QUESTION BANK 2020-2021
STD -VII ***SUBJECT-GEOGRAPHY***

TERM-1

CHAPTER -1

Answer the following questions

Q.1) What are the advantages of drawing a map to scale?

Ans) Advantages of drawing a map to scale are as follows:-

a) It gives us an accurate understanding of distance.
b) The scale can be converted into any unit and it is universally accepted.
c) Details of manmade as well as natural features can be shown with the help of a scale.

Q.2) What is the importance of colours in maps?

Ans) Colours are shown to the natural as well as manmade features.

- Each colour has its own significance and are universally accepted for interpretation of survey sheets and map pointing.
- Colours like "Yellow" represents cultivable land, plateaus, deserts and plains whereas "Red" represents settlements and cities.

Q.3) State ways to measure distance.

Ans) We can measure distance with scale using

- Ruler method
- Twine method
- Using a divider

Q.4) What is the importance of Topographical maps? State any two reasons.

Ans) Topographical maps are useful in many ways:-

- They are used by students of Geography to study regional Geography of an area in detail.
- To provide useful information to engineers, surveyors, town planners etc.
- They serve as a guide for travel and military purpose.

<u>Extra Questions</u>

<u>Q.) Define the Following.</u>

a) Conventional signs: The universal language used in a map which give a lot of information about a map are called Conventional signs.

b) Legend: The list of relevant conventional signs which are given at the bottom of a map to help in the study of maps are known as legends.

c) Topographical maps: It is a large scale map which shows both manmade and natural features.

d) Grid Reference: Reference value of latitudes and longitudes of any area.

<u>Q.)Answer the Following.</u>

1) Write two ways to measure the distance of a curved road or river.

Ans) We can measure the distance of a curved road or a river by :

a) Using a paper strip.
b) By using a thread.

2) Write the three types of scales used to measure distance in a map.

Ans) The three types of scales are:-

a) Verbal Scale or statement scale
b) Numerical Fraction or Representative Fraction Scale
c) Graphic or Linear Scale.

3) Write the difference between large Scale and Small scale maps.

Ans) Large Scale map :

- They show a small area in a greater detail
- They show details of cities, towns and villages
  Ex. Topographical Maps

Small Scale map :

- They show larger area in small detail and space.

- They show important relief features like mountains, Plateaus, Continents.
  Ex. Political Maps, Wall maps, Atlas maps.

4) Write two things which we should keep in mind while reading Grid Reference.

Ans) The following things should be kept while reading Grid Reference:-

- One should keep in mind the SW corner of the map or the origin.
- Eastings are always to be stated first following by Northings.
- The readings are to be always taken right to the Eastings and to the North of the Northings.

5) What do you mean by Linear Settlements?.
Ans) The Settlements which usually develops on either side of a main road with a view to provide services.
Ex. Dhabas, hotels and shops

CHAPTER -2

Answer the following questions

i) State the major effects of climate change?

Ans.) Major effects of climate change are:-

a) There are rise in global temperature.
b) Rise in sea level due to the melting of snow covers in Northern Hemisphere.
c) In future the length and intensity of heat waves as well as speed of winds of Tropical cyclones will increase.
d) The increase in CO2 level may lead to the destruction of our ecosystem.

ii) What is Green house effect? How does it lead to Global warming?

Ans) The earth's atmosphere contains green house gases such as CO2, Methane, Nitrous oxide(N2O) that trap the outgoing radiation thereby leading to increase in the temperature of the earth. This is termed as the Green house effect.

As the green house gases trap the heat radiated by the Sun, it leads to Global warming.

(iii) Name the Major green houses gases and their sources.

Ans) CFC's, CO2, Methane and Nitrous Oxide are few Green House gases.

- CFC's are manmade green house gas which come from refrigerators and foam, aerosol spray etc.
- Methane are found in natural wet lands, rice fields and livestock. Natural gas production, biomass burning, termites, landfills and coal mining also release Methane.
- Nitrous Oxide: It is released by Oceans and soils but human activities such as biomass burning and use of fertilizers also add NO2 to the atmosphere.
- Carbon dioxide: It is added due to the burning of fossil fuels or vehicular emissions.

iv) How does Global warming cause spread of diseases?

Ans) Global warming leads to ozone layer depletion as a result of which

- Increased amount of Ultra violet radiation are reaching the earth and causing damage to plants, human beings and marine animals because of which the body is exposed to infectious diseases.
- Increased temperature is creating an ideal condition for the breeding of virus and bacteria which has become a cause for the spread of diseases and epidemics.

v) Where is Ozone layer? Why is it getting depleted?

Ans) Ozone layer is found in the stratosphere between 20-30 Km.

It is depleting because of emission of green house gases due to burring of fossil fuels.

CFC's that are used in aerosol sprays, refrigerators and making plastic cartoons also lead to depletion of Ozone layer as they enter the atmosphere when destroyed and discarded.

Due to deforestation.

vi) How is Ozone useful in the stratosphere?

Ans) The Ozone layer shields us from the Ultra violet rays from the Sun.

vii) What are Chlorofluorocarbons? Name their sources.

Ans) Chlorofluorocarbons are manmade green house gases which come from refrigerators and foams.

Sources:

(a) When refrigerators are destroyed and discarded, the CFC gases escape and enters the atmosphere.
(b) The chemicals used in aerosol sprays an making of plastic carton are also a source of CFC's.

viii) “Ozone depletion and climate change are serious threats to the very survival of human beings” What are the measures taken by various countries to mitigate the problem?

Ans) (a) The UNFCCC has set an overall frame work for all the countries in which it was agreed that the future global warming should be limited to 2° C.
(b) In the Rio Earth Summit 154 nations have jointly agreed to prevent the devastating impact of Green House effect.
(c) The GEF (Global Environmental Facility) was set up in 1991 to facilitate global environmental co operation between developed and developing countries.

ix) State the objectives of Global Environment Facility (GEF)

Ans)

a) To reduce the Green house effect in the atmosphere
b) Protection of biological diversity
c) Protection of international water.
d) Reduction of Ozone layer depletion

x) State the effect of global warming on Flora and Fauna of the earth.

Ans) Plants and animals react to warm temperature by moving to higher elevation and latitudes because of this there is rise in species loss and endangerment or extinction of few species

Increase in CO2 may destroy the ecosystem.

The increasing acidification of oceans has made it difficult for marine life such as corals and Plankton. It is a threat to the food chains connected to oceans.

xi) State the effect of Ozone depletion on earth.

Ans) The thin layer of Ozone fails to absorb the ultra violet radiation

Due to depletion of Ozone layer, more amount of Ultraviolet radiation is reaching the earth causing damage to plant life, human beings and marine life.

Our body is exposed to infectious diseases like skin cancer.

Planktons the very foundation of the vast Oceanic food chain are also killed.

xii) Which gas is released from the use of chemical fertilizers and pesticides? In what way does it affect the atmosphere?

Ans) Nitrous oxide is released from the use of chemical fertilizers and pesticides.

Nitrous oxide is one of the Green house gases which leads to the depletion of Ozone layer.

xiii) State the ways to reduce global warming.

Ans) Ways to reduce global warming are :-

- By using sources of energy such as wind, hydro electricity, geothermal, solar, tidal and nuclear energy.
- Reduce industrial pollution.
- Conserve forest and plant more trees.
- Carefully and safely dispose AC's and refrigerators.

xiv) How can we prevent Ozone depletion?

Ans) We can prevent Ozone depletion by:-

- Banning the CFC sprays and ozone depleting chemicals
- Using eco friendly products for house hold chores.
- Reducing vehicular pollution by opting the use of Public transport, Car pooling etc.
- Safely disposing AC's and refrigerators.

Extra Questions.

Give reasons.

a) Ionosphere is important in long distance radio communication.
Ans) Because Ionosphere reflects the low frequency radio waves but absorbs the medium and high frequency waves so, it is important in long distance radio communication.

b) Pressure decreases with height.

Ans) The air in the lower part of the earth close to the earth's surface is denser than the upper part and it gets thinner as we go higher. So pressure decreases with height.

c) Acidification of Oceans is a threat to the food chains.

Ans) Oceans serve as a sink for carbon dioxide as it dissolves the CO2 released by humans. The increasing acidification makes it difficult for marine life such as Corals and Plankton to survive thereby posing a threat to the food chains.

Give one word for:

1) A gas found in natural wetlands: Methane
2) A bluish gas present in the upper air: Ozone
3) An alternative source of energy: Geothermal/Solar/Wind
4) Measure of acidity in the ocean: PH of Ocean
5) Rain forests of the sea: Coral reefs
6) That organism which gives both colour and nourishment to the Corals: Microscopic Algae.

Chaper-4 Weathering and Soil formation

Answer the following (Book question)

1) What is mechanical weathering?

Ans) The disintegration of rocks caused by the elements of weather such as heat, frost, wind, Plants, man and animals is called mechanical weathering. It does not change the composition of rocks.

2) Name the factors responsible for mechanical weathering.

Ans) Factors responsible for mechanical weathering are:-

(i) Extremes of temperature
(ii) Nature of rocks
(iii) Structure of rocks
(iv) Frost
(v) Wind
(vi) Slope of land

3) What is meant by denudation?

Ans) It is a dynamic process which includes disintegration and decomposition of rocks as well as wearing away of rocks.

4) What is meant by biological weathering?

Ans) Weathering caused by plants, animals and human activities is termed as Biological weathering.

5) How does biological weathering take place?

Ans) It takes place by plants, animals and human activities.

Plants: The roots of plants grow into the cracks and crevices in search of water or nourishment. They exert great pressure and break them as they grow.

Animals: Burrowing animals also cause break up of rocks by loosening and weakening the rocks thereby exposing them to the other agents of weathering.

Human Activities: Activities such as road construction work, mining, farming and deforestation cause weathering and disintegration of rocks.

6) Name the factors responsible for weathering

Ans) Factors responsible for weathering are:

- Plants
- Animals
- Human activities

Chemical weathering is caused by:

- Oxidation
- Hydration
- Carbonation
- Solution

Mechanical weathering caused due to

- Disintegration of rocks
- No change in composition
- Exfoliation

7) What is meant by exfoliation?

Ans) This process generally occurs in arid regions where the layer of rocks peel off due to expansion and contraction of rocks because of alteration in temperature. This process ultimately changes rocks into rounded boulders.

8) How does climate affect weathering? Explain giving examples.

Ans) Weathering is caused due to

Extremes of temperature: The diurnal range of temperature is very high in arid, semi arid regions which caused expansion during day and contraction during night leading to disintegration of rocks.

Frost: It is a common agent of weathering in the temperate regions. Water enters into the rocks and turns into ice and enters deep into rocks. At night when the temperature drops, the water freezes again widening the cracks.

In hot and humid regions, water containing oxygen from the air may change iron in rocks to iron oxide or iron compounds.

Rain water when mixed with carbon dioxide in the atmosphere forms a weak solution of carbonic acid which acts on limestone and chalk resulting in the formation of calcium bicarbonate which is easily washed away in solution.

9) What is meant by Soil? State the methods adopted to prevent soil erosion.

Ans) The thin top most layer of the earth's crust made up of fine rock particles and organic matter is termed as soil.
Method adopted to prevent soil erosion are:-

- Improved techniques of agriculture such as Contour method, Terrace farming, Crop rotation, Planting of cover crops etc to be adopted.
- Construction dams and barrages:- This check the speed of water and saves soil from erosion
- Afforestation: By increasing area under forest can also prevent soil erosion.
- Check over grazing: Separate grazing grounds should be provided for cattle.

Extra Questions.

1) Write two constructive effects of weathering.

Ans) Weathering leads to soil formation which is required for agriculture.

Chemical weathering gives rise to many new minerals having economic value.

Weathering provides building materials like cement and limestone.

2) Write the factors responsible for soil formation.

Ans) Formation of soil depends on-

(a) Nature of parent rock: The colour, texture, chemical properties, mineral content and permeability of soil depends on the parent rock.
(b) Relief- Altitude and slope of the land determines the accumulation of soil.
(c) Climate- Temperature and rainfall also influence the rate of weathering and erosion.
(d) Vegetation- It determines the quantity of humus and micro organism in the soil which also includes the flora and fauna.
(e) Time- It determines the thickness of the soil.

3) Write the various importance of rocks.

Ans) Rocks are used for building materials
Rocks on disintegration break up into fine particles which form soil
Rocks contain precious metals like gold and silver.

4) Write the difference between.

a) Igneous rocks and Sedimentary rocks

Igneous rocks

(i) They are formed from the molten magma which solidified on either side or on the outer surface of earth.
(ii) They are compact and do not wear out easily
(iii) We get ores which are valuable to man. Ex. Basalt, granite, pumice etc.
(iv) They are of two types. Intrusive and Extrusive igneous rocks.

Sedimentary rocks

(i) They are formed from the Sediments accumulated over long period due to the action of wind, running water and glacier.
(ii) They are easily broken and can be transported to other places.
(iii) We get rocks like- Sand stone, slate, gypsum. Petroleum is also an example of it.
(iv) They are of three types. Mechanically formed, chemically formed and organically formed sedimentary rocks.

b) Physical and chemical weathering.

Physical weather:

(i) Rocks are disintegrated
(ii) There is no chemical change in rocks.
(iii) Rocks are affected to greater depth.
(iv) Effective in cold, dry areas.

Chemical weathering:

(i) Rock are decomposed.
(ii) Rocks undergo chemical change
(iii) Only the rocks near the surface are affected.
(iv) Effective in hot and humid areas.

Chaper-7 Europe

Answer the following (Book questions)

1) State the location and extend of Europe.

Ans) Europe lies entirely in the temperate zone of the Northern Hemisphere. It extends from 36 ^{o} N – 72 ^{o} Latitude and 25 ^{o} W – 60 ^{o} E longitude.

2) Name two counties which are called Balkan states.

Ans) Serbia and Greece are a part of Balkan State.

3) Give two examples of new fold mountains in Europe.

Ans) The Alps and the Andes.

4) Name the low land countries. Why are they called so?

Ans) The countries of the Netherlands, Belgium and Luxembourg are called low countries because they are made up of low lands. A part of it is below the sea level and are situated at a lower altitude.

5) Which country is called Holland? Where is it located?

Ans) The Netherlands is called Holland. It is located in the Benelux countries or low countries.

6) Which countries occupy the Iberian Peninsula? Where is it located?

Ans) It includes the Sovereign states of Spain, Portugal, Andorra, Parts of France as well as the British overseas territory of Gibraltar.
It is locate dint he extreme south west of Europe.

7) Name the countries included in United Kingdom.

Ans) England, Scotland, Wales and Northern Ireland are the countries included in UK.

8) Name the tree countries bordering the Baltic sea.

Ans) Estonia, Lithuania and Latvia are the three countries bordering the Baltic sea.

9) What are the objectives of European Union? When was it formed?

Ans) It was formed on November 1.1993 by the Treaty of Maastricht with 28 member countries. Its objective is to achieve political unity and economic integration.

Main Objectives:

- It was formed for the purpose of achieving political and economic integration reducing trade barrier and increasing co operation among its members.
- They agreed to reduce green house gas reduction.
- To provide protection of natural environment and the exploitation of alternative energy source.
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10) Name the physiological division of Europe.

Ans) The physiological divisions of Europe are :-

- North Western Highlands
- Central Plains
- Central Highlands
- Alpine Mountain System

<u>Give reasons</u>

a) Europe is called Peninsula of peninsulas.

Ans) A peninsula in itself Europe is made of a few more peninsulas lying along the coastline- The Scandinavian Peninsula, the Iberian Peninsula and the Peninsulas of Greece and Italy with its many islands. So, it is called the Peninsula of Peninsulas.

b) Europe is called dynamic continent.

Ans) Because it has always been home to inventions, discoveries and rapid rate of progress, it has influenced the world politically, economically and culturally.

c) Finland is called a land of thousand lakes.

Ans) Glacial lakes are found in abundance more than 50,000 lakes are found here. So it is called the land of thousand lakes

EXTRA QUESTIONS:

Name the Following

a) Largest fresh water lake in Europe: **Lake Ladogo**
b) The mountain located between Black sea and Caspian sea. **The Caucasus Mountain**
c) The highland around the Baltic sea. **Baltic Shield**
d) Rich soil of Steppeland which is black in colour. **Loess**
e) The backbone of Scandinavian peninsula. **Caledonian mountain**

Chapter-9 Australia

Answer the following.

1) What is meant by term Australasia? What is the other name given to it?

Ans) Australia, New Zealand and the neighbouring islands of the South Pacific Ocean together is named as Australasia.
Oceania is the other name given to it.

2) Name the Political division of Australia.

Ans) Australia is politically divided into six states- New South Wales, Victoria, South Australia, Queensland, Tasmania and Western Australia and two union Territories Northern Territory and Australian Capital Territory.

3) How is Coral reef formed?

Ans) Coral reefs are formed Coral polyps. The Coral Polyps secrete calcium carbonate which accumulates into a ridge like structure formed below the sea level after their death.

4) Name the factors that may cause damage to coral reefs.

Ans) Factors that cause damage to coral reefs are:-

- Human activities like over fishing.
- Global warming is also responsible for the damage to coral reef.
- Irresponsible tourism
- Urban and industrial wastes increase the level of nitrogen in the water which leads to the growth of algae which leads to suffocate the corals.

5) State the importance of Murray darling Basin. From where does it gets its water supply?

Ans) Murray Darling Basin is a rich agricultural area which drains nearly the whole of South East Australia.
It gets its water supply from the Southern Alps.

6) Where is the Great Artisian Basin situated? What is its importance?

Ans) It is situated mainly in the State of Queensland and South Wales.

Importance of Great Artisian Basin are:

- The water of Great Artisian Basin is a major source of ground water supply.
- It is useful for irrigation purpose.

7)State three important conditions for digging an Artesian well.

Ans) Artesian well can be dug only when the following conditions are favourable:-

- The aquafier should be saucer shaped so that the water moves downward in it under the action of gravity.
- There should be a layer of porous rock between two layers of non porous rock.
- The layers of porous rocks should be exposed at the surface of the ground to enable the surface water to got in.
- There should be adequate rains to supply ground water.

<u>Extra Questions.</u>

1) Name the four major physical division of Australia.

Ans) Australia is divided into four physical or relief regions:-

(a) The Eastern Highlands
(b) The Central lowlands
(c) The Western Plateau
(d) The Coastal Plains

2) Write the location and extent of Australia.

Ans) Australia lies entirely in the Southern and Eastern Hemisphere.
It extends from 10 ^{o} S – 44 ^{o} S latitudes and 112 ^{o} E – 154 ^{o} E longitudes.

3) Name the water bodies that surround Australia.

Ans) Australia is surrounded by Indian Ocean on the west, Pacific Ocean on the East. The Arafura Sea and Timor Sea lie to its North and Southern Ocean to its South.

4) Name the parts of the Central Lowlands.

Ans) The central lowlands or Plains extends from Encounter Bay in the South to Gulf of Carpentaria in the North.
It is divided into three parts.

(i) The Murray Darling Basin
(ii) Lake Eyre Basin
(iii) The Carpentarian Lowlands.

5) Write a few lines about the Great Barrier Reef.

Ans) The great Barrier reef is the largest coral reef in the world.
It stretches over 1900 m along the North East Coast of Australia in the Pacific Ocean.
It is made up of Coral polyps.
It is a great tourist attraction but is hazardous for ships and navigation.

<u>Give reasons:</u>

1) Lake Eyre region is called the area of inland drainage.

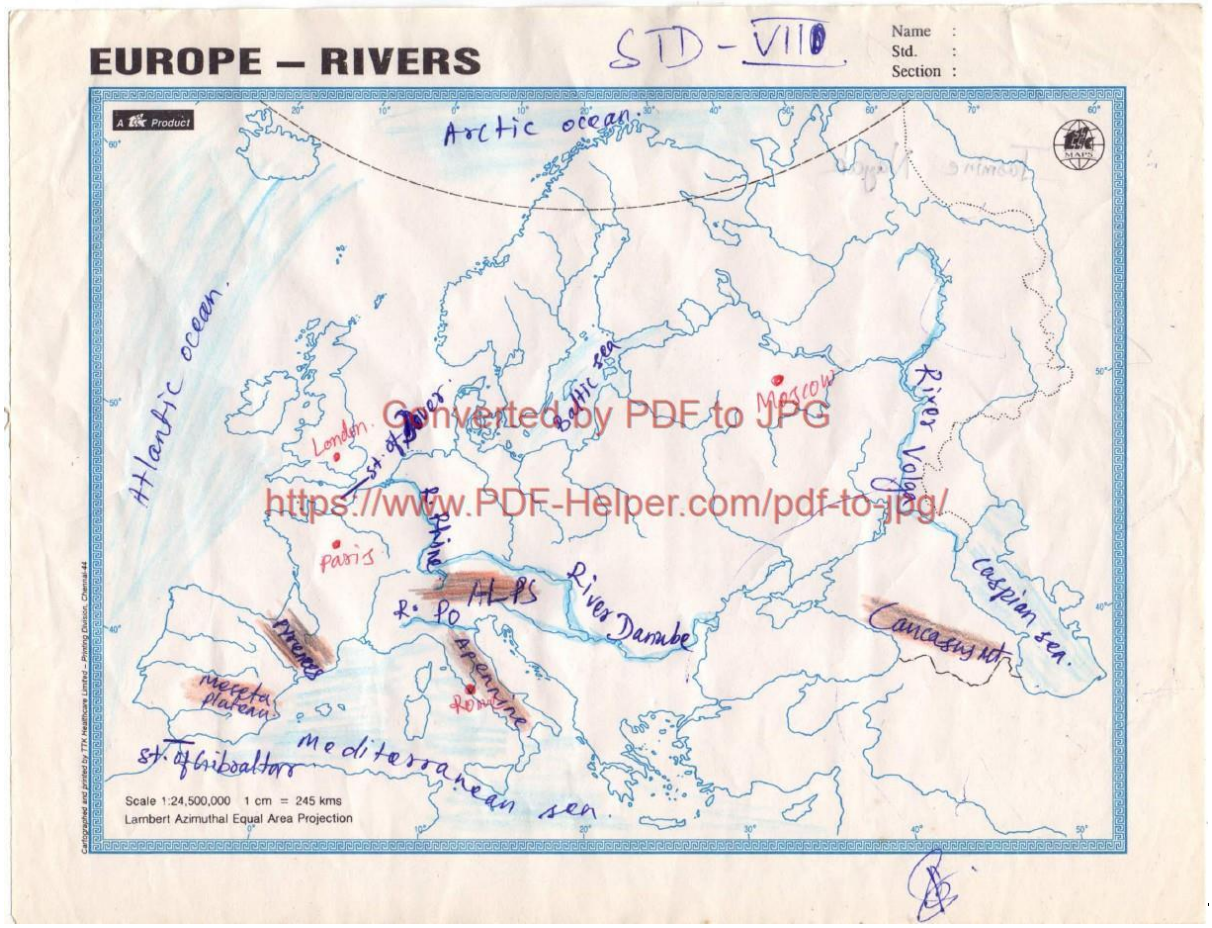
Ans) Because it is a dry area and many rivers disappear here without reaching the sea. It is a vase saucer shaped area of inland drainage.

2) Why is the Great dividing Range called so?

Ans) Because they formed a formidable barrier to the early settlers.

3) Murray Darling basin is a rich agricultural area

Ans) Because it gets ample supply of water from snow fed rivers which drain nearly the whole of south East Australia making it a fertile area.



GEOGRAPHY

2nd TERM

CHAPTER: WEATHER AND CLIMATE

Tick the correct options:-

1 Wind vane is used to find out Direction.

2 The unit of pressure is Mb.

3 Relative humidity is measured by Wet and Dry Bulb Thermometer.

4 Wind speed is measured in knots.

Fill in the blanks:-

1. Meteorological station is a place where weather conditions are recorded with the help of instruments.

2. Rain Gauge is used to measure rainfall.

3. Laboratory thermometer can record the highest and the lowest temperature of a given period.

4. Horizontal movement of air near the surface of the earth is called Wind.

Answer the following questions briefly :-

Q.1 Write the difference between Weather and Climate.

Ans. Weather:-

*Weather refers to a short-term condition of the atmosphere.

*It is not static but keeps changing from time to time. It cannot be generalised.

*Study of weather is called meteorology.

Climate:-

*Climate is the average weather conditions over a long period of time.

*Since climate refers to average conditions, it can be generalised.

*Study of climate is called climatology.

Q.2 Name the important elements of weather?

Ans: Temperature, Wind, Atmospheric pressure, Humidity, Precipitation, Cloud cover.

Q.3 What is the difference between diurnal range of temperature and annual range of temperature ?

Ans: Diurnal temperature – The difference between the maximum and minimum temperature of a day.

Annual temperature – It is the difference between hottest and coldest month of a year.

Q.4 What are the instruments used for measurement of the following;

a) Pressure b) Wind speed c) Rainfall d)Humidity e) Temperature

Ans. a) Pressure—Barometer

b) Wind speed—Anemometer

c) Rainfall –Rain Gauge

d) Humidity – Hygrometer

e) Temperature – Thermometer

Q.5 State the use of Wet and Dry Bulb Thermometer.

Ans: The relative humidity of the atmosphere at a particular place can be measured with the help of a Wet and Dry bulb thermometer.

Q.6 What is the purpose of the meteorological station ?

Ans: We often hear these weather forecasts on radio and television. Their reports are based on the data collected by weather bureaus or meteorological stations.

Q.7 What is the purpose of Anemometer?

Ans: It is used to measure the wind speed.

Q.8 What are weather maps used for?

Ans: Weather maps are used to show various meteorological features like Isotherms, Isohyets, etc.

Extra Questions:-

1. How is cloud cover responsible for affecting weather conditions?

Ans: During the daytime, a cloud covered sky reflects the sunshine and reduces insolation and also the amount of heat received. It also prevents the radiation from the Earth's surface for in which cloudy days and nights are warmer than cloudless ones.

2. What do you mean by atmospheric pressure?

Ans : Air has weight and exerts pressure on the Earth's surface. This is known as air pressure or Atmospheric pressure.

3. What is Precipitation ? What are the different types of precipitation ?

Ans. When clouds gets loaded with water vapour, they can no longer remain suspended in the air, so they come down on the Earth as tiny droplets. This is called precipitation. The different types of precipitation are rain, snow fall, hailstorm, sleet, drizzle, etc.

4. What causes Wind?

Ans : Wind is caused by differences in the atmospheric pressure and an uneven heating of the Earth's surface.

5. What are the factors that determine the temperature of a place?

Ans. The factors that determine the temperature of a place are:

1. Latitude,

2. Altitude,

3. Distance from the sea,

4. Direction of winds and

5. Ocean current

Q.6 What is temperature?

Ans. Temperature can be defined as the degree of hotness or coldness.

Q.7 How does latitude determine temperature?

Ans. The insolation decreases from the equator towards the poles due to the curvature of the Earth and angle of the Sun's rays. At the equator, the sun is overhead, so its heat is concentrated on a small area. Towards the poles, the sun shines at an angle. The solar energy spreads over a larger area and the temperature is lower.

Q.8 Why is weather unpredictable?

Ans. Because it changes in a short span of time.

Q.9 What are the different types of heating?

Ans. The atmosphere gets heated up by three processes: radiation, conduction and convection.

Q.10. What is insolation?

Ans. Radiation is the process of heat transfer from a hot body to a colder body without heating the space between the two. The radiant heat energy received by the Earth from the sun is called Insolation.

Q.11 What is terrestrial radiation?

Ans. Radiant energy from the sun first heats up the Earth's surface. Then ,the heated surface in turn warms up the air above it. This further raises the surface temperature to a comfortable 15 degree C. Layer by layer , the air is slowly warmed up as some amount of this heat is reflected by the dust particles and the air. This is called terrestrial radiation.

Q 12 What is wind ?

Ans. The horizontal movement of air is called wind.

Q 13 What is Coriolis force ?

Ans. As winds keep blowing on the earth's surface their directions is affected by the force created by the rotation of the earth this force is known as Coriolis force.

Q.14 Define Ferrell's law.

Ans. The Coriolis force is responsible for the deflection of winds to the right of its line of motion in the northern hemisphere and to the left of its line of motion in the southern hemisphere . This is called Ferrell's law .

Q.15. Classify clouds according to their shape and form.

Ans. Classification of cloud according to their shape and form are-

a) Cirrus or Cerro means feather-like.
b) Alto means medium clouds.
c) Stratus or strata means a layer or layer-like.
d) Nimbus or Nimbo means rain.
e) Cumulus or Cumulo means a heap or globular

B. Define:

i) Weather : Is the condition of the atmosphere at a particular place over a short period of time . The state of the atmosphere of a place over a short period of time.

ii) Climate : The average of the atmospheric conditions pf a large area over a long period of time.

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CHAPTER: INDUSTRIES

Tick the correct option:-

1. The port nearest to the Tata steel Company is Kolkata.

2. Detroit is located in the state of Michigan.

3. Which is the leading shipbuilding yard in the S.E Asia? S. korea.

4. The main raw material of iron & steel industry Dolomite.

5. Bhilai Steel plant was set up with collaboration of Russia.

Fill in the blanks:-

1. Cuba is a major producer of Sugar.

2. Bengaluru is the chief centre of IT industry.

3. UK is known as birthplace of modern textile industry.

4. Osaka is known as Manchester of Japan.

5. The first successful textile mill was set up in England in Europe

Match the following:-

1. IBM ---- Information and Technology

2. Ahmedabad ---- Textile Industry.

3. Durgapur ---- Iron and steel industry.

4. Sugar Industry ---- Cuba.

5. USA ---- Silicon valley.

Write True or False for the following:-

1. Osaka is situated in South Asia. – False

2. The Tata steel is situated in Mumbai – False

3. Detroit is famous for Automobile industry. – True

4. The IT industry is situated in Jharkhand – False

5. Bengaluru is called as IT capital of India – True

Answer the following in brief:-

1. State any three raw materials required for iron and steel industry.

Ans: The basic requirement s for the development of iron and steel industry are raw materials like iron ore, limestone, dolomite, manganese.

2. How industries pollute our water resources? State any one preventive measures.

Ans: i) Industrial waste is a major source of water pollution. Various industries like chemicals, paper, tanning, dyeing, textiles, sugar, jute, steel, oil refineries, etc. produce millions of tons of industrial waste, both in solid and liquid form. The entire waste is thrown into the water bodies. This waste affects the surface water as well as groundwater.

ii) The industries should be provided waste treatment facilities.

3. Name any two largest producers of cotton textile.

Ans: U.K and U.S.A

4. Why is cotton textile concentrated in Maharashtra and Gujarat?

Ans: The ideal geographical factors such as black soil, plenty of freshwater, transport facility and rich hinterland are some of the factors for the development of the textile industry in this region.

5. What are the key elements of Information technology ?

Ans: IT, more than any other industry or economic facet, has greater productivity, particularly in the developed world and therefore it is a key driver of global economic growth.

6. What is the difference between information technology and software industry?

Ans: Information technology – The study or use of electronics equipments, especially computers for collecting storing and sending out information.

Software industry – It is a set of instructions, data or program used to operate computer and execute specific tasks.

7. State any three advantages of industrialization.

Ans: Higher economic growth, improved national income and Higher standard of living.

8. What is the difference between agro-based and mineral based industry? Give one example of each.

Ans: Agro based industries – Industries that depend on agricultural products for their raw materials are known as Agro based industries. Ex-Sugar Industry/cotton industries.

Mineral based industries – Industries that depend on minerals for their raw materials are known as mineral based industries. Ex- Iron and steel industry.

9. Where is the famous ship-building yard located? Where is ship-building industry located in India?

Ans: South Korea. Vishakhapatnam, Kolkata and Mumbai.

10. Define mini steel plant.

Ans: Steel plants that do not do all the processes under one complex are known as mini steel plants. They use scrap iron and sponge iron which is easily available. They are decentralized secondary units. They are electric furnaces instead of blast furnaces.

11. State any three problems of sugar industries.

Ans: i) Lack of transport facilities.

ii) Perishable goods so the sucrose contains decreases if it is not reaching to the mills within 24 hrs.

iii) Old machines and unskilled labours.

12. Name the by products of sugar industry with one use each.

Ans: Molasses – for the DDT, pesticides and alcohol.

Pressmud – Shoe polish, wax, card board.

Extra Questions:-

1. Write the differences between Large scale and small scale industries.

Ans: Large scale – i) Large no. of workers

ii) Large Production

iii) Huge Investment

Ex. Iron and steel industry, automobile industry.

Small scale – i) Few workers

ii) Less production

iii) Comparatively less investment

Ex. Rice Mill, Flour mill, bakery, etc

2. Differentiate between Public sector and Private sector industries.

Ans: Public sector – Industries that are owned and controlled by the government.

Private sector – Industries that are owned and controlled by private industrialists.

3. Differentiate between Heavy and Light Industries.

Ans: Heavy – Industries which use heavy Raw materials, large amount of power and involve huge investment.

Light – Industries not using heavy raw material and whose finished products are not too big.

4. What are the factors affecting the location of industries?

Ans: Factors affecting the location of industries:

a) Geographical factors – Raw materials, power supply, labour, water supply, transport, market site, climate, etc.

b) Non- Geographical factors – Capital, Government policies, bank and credit facilities and an efficient organization.

5. How are pollutants formed?

Ans: Pollutants are formed by burning of coal, combustion of oil, use of chemicals, smelting, oil refining.

6. What are the major air pollutants?

Ans: Major air pollutants are nitrogen oxide (combustion of oil), Sulphur dioxide (burning of coal), carbon monoxide(combustion of oil), lead oxide(automobile) and particulate matter (dust, smoke, fumes, bacteria,etc).

7. What are the advantages Bengaluru has the location of IT industries.

Ans: Bengaluru has the location of IT industries due to :

i) Presence of many high-tech industries.

ii) Highly educated and skilled labour force.

iii) Strong educational system for science and engineering.

iv) It has mild climate throughout the year.

8. Where can an automobile industry develop?

Ans: It can be developed where there is abundance of cheap and skillful labour, good demand and easy availability of power supply.

9. What is fishing industry?

Ans: The fishing industry includes any activity concerned with catching processing, preserving, storing, transporting, marketing, or selling fish or fish products.

10. What are the processes involved in making cloth?

Ans: Carding (to make fibre parallel), spinning (to make yarn), weaving (to turn yarn into cloth), dying and processing.

11. Name the oldest steel plant of India in Private sector.

Ans: Tata steel is one of the oldest steel plants in the Private sector.

12. What is manufacturing?

Ans: The process by which the natural products are made convienient for human use are called manufacturing.

OR

The conversion of raw material into finished products with the help of machinery is called manufacturing.

CHAPTER: ENERGY AND POWER RESOURCES

Tick the correct option:-

1. Fossils fuels are found in Sedimentary rocks.

2. Most of the minerals of India are found in the Chottanagpur plateau

3. Hydel power is Conventional energy.

4. Mumbai High is located in Arabian Sea.

5. Bituminous coal is used for Industrial purpose, Domestic purpose and electricity generation.

Fill in the blanks:-

1. Fossil fuels are found in Sedimentary rocks.

2. Coal is a Conventional power resource.

3. Wind energy is used for producing mechanical energy.

4. Solar energy is Renewable source of energy.

5. Coal is a non- renewable source of energy.

Answer in Brief:-

1. Give three ways to save energy.

Ans: i) Energy can be conserved by reducing wastage and losses, improving effieciency through technological upgrades and improved operation and maintenance.

ii) At home, simple actions such as turning off lights and unplugging computers or turning off television can help us reduce our daily consumption of energy.

iii) Carpooling must be encouraged to save fuel. It will also help in reducing pollution.

2. State any three advantages of solar power.

Ans: i) Solar energy is a resource that is not only sustainable for energy consumption, it is indefinitely renewable.

ii) Solar power does not cause any pollution.

iii) Solar panels require little maintenance.

3. State any three uses of biogas.

Ans: Domestic fuel, Lighting streets and homes and bio fertilizer.

4. Why should we conserve coal and petroleum?

Ans: i) Important source of energy as they provide more heat and energy than the renewable sources of energy.

ii) They are non renewable energy resources so they may exhaust.

5. Why do we grow trees around the industries?

Ans: To prevent air pollution by taking on the carbon dioxide from industries and by giving out oxygen.

6. What is the significance of Bhakra Nangal Project?

Ans: * It provides electricity for industrial, agricultural and domestic use.

*This project has helped in controlling floods in the river Satluj downstream.

*The other benefits are soil conservation, afforestation, development of fish culture and increase in the production of food crops and cash crops.

7. Write a note on the advantages and disadvantages of multi purpose projects.

Ans: Advantages –i) It is a renewable source of energy.

ii) Dams store excess rainwater, thereby lessen the risk of flooding.

iii) Lakes and land behind the dam are used for boating and other recreation facilities, such as wildlife sanctuaries.

iv) It generates electricity.

v) There is little pollution.

Disadvantages:

i) Dams are expensive to build.

ii) They are risky as heavy pressure of water may result in bursting of dam.

iii) Their construction may render people living around rivers homeless.

Extra Questions:-

1. Name the methods by which we can save energy?

Ans : Reduce, Recycle, and Reuse

2. Name the countries which have developed wind power?

Ans: China/ Germany/ Spain

3.What are the factors necessary for the installation of hydroelectric power plant?

Ans :

- Mountains or hilly areas for water to fall from a great height.
- A perennial supply of abundant water ensued from perennial, snow fed rivers
- The climate should be suitable ie : the rivers should not freeze during winter

4. Write three advantages of Hydel Power?

Ans :

- It is a renewable source of energy
- It generates electricity
- It causes little pollution

5. What are different types of energy resources?

Ans. There are two types of energy resources- conventional and non-conventional.

6. What are conventional resources?

Ans. Conventional resources are those which have been in use for quite some time. They produce bulk of energy, but cause lot of pollution. Firewood, coal, petroleum and natural gas are conventional sources of energy.

7. What are non-conventional resources?

Ans. Non-conventional sources of energy are renewable or inexhaustible. These energies are environment friendly and have been in existence but their total share is very less. Example –solar, wind, tidal and water

8. Why are non-conventional sources of energy called “renewable”?

Ans. Non-conventional sources of energy are replenished faster than they are consumed, hence they are said to be “renewable”

9. Write three advantages of non-conventional sources of energy.

Ans. Advantages of non-conventional sources of energy are:

1. They are inexhaustible and freely available.
2. They are clean fuels and do not cause pollution
3. They can be expensive to install in the beginning, but in the long run, they are cheap.

10. State two disadvantage of Wind energy.

Ans. The two disadvantage of wind energy are

- The initial installation of wind mills is quite expensive.
- Wind does not blow continuously which makes this source of rather unreliable.

11. What are the various purposes of river valley projects?

Ans. The various purposes of river valley projects are

- Irrigation
- Water supply for drinking and industrial purpose
- Flood control
- Navigation
- Recreation

12. On which rivers Bhakra Nangal Dam, Hirakud and Sardar Sarovar Dam constructed.

Ans. Bhakra Nangal Dam-Sutluj river

Hirakud Dam-Mahanadi river

Sardar Sarvor Dam-Narmada river

13. State the disadvantages of Solar Energy.

Ans. 1. Solar power cannot be generated during the night or during the rainy season when the sky is clouded.

2. The initial costs of installing solar panels in quite expensive.

B. Define:

i) Conservation: Wise and judicious use of resources to avoid wastage.

ii) Conventional power resources: Power resources which have been in use for a long time.

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CHAPTER: AFRICA- LOCATION, POLITICAL DIVISIONS AND PHYSICAL FEATURES

Tick the correct one:-

1. River Nile originates in Victoria.

2. The northern part of Africa is a Plateau.

3. Mount Rwenzori is a Block mountain.

4. The most prominent physical feature of Africa is Rift Valley.

5. The longest river in the world is Nile.

Answer in One word:-

1. A narrow strip of land separating two seas. Isthmus

2. A sudden fall of water from a certain height. Water fall

3. A narrow stretch of water connecting two seas. Strait

4. A region of tall and coarse grass in tropical Africa. Savannah

5. Temperate grasslands of South Africa. Veld

6. A narrow steep sided valley formed between two parallel faults. Gorge

Match the following:-

i) Ghana ---- Accra

ii) Kenya ---- Nairobi

iii) Ethoipia ---- Addis ababa

iv) Sudan ---- Khartoum

v) Zambia ---- Lusaka

Fill in the blanks:-

1. The White Nile is the tributary of river Nile.

2. River Nile is 6670 km long.

3. The Nile delta is 250 km wide.

4. Fold mountains are remnants of ancient old fold mountains.

5. Africa is called a Dark Continent because it could not be explored by the Europeans.

6. Himalayas is the highest mountain in the world.

Answer in brief:-

1. Name the three important parallels of latitudes which pass through Africa.

Ans. Tropic of Cancer, Tropic of Capricorn and Equator.

2. State the latitudinal and longitudinal extent of Africa.

Ans. Latitude - 37^0 N to 35^0 S ; Longitude- 17^0 W to 51^0 E

3. Name the water bodies surrounding the continent of Africa.

Ans. It is surrounded by many water bodies – in the north by the Mediterranean Sea, in the northeast by the Red Sea, in the east by the Indian Ocean and in the west by the Atlantic Ocean.

4. Why is Africa called the dark continent? State any two reasons.

Ans. It is called as dark continents because of its Dense Forests, Marshes, swamps and vast deserts.

5. State the four physiographic divisions of Africa.

Ans. a) Sahara and Kalahari desert

b) Rift Valleys

c) The Basins – Congo Basins, Orange basin and Chad basin.

d) The mountains – Fold mountains, Block mountains and Volcanic mountain.

6. Name any three basins of Africa.

Ans. Congo basin, Orange basin and Chad basin.

7. What is extent of the Great Rift Valley of Africa? Name any two lakes situated within the area of Rift Valley.

Ans. The great Rift Valley of Africa is about 6440 km long extends from Red Sea to River Zambezi in the south. Lake Tanganayika and Lake Malawi.

8. Why is Egypt known as the Gift of Nile?

Ans. As Egypt lies in Sahara Desert and River Nile is the only source of water for drinking and cultivation. It is also a perennial river.

9. Why is River Zaire not fit for navigation? Name its tributaries.

Ans. It has many falls and rapids hence, it is not fit for navigation.

Ubangi and Kasai are its tributaries.

10. From where does river Nile originate? Name its main tributaries.

Ans. River Nile originates in Lake Victoria. White Nile and Blue Nile are its main tributaries.

Extra Questions:-

1. How the rivers of Africa can be harnessed for hydroelectricity?

Ans. The rivers of Africa can be harnessed for hydro electricity because the rivers of Africa are perennial rivers and dams can be built on them.

2. What were the factors that made it difficult for the explorers to venture into the continent of Africa?

Ans : Dense tropical forests and mashes inhabiting dangerous wild animals, insects, steep plateaus, in the North lies Sahara desert, absence of natural herbivorous animals

3. Name cold and warm currents that affect the climate of Africa.

Ans. The cold currents washes the north west coast of Africa while the Banguela current washes the shores of north west Africa and has a cooling influence on the adjacent land . Winds blowing over these cold currents become cold and do not pick up moisture

4. What are the major physical regions of Africa?

Ans. Africa has five major physical regions:

1. Desert area
2. Ethiopian Highlands- Mountains and Plateaus
3. The Great Rift Valley
4. Plains
5. River Basins

5. Name the major mountain ranges of Africa. Describe.

Ans. The Atlas Mountains lie in north-western Africa. They are young fold mountains consisting of three parallel ranges- the Tell Atlas in the north, the High Atlas in the middle and the Sahara Atlas in the south.

6. Name the lakes found in the Great Rift Valley.

Ans. The lakes found in the Great Rift Valley are Lake Malawi, Lake Mobutu, Lake Edward and Lake Rudolf.

7. How many groups does the river of Africa divide into?

Ans.The river of Africa may be divided into three groups:

a) Those that drain northwards
b) Those that drain westwards
c) Those that drain eastwards

8. The rivers of Africa are not very suitable for navigation in their lower course. Why?

Ans. The rivers have many rapids and waterfalls making them unfit for navigation.

9. The river Nile flows through a desert and yet has water throughout the year. Why?

Ans. River Nile has water throughout the year because its source is Lake Victoria which lies in the rainy equatorial region.

10. What is an oasis?

Ans. An oasis is a hub of water in the desert.

CHAPTER: ANTARCTICA

Fill in the Blanks:-

1. The first Norwegian expedition to Antarctica was led by Captain Carl Anton Larsen in 1892.

2. Antarctica Treaty was signed in 1959.

3. The Waddell and Ross seas deeply penetrate the continent from opposite directions.

4. The highest mountain of the continent is the Vinson Massif in Ellsworth land .

5. The Adelle and Penguins are the most common flightless birds.

Answer the following in one word:-

1. The continent of Antarctica covered with thick ice sheets Permafrost.

2. Large floating and drifting blocks of ice in the ocean Iceberg.

3. Indian scientific research station in Antarctica in 2013 Bharati.

Match the following:-

1. Iceberg ---- Antarctica

2. Bharati ---- 2013

3. Vinson Massif ---- Highest point

4. Adelie Penguin ---- Flightless birds

5. Mosses and Litchens ---- Vegetation.

State whether the following statements are True or False:-

1. The Antarctica is the coldest of all the continents. True

2. The Antarctica Treaty was signed in 1959. True

3. The vegetation in Antarctica consists of coniferous forests. False

4. Maitri Station is an Unmanned Indian station on Antarctica. False

5. The Antarctica is a temperate desert. True

Answer the following in brief :-

1. Why is Antarctica called White Continent?

Ans: A Thick ice Cap covers over 98 % of the continent permanently.

2. Describe the climate conditions of Antarctica.

Ans: i) The Antarctica climate is the severest of all the continents. It experiences extreme cold, frost, howling snow storms and winds.

ii) The temperature in Antarctica interior are -28^{0}C in summer in January and -50^{0}C in Winter (July).

iii) Humidity in Antarctica is very low as the moisture in air freezes.

3. State the main purpose of the Antarctica Treaty.

Ans: The Antarctica Treaty was signed in 1959 by 12 countries. The treaty prohibits military activities, mineral mining, nuclear explosions and nuclear waste disposal. This treaty supports scientific research and protects the continent's ecozone.

4. Why is the climate of Antarctica not suitable for vegetation and cultivation?

Ans: Antarctica is a cold desert. Therefore entire Antarctica flora is represented by mosses, lichens and small flowering plants. The permanent severe frosts and very cold winds prevent any distribution of plant species.

5. Why is continent of Antarctica known as continent of science?

Ans: Antarctica provides an excellent opportunity for the conduct of scientific researches for the benefits of mankind. Projects on the origin of continents, climate change, meteorology, Earth science, oceanography, biodiversity and environment physiology, medical science, mapping, pollution, etc. are the main areas of research here. Thus Antarctica is often called as Continent of Science.

6. State the future prospects of the continent of Antarctica.

Ans: Antarctica is fully protected from mineral exploitation and conflict under the Antarctica Treaty. It is a continent dedicated to peace and science. The Environmental Protocal (1991) has ensured comprehensive protection of Antarctica. However, as energy/mineral reserves and fishing resources are exhausted or depleted and tourist numbers on Antarctica continue to escalate, the pressure to exploit

Antarctica’s natural resources on land and in the ocean is likely to increase in the future.

7. Describe the location and extent of Antarctica.

Ans: It is the fifth largest continent. It is situated in the Antarctica region of Southern Hemisphere, almost entirely south of the Antarctic circle and is surrounded by the Southern Ocean having area approximately 14,000,000 sq.km.

8. Describe the physical features of the continent of Antarctica.

Ans: There are no coastal plains. The Transantarctic mountains divide the continent into two parts.

The smaller and narrower western part is called Lesser Antarctica and the larger eastern part is called Greater Antarctica. Mount Erebus on Ross Island is Antarctica’s second highest active volcano. Mt. Sidley is the highest volcano on Antarctica. A plateau called Queen Maud land is located along the coastal area on the eastern side of the continent. Recently over 70 lakes have been discovered and among the largest ones is Lake Vostok.

9. Write a short note on the discovery of Antarctica.

Ans: In 1773, James Cook crossed the latitude of $67^0$15’S along the Antarctica circle for the first time but although he discovered nearby islands, he did not catch sight of Antarctica itself. In 1820, several expeditions claimed to have been the first to have sighted Antarctica, with the very first being the Russian expedition led by Fabian Gottlieb von Bellingshausen and Mikhail Lazarev. The first Norwegian expedition to Antarctica was led by Captain Carl Anton Larsen in 1892. Finally a Norwegian explorer, Roald Amundsen with his team reached the South Pole on December 14, 1911 following a dramatic race with the Englishman Robert Falcon Scott.

10. Why is Antarctica uninhabitable for human beings?

Ans: Antarctica's freezing climate, barren glacial coasts, with not a drop of freshwater to drink, isolated from the world, makes it impossible for normal life to survive.

Extra Questions:-

1) Why is Antarctica considered a Unique Continent?

Ans : As it the highest , driest , coldest and windiest continent of the world. Antarctica is the highest as thick larger that covers most of the continent which gives it an exemplary height.

It is driest with an annual of only 200 km along the coast and far less inland.

It is the coldest as the average summer temperature is below 0°C.

It is the windiest due to strong winds blow over the continent as there is no vegetation to check the wind

2.Why are minerals difficult to extract in Antarctica ?

Ans. Antarctica is covered by ice sleets. At its thickest point, the ice sleet is 4,776 metres deep and the average thickness is 2,106 metres. It is believed that 95% of the world's total ice is found here so it is difficult to extract minerals here.

3. How do animals living in Antarctica survive the cold ?

Ans. Animals living in Antarctica like penguins, whales and seals have thick layers of fat called blubber. Blubber acts as an insulator, helping to keep the animals warm. Antarctic animals often have small extremities (flippers and feet) to reduce heat loss.

4. Why has Antarctica been named the 'continent for science'?

Ans. Projects on the origin of continents, climate change, meteorology, Earth Science, Oceanography, biodiversity and environment, physiology, medical science, mapping pollution etc are

the main areas of research here. Thus Antarctica is often called the ‘continent for science’.

5. There are no permanent settlements in Antarctica comment.

Ans. Antarctica is a frozen, windswept continent, so remote and hostile in environment that it has no permanent in habitants. The protocol on Environmental protection (1991) which protects the continent, would have to be considerably modified, it permanent habitation is to be allowed.

6. Differentiate between East Antarctica and west Antarctica.

East Antarctica	West Antarctica
The East Antarctica covering about two – thirds of the continent is called greater Antarctica, It is mainly a high ice-covered plateau.	The smaller western part is called lesser Antarctica and is mainly an archipelago of islands covered and held together by ice.

7. There are no permanent settlements in Antarctica? Comment.

Ans: Antarctica is a frozen, windiest continent so remote and hostile in environment it has no permanent settlement**.**

AFRICA – RIVERS

Name :
Std. :
Section :