars and fruit trees such as apples, apricots and walnuts etc.

- 2. Tick the correct answer.
- (i) Sahara is located in which part of Africa
- (a) eastern (b) northern (c) western

Ans.

- (b) northern
- (ii) Sahara is what type of desert
- (a) cold (b) hot (c) mild

Ans.

- (b) hot
- (iii) The Ladakh desert is mainly inhabited by
- (a) Christians and Muslims
- (b) Buddhists and Muslims
- (c) Christians and Buddhists

Ans.

(b) Buddhists and Muslims

- (iv) Deserts are characterised by
- (a) Scanty vegetation
- (b) Heavy precipitation
- (c) Low evaporation

- (a) Scanty vegetation
- (v) Hemis in the Ladakh is a famous
- (a) Temple (b) church (c) monastery Ans.
- (c) Monastery



Ans.

(i) Oasis	(d) depressions with water
(ii) Bedouins	(f) Sahara
(iii) Oil	(a) Libya
(iv) Gangri	(c) glacier
(v) Lamayuru	(b) monastery

4. Give reasons.

(i) There is scanty vegetation in the deserts. Ans.

Deserts are characterised by low rainfall, scanty vegetation and extreme temperatures. Due to this reason scanty of vegetation are found in desert.

(ii) People of the Sahara desert wear heavy robes. Ans.

The climate of the Sahara desert is scorching hot and parch dry. That is the reason why people of Sahara desert wear heavy robes. Which protect them against storms and winds.

