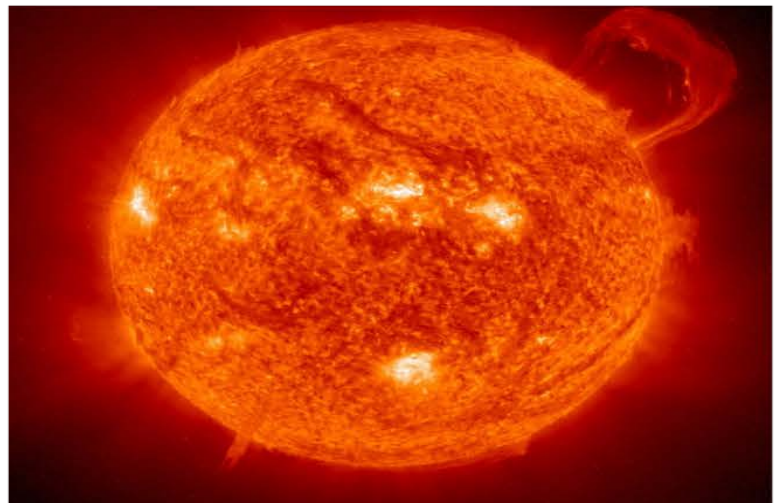




# **GEOGRAPHY**

*FOR*  
Senior Secondary School

# **2**



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**SS 2**  
**FIRST TERM NOTES ON**  
**GEOGRAPHY**

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## Week 1

### Topic: Action of running water

#### Content

1. Factors affecting the velocity of rivers
2. Process of river erosion
3. Processes of River Transportation
4. Importance of rivers to man

Running water is one of the most important agents of denudation. Rivers involve erosion, transportation and deposition of minerals.

#### Factors affecting the Velocity of a River

1. The higher the volume of water released by a river, the higher the velocity, however as the volume decreases during dry period, the velocity also decreases
2. The steeper the slope, the higher the velocity of water in the river
3. A river uses more energy to flow through a flat – wide valley than through a narrow – deep valley because the former has a large surface area
4. The greater the speed of river, the greater the materials or loads it can carry or move

#### Processes of River Erosion

The erosive work of a river consists of four interacting processes which are:

- **Hydraulic action process** is the fast flowing water forces itself into cracks and cavities within the valley under pressure and enlarges the crack
- **Corrosion** is the wearing away of the sides and floor of the river valley with the aid of sand, pebbles, silts and boulders which are being transported. These materials eventually widen and deepen the river valley

- **Attrition** is the wearing down of the load as they collide with one another and with the floor and sides of the valley. Large boulders are broken down into small pieces like pebbles
- **Solution** refers to the chemical action of water on materials it comes in contact with while flowing, rock salts are dissolved and carried away in solution

### Processes of River transportation

The load of a river is carried or transported along four main processes, these are:

1. **Solution:** Some rock materials dissolve in water and there are carried in a solution from the upper to lower course of river
2. **Suspension:** The lighter particles of solid materials are carried in suspension as the water flows
3. **Salutation:** In this process, larger particles are moved in series of hops or jumps along the stream bed
4. **Traction:** In this process, very large fragments of materials are rolled or pushed along in the river



### Delta

Delta is a fan shaped alluvial plain formed as a result of deposition of the fine materials by a river as it reaches or enters the sea or ocean.

### Importance of Delta to man

- Delta provides good agricultural land especially for cultivation of rice, oil palms and raffia palm e.g River Niger

- Delta is also good for fishing
- Delta is equally good for petroleum mining

### **Types of Delta**

- **Arcuate delta:** These consist of both coarse and fine sediments and have the shape of an inverted cone. It is crossed by many distributors. Example is found in Niger
- **Bird's foot delta:** This delta consists of very fine materials called silt with several main distributaries like the foot of a bird extending into a sea. Example is the Mississippi delta
- **Estuarine delta:** This delta is formed when it is partially submerged in coastal waters and there is a direct flow of water into the sea with little or no sediments. Example is Amazon

### **Importance of Rivers to man**

1. Rivers serve as a medium transportation from one place to another
2. River also help in the generation of Hydro electric power
3. Rivers provide water for animal use
4. Rivers aid in the promotion of sport
5. Rivers provide employment (fishing) to many people

#### **Exercise**

1. List the stages which involve in the process of transportation
2. Rivers involve \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_
3. What are the importance of delta to man?

#### **Exercise**

## Week 2

### Topic: Action of Wind

#### Content:

1. Action of wind in desert
2. Characteristics of desert
3. Action of wind erosion
4. Features of wind erosion in the desert

The action of wind is dominant in desert and other semi arid regions of the world. Desert which are associated with aridity (dryness) are caused by low rainfall, high temperature, cold current and high evaporation rate.

#### Characteristics of desert

1. Deserts do experience extreme high temperature during the day and extreme low temperature at night
2. Deserts do experience low rainfall due to cold currents blowing them
3. Deserts do lack dense vegetation cover in deserts because of low rainfall
4. Deserts do experience high evaporation temperature due to the fact that there is high rate of temperature
5. Deserts do experience cold currents.

#### Action of Wind Erosion

Wind erosion is carried out in the following ways:

1. **Deflation:** This is the lifting and blowing away of loose sand and pebbles by wind. Deflation results in the lowering of the land surface to form large depression called **deflation hollows**
2. **Abrasion:** This is the process whereby sand particles carried by wind are used to blast or wear away rock surfaces as in rock pedestal, zeugen and yandang

3. **Attrition:** This is the process whereby wind borne particles collide with one another, resulting in the wearing away of each other. This result in reduced and rounded sizes of the particles.

### **ASSESSMENT**

1. The action of wind is dominant in/on the
  - (a) air
  - (b) forest
  - (c) ocean
  - (d) desert
2. Aridity in deserts are caused by the following except
  - (a) low rainfall
  - (b) low humidity
  - (c) high temperature
  - (d) cold current
3. Which of these statements is true
  - (a) deserts experience high temperature during the day and low temperature at night
  - (b) deserts experience low temperature during the day and high temperature at night
  - (c) deserts experience high temperature during the day and high temperature at night
  - (d) deserts experience low temperature during the day and low temperature at night
4. \_\_\_\_ is the lifting and blowing away of loose sand and pebbles by wind
  - (a) attrition
  - (b) deflation
  - (c) inflation
  - (d) abrasion
5. The process whereby wind borne particles collide with one another is
  - (a) attrition
  - (b) deflation

- (c) inflation
- (d) abrasion

**ANSWERS**

1. d
2. b
3. a
4. d
5. a

## Week 3

### Topic: Action of Glaciers

#### Content:

1. **Action of Glacier erosion**
2. **Features of Glacier erosion in the Highland**

#### **Action of Glacier Erosion**

The action of glacier as an important agent of erosion, transportation and deposition of materials that is confined on mountaineous and temperate regions of the world.

The action of glacier is carried out in the following ways:

- **Sapping:** It is the breaking up of rocks of alternate freezing and thawing of water at the bottom of cracks between a mass of ice and sides and floor of a valley or the sides of a mountain
- **Plucking:** It is the tearing away of blocks of rocks which have become frozen on the sides or bottom of a glacier
- **Abrasion:** is the wearing away of rocks beneath a glacier by the scouring action of the rocks embedded in the glacier

#### **Features of Glacier Erosion in the Highland Areas:**

**Striations:** are scratches or marks left on rock over which glacier passes. Rock fragments or mountain embedded in the glacier affect the striation of rocks

**Corries or Cirque:** is a deep and rounded hollow or depression with steep sides, formed through erosion by ice. They are arm – chair shaped hollows, resulting from plucking of rock materials down the slope. After the ice has moved, it later forms corrie lake

**Arete:** occur when two corries cut back opposite side of the same mountain. Resulting in a knife edge ridge called arête. Arête is therefore a wall ridge like structure separating two corries

**Pyramidal peak:** occurs where three or more corrie cut back on the same mountain. A pinnacle shaped like like pyramid, develops and is called pyramidal peak

**Bergshrund:** is formed at or near head of glacier. It is a deep and vertical crack separating the lower part of a glacier that has started to move down its valley and the upper part which is static.

**U- Shaped Valley or Trough:** is a wide flat floor with very steep side which has been eroded by glacier. All the sides and floor including all debris are washed away by glacier. This results in the formation of a U- shaped valley which forms the main valley

**Hanging Valley:** results when glacier action from tributaries eroded materials into the main or U shaped Valley.

**Rock Basin and Rock Step:** when two tributaries join a main valley, the additional weight of ice in the main valley cuts deeper into the valley floor at the point of convergence, thus forming a rock step. It can also be formed due to the difficulties in resistance to frost action. Rock basin is formed when glacier erodes and excavates the valley floor so deep to form rock basin

**Moraines:** are made up of rocks that are shattered by frost action, embedded in the glacier and brought down the valley. Moraines exist in lateral, medial ground and in terminal forms

## **ASSESSMENT**

1. The breaking up of rocks of alternate freezing and thawing of water at the bottom of cracks between a mass of ice and floor of a valley is
  - (a) erosion
  - (b) abrasion
  - (c) sapping
  - (d) plucking
2. \_\_\_\_ is the tearing away of blocks of rocks which have become frozen on the sides or bottom of a glacier

- (a) erosion
  - (b) abrasion
  - (c) sapping
  - (d) plucking
3. \_\_\_\_ occurs when two corries cut back opposite side of the same mountain
- (a) cirque
  - (b) bergshrund
  - (c) striations
  - (d) arete
4. \_\_\_\_ results when glacier action from tributaries eroded materials into the main or U shaped Valley
- (a) cirque
  - (b) hanging valley
  - (c) striations
  - (d) arete
5. The wearing away of rocks beneath a glacier by the scouring action of the rocks embedded in the glacier
- (a) erosion
  - (b) abrasion
  - (c) sapping
  - (d) plucking

## **ANSWERS**

- 1. c
- 2. d
- 3. d
- 4. b
- 5. b

## Week 4

**Topic: Action of Glaciers (II) for previous note on “Action of Glaciers”**

**see:**

### **Content:**

1. Glacier Erosion in Lowland
2. Features of Glacier Erosion in Lowland

### **Glacier Erosion in Lowland**

**Roche Moutonnee:** are resistant residual rock structures. The surface is striated by ice movement. Its upstream side is smooth due to abrasion while downstream is rough due to plucking. The surface is also rough

**Crag and Tail:** is a mass of hard rock which slopes on the upstream side that protects the softer leeward slope from erosion and later develops to form the tail

### **Features of Glacier Deposition in lowland**

1. **Boulder Clay:** is the ground moraine of the glacier. It generally consists of stones of various sizes and shapes in a mass of sand and clay
2. **Erratic:** are transported rock fragments which are composed of materials entirely different from the bedrock or rock fragments of the region in which they are deposited. They are deposited when the ice carrying them melts into water
3. **Drumlins:** are swarms of oval, elongated whale-back hummocks composed mainly of boulder clay with their elongation in the direction of the ice flow. The shape of drumlins are better described as baskets of eggs

4. **Eskers:** are long, narrow and winding ridges of sand and gravel deposited by melt water streams. They are porous and numerous.
5. **Terminal moraines:** they are made up of boulders which are deposited at the edge of the ice sheet. They are usually form a large debris deposited at the edge of the ice sheet
6. **Outwash plain:** refers to the large area beyond the terminal moraines in sand and gravel, washed down the mountainous zone and deposited in an extensive area. This wide area of sand and gravel is called the outwash plain

## ASSESSMENT

1. The features of a Roche moutonnee include all these except
  - (a) resistant residual rock structure
  - (b) smooth surface
  - (c) surface is striated by ice movement
  - (d) Its upstream side is smooth due to abrasion
2. The large area beyond the terminal moraines in sand and gravel, washed down the mountainous zone and deposited in an extensive area is known as
  - (a) outwash plain
  - (b) drumlins
  - (c) eskers
  - (d) boulder clay
3. \_\_\_\_\_ are long, narrow and winding ridges of sand and gravel deposited by melt water streams
  - (a) outwash plain
  - (b) drumlins
  - (c) eskers
  - (d) boulder clay
4. \_\_\_\_\_ are made up of boulders which are deposited at the edge of the ice sheet
  - (a) outwash plain
  - (b) drumlins

- (c) eskers
- (d) boulder clay

5. \_\_\_\_\_ is a mass of hard rock which slopes on the upstream side that protects the softer leeward slope from erosion

- (a) roche mountanne
- (b) crag and tail
- (c) eskers
- (d) boulder clay

### **ANSWERS**

- 1. b
- 2. a
- 3. c
- 4. d
- 5. b

**Week 5**  
**Topic: Action of waves**

**Content**

1. **Meaning of Wave**
2. **Process of wave erosion**
3. **Features produced by wave erosion**
4. **Features of wave deposition**

**Meaning of Wave**

A wave is an oscillation of water particles. It is the most potent agent of marine erosion. Their actions are confined to coasts of oceans and seas.

**Process of wave erosion**

1. **Corrosion:** This occurs when the mass of fragments carried by wave action erodes the foot of cliffs.
2. **Attrition:** These occurs when the friction between materials transportation by waves wear down themselves to fine pieces of fragments
3. **Solution:** This happens when rock like limestone and chalk dissolve in water

**Features produced by wind erosion**

1. **Cape and Bay:** These are features of marines erosion in coastlines. Cape is the hard rock while Bay is the oft rock. A cape is a prominent projection or cliff protruding into the sea. A Bay is wide opening carrying part of the sea into the land.

2. **Cliff and Wave – Cut:** A cliff is a rock found along the sea coast where the land rises steeply, while a wave-cut is a base of a cliff left as the cliff reaches landwards under the impact of the wave.
  3. **Coastal Cave:** A cave is a hole produced in the regions of local weakness at the base of a cliff. The pressure in the cave increases due to air compression resulting in an expansion hollow with steep sides.
- Other erosional features of waves are arch, stack and stump.

### **Features of wave deposition**

1. **Beaches:** They are made up of sand and gravel deposited by wave action. These deposits of sand and gravels are called beaches
2. **Spits:** A spit is a long narrow accumulation of sand and shingle with one end landwards and the other seawards across the estuary. They are characterized by long narrow ridges e.g. Senegal
3. **A Bar:** It is a deposit of mud, sand and shingle at the offshore parallel to the coast. Example is Fete near Senegal Baraku
4. **Marine Dune and Belts:** They are dunes or sand dune belts resulting from the force of offshore winds which deposited them towards the land.

### **ASSESSMENT**

1. A wave can be defined as
  - (a) moving about of water particles
  - (b) an oscillation of water particles
  - (c) movement of water particles from one location to the other
  - (d) the drying up of water particles
2. \_\_\_\_\_ occurs when the mass of fragments carried by wave action erodes the foot of cliffs
  - (a) solution
  - (b) erosion
  - (c) attrition
  - (d) corrosion
3. \_\_\_\_\_ is a hole produced in the regions of local weakness at the base of a cliff

- (a) crag
  - (b) cave
  - (c) beach
  - (d) bay
4. A long narrow accumulation of sand and shingle with one end landwards and the other seawards across the estuary is known as
- (a) bar
  - (b) beach
  - (c) spit
  - (d) bay
5. \_\_\_\_ is a deposited of mud, sand and shingle at the offshore parallel to the coast
- (a) bar
  - (b) beach
  - (c) spit
  - (d) bay

### **ANSWERS**

- 1. b
- 2. d
- 3. b
- 4. c
- 5. a

## **Week 6**

### **Topic: Climate**

#### **Content:**

- 1. Meaning of climate**
- 2. Factors affecting climate**
- 3. Importance of climate**

#### **Meaning of Climate**

Climate is the average weather condition of a place over a long period of time of about 30years. Climate varies from place to place

#### **Factors affecting Climate**

Climate is influenced by the following.

Factors: Latitude, Planetary Winds and Pressure, Belts, Distance from sea, Altitude and Relief, Ocean Current

- **Latitude:** The sun's elevation is high at the equator. Regions here, called the tropics, are hotter than those within the temperature latitudes. Thus, changes in latitude brings about seasonal temperature changes
- **Planetary Wind and Pressure Belts:** The planetary wind system ensures the movement of winds from the high pressure around the N&S poles of equator to the low pressure belts around the equator. Planetary wind movement determines precipitation, humidity and changes in temperature.

- **Distance from the Sea:** Land surface warmed up cools down more quickly than the sea. In temperate region the sea warms land close to it (costal areas) in winter and cools such land in summer
- **Altitude and Relief:** Mountains and highlands have cold climate. Also, high relief determines relief rainfall
- **Ocean Current:** Ocean current change the effect of winds blowing over them. A cold current causes the wind to be cool and dry. While a warm current causes the wind to be warm and laden with moisture

### **Importance of Climate**

1. The knowledge of climate helps farmers to plan their planting operations and other activities
2. Transportation use the knowledge of climate to plan movement
3. Knowledge of climate informs dress code

### **ASSESSMENT**

1. The average weather condition of a place over a long period of time of about 30years is known as
  - (a) atmosphere
  - (b) climate
  - (c) weather
  - (d) latitude
2. One of these does not influence climate
  - (a) belts
  - (b) buckles
  - (c) distance from sea
  - (d) altitude
3. \_\_\_\_\_ movement determines precipitation, humidity and changes in temperature
  - (a) planetary wind
  - (b) latitude
  - (c) altitude
  - (d) ocean current

4. Mountains and highlands have \_\_\_ climate
- (a) hot
  - (b) cold
  - (c) dry
  - (d) wet
5. One of these is not the use of climate
- (a) helps farmers to plan their planting operations and other activities
  - (b) it is used to plan movement
  - (c) it informs the use of dress code
  - (d) it keeps people from crime

### **ANSWERS**

- 1. b
- 2. b
- 3. a
- 4. b
- 5. d

**Week 7**  
**Topic: Types of Climate**

**Content:**

1. **Types of Climate**

**Types of Climate are:**

**Cold climate**

This is divided into the polar climate and the Arctic or Tundra climate

**Polar climate** is located around lat 90°N and S of the equator. It covers areas like Greenland and Iceland. Temperature is below 0°C. Strong winds and low rainfall (10–15cm). Sparse population

**Tundra climate** is located around the arctic and antarctic circles (lat 60°N and 90°N and South of the equator). Covers countries like Canada, Norway, Alaska and part of Eurasia. Characterized by low temperature, inequalities of length of day and night; prolonged winter, as such, no true tree; shorter summer encourages growth of low shrub; precipitation is during autumn and winter periods; bears, sheeps, foxes and wolves are in place. Cool temperate West margin 4°C – 17°C temperature range; 600 – 800 mm annual rainfall; deciduous trees; coniferous forest; foxes and squirrels are prevalent.

**Cool climate**

Regions with mid – latitude cyclones within lat 45° and 60°N and S of equator. There are three types which are:

**Cool temperate East margin:** Areas bordering the Atlantic ocean found between lat 40° – 50°N and S of the equator covers places like N –E of North America and Argentina; rainfall is 700– 1,600mm: has coniferous forest and land; cultivation of cereals crop like rice, maize oats barleys.

**Cool temperate continental:** located 40° and 45° N and S of equator. Covers place like east central Europe; South Canada and North America high temperature (16°c) and at times falls below 0°c rainfall is 508mm; temperate grassland called prairies in Canada, steppers in Eurasia, Pampas in Argentina, Veld in South Africa and Downs in Australia scarcity of trees because scarcity of rainfall, long drought and severe winter; nomadic farming prevalent.

### **Warm climate**

There are two types of warm climate which are:

**Warm Temperate Western Margin (Mediterranean type):** 30° and 45°N and S of equator. Covers South Europe (France, Italy, Portugal, Spain, North Africa (Morocco, Libya, Tunisia), South America (Central Chile), California in USA and South West of South Africa.

### **Characteristics**

It is characterized by a dry and hot summer with temperature range of between 21°C – 27°C; high temperature throughout the year; rainfall is 600 – 840mm. Drought- resistant plants grow; presence of small shrubs patches like acacia, Rosemary and Laurel which are grown; Orchard farming with wide range of citrus fruits are grown

**Warm Temperate Eastern Margin (china type or gulf climate):** found between lat 20° and 40°N and S of the equator in places like South East

Australia, Central part of South America, Central China, South Japan, New Zealand and South East US.

### **Characteristics**

It is characterized by a warm moist summer and cool dry winter.  $4^{\circ}\text{C} - 26^{\circ}\text{C}$  of temperature; moderate rainfall between 635mm and 1,524mm, evergreen and deciduous forest because of continuous rainfall all year round; cultivation of maize, cotton, sugar, rice and sugar- are extensively carried out.

### **Equatorial climate with in Lat $5^{\circ}\text{N}$ and S of equator.**

Places that come under the equatorial region are: Congo Basin of Central Africa, Amazon Basin of South America, South East Asia and the Central Area of West Africa; Temperature range is  $20^{\circ}\text{C} - 26^{\circ}\text{C}$ (high); conventional rainfall and thunderstorms an lightening; maximum temperature are in March and September when the sun is overhead the equator; tropical rainforest and equatorial trees; presence of rivers; presence of economic trees such as iroko, Sapele, Ebony, African walnut etc and plantation agriculture such as rubber, cocoa, oil palms etc. The pignies live here around Congo Basin and Red Indians of the Amazon Basin

### **Desert Climate**

Desert climate are of two types; they are Cold desert climate and hot desert climate:

**Hot Climate:** They are classified into two; which are: (i) Equatorial climate with in Lat  $5^{\circ}\text{N}$  and S of equator. Places that come under the equatorial region are: Congo Basin of Central Africa, Amazon Basin of South America, South East asia and the Central Area of West Africa; Temperature range is  $20^{\circ}\text{C} - 26^{\circ}\text{C}$ (high); conventional rainfall and thunderstorms an lightening; maximum temperature are in March and September when the sun is overhead the equator; tropical rainforest and equatorial trees; presence of rivers; presence of economic trees such as iroko, Sapele, Ebony, African

walnut etc and plantation agriculture such as rubber, cocoa, oil palms etc. The pigmies live here around Congo Basin and Red Indians of the Amazon Basin



## ASSESSMENT

1. Arctic climate is also known as
  - (a) tundra climate
  - (b) polar climate
  - (c) desert climate
  - (d) temperate climate
2. The kind of climate that covers areas like Greenland and Iceland is
  - (a) tundra climate
  - (b) polar climate
  - (c) desert climate
  - (d) temperate climate
3. The type of climatic condition experienced in the Central Area of West Africa is
  - (a) tundra climate
  - (b) polar climate
  - (c) desert climate
  - (d) hot climate
4. The pigmies live around
  - (a) Congo Basin
  - (b) Amazon River Basin
  - (c) Niger River Basin
  - (d) Mississippi River Basin
5. Warm Temperate Western Margin (Mediterranean type) climate is experienced in these countries except

- (a) France
- (b) Libya
- (c) Nigeria
- (d) Spain

**ANSWERS**

- 1. a
- 2. b
- 3. d
- 4. a
- 5. c

## **Week 8**

### **Topic: Environmental Resources**

#### **Content**

1. Meaning of Environmental Resources
2. Major form of Environmental
3. Some importance of environmental

#### **Meaning of Environmental Resources**

Environmental Resources are those organic and inorganic natural materials which are of great value to man, animals and plants

#### **Major forms of environmental Resources**

1. **Atmosphere resources:** They are those resources in the atmosphere example solar energy, wind, gases, rain water etc

#### **Importance of atmosphere resources**

Gases: this include oxygen, carbon dioxide, nitrogen, water vapour

- Oxygen is used by plants and animals for respiration. It also supports burning of materials. Oxygen supports human life and also combines with water (oxidation) for chemical weathering and is also used for industrial purposes
- Carbon dioxide is required by plant for photosynthesis. Carbon dioxide combines with water to produce chemical weathering(carbonation). Green plants also take in carbon dioxide. Carbon dioxide absorbs heat to control atmospheric temperature in the carbon cycle
- Nitrogen is required by plants for the manufacture of proteins. It combines with water to provide food for plant growth. Nitrogen in soil can be converted to nitrate in the soil. Nitrogen gas is used in electrical industry

- Water vapour is important for rain formation. The resultant of rain is used by plants and animals in the process of chemical weathering. Water vapour moderates atmospheric temperature

**2. Mineral resources:** They are mineral content in rock (ores). Examples are gold, silver, gems, metals, petroleum, coal etc

### **Importance of mineral resources**

- It serves as source of fuel
- it is used for construction purposes
- It is used for industrial purposes
- it is used as a source of foreign exchange
- it serves as a provision of employment
- It serves as the provision of raw materials for industries

**Water resources:** These are resources which contained in natural water bodies example aquatic life like fish, water, minerals like potash and petroleum

- **Vegetation resources:** These are resources from the forest example timber, cash crop, tourism etc
- **Human resources:** These are resources which have to do with human intelligence. Human coordinate other resources for productivity

### **Some importance of Environmental resources to man**

1. Mineral resources provide raw materials for industries
2. Human resources is the basis for labour supply
3. Atmospheric resources helps in the supply of solar energy
4. Water resources also provide hydro electric power
5. Vegetative resources provide food for man

### **ASSESSMENT**

1. Environmental Resources are of great value to all the following except
  - (a) man
  - (b) animals
  - (c) plants
  - (d) non living things

2. Atmosphere resources include the following except
  - (a) wind
  - (b) gold
  - (c) gases
  - (d) rain water
3. Carbon dioxide is required by plant for
  - (a) photokynetics
  - (b) photography
  - (c) photosynthesis
  - (d) photology
4. Which of these is not an importance of mineral resources?
  - (a) source of fuel
  - (b) used for construction purposes
  - (c) It is used for respiration
  - (d) it is used for industrial purposes
5. Vegetation resourves provide man with the following except
  - (a) timber
  - (b) cash crop
  - (c) fish
  - (d) tourism

## **ANSWERS**

1. d
2. b
3. c
4. c
5. c

## **Week 9**

### **Topic: Renewable and Non Renewable Resources**

#### **Content:**

- 1. Definition of renewable and non-renewable resources**
- 2. Advantages of renewable and non-renewable resources**
- 3. Disadvantages of renewable and non-renewable resources**

**Natural resources** which are useful to human beings, but when they are abused or mismanaged could have adverse effect on man and his environment.

Resources are classified into:

- **Renewable resources** are resources that have cycle and as such, readily available for man's use. This type of resources is much more desirable to use because often a resource is renewed so fast that it will have regenerated by the time it is used up. Examples are solar energy, wind energy, trees, plants, water e.t.c

#### **Advantages of renewable resources**

1. The resources are renewable and easily regenerated
2. Renewable energy such as solar produce clean energy that does not pollute the environment.
3. Renewable sources of energy are available every where
4. Maintenance cost needed to install renewable source energy is cheap

#### **Disadvantages of renewable resources**

1. Most renewable sources of energy are affected by weather
2. They could be wasted because of the fact that they are readily available
3. No optimum use of it
4. They can cause natural disaster

**Non Renewable resources** are resources that don't have cycles and as such can be depleted. Non renewable resources cannot sustain its consumption rate. In other words, non renewable energy is not sustainable. Examples are fossil fuel (petroleum, oil and natural gas) and nuclear energy

### **Advantages of non renewable resources**

1. Availability of fossil fuels and coal
2. Availability of technology

### **Disadvantages of non renewable resources**

1. The resources are not renewable when they run out inevitably
2. Carbon dioxide and other climate gas are released in large quantities when fossil fuels and coal are used
3. Environmental pollution
4. They can be depleted

### **ASSESSMENT**

1. What are the classification of resources?
2. What are renewable resources?
3. What are non-renewable resources?
4. List 2 advantages and 2 disadvantages of renewable resources
5. List 2 advantages and 2 disadvantages of non-renewable resources

## **Week 10**

### **Topic: Environmental Problems (Hazards)**

#### **Contents:**

1. Definition of environmental Problems
2. Factors of environmental Problems, causes effects and control

#### **Definition of Environmental Problems**

Environmental problems or hazards are disasters which affects lives and properties as a result of the action of man and other natural phenomenon. Environmental hazards have causes and effects. They can be controlled

#### **Factors affecting Environmental Hazards**

Forms of environmental hazards are:

1. **Deforestation:** This is the destruction of natural forest by the indiscriminate felling of lumberable trees

#### **Causes**

- Cutting of trees for timber
- Cutting down of trees for crop cultivation
- Excessive bush burning and grazing

#### **Effects**

- Deterioration of the environment
- Soil Erosion
- Destruction of soil nutrient
- Disrupts the act of keeping wild life
- Decrease transpiration and increases erosion

#### **Control**

- Afforestation is the act of planting trees to replace those that have been cut down
  - Decrees is the legislation against tree felling
  - Alternate sources of fuel apart from wood
  - Public enlightenment
  - Licensing
2. **Soil Erosion:** It is removal of the top layer of the soil by the agents of denudation. These agents are water, wind and ice

### **Causes**

- Bush- burning
- Over grazing
- Excessive rainfall
- Deforestation
- Excavation of soil for various purposes example mining and construction

### **Effects**

- Reduction of farmlands
- Reduction of soil fertility
- Destruction of roads
- Loss of lives and properties
- Land and water pollution through deposition of sediments

### **Controls**

- Afforestation
- Contour ploughing or making ridge across slopes
- Bush fallowing
- Controlled grazing
- Planting of cover crops like legumes, melons, cowpea e.t.c
- Public enlightenment
- Through terracing
- Urban master plan to check developments

3. **Drought:** It refer to dryness due to lack of rainfall in an area over a period of time

### **Causes**

- Lack of rainfall
- Low humidity and cloud cover
- High temperature over a period of time without compensating rainfall
- climatic fluctuation

### **Effects**

- It affects plant growth
- Loss of crops and livestock
- Migration of man and animals
- Drying up of rivers and streams

### **Control**

- Irrigation
  - Avoidance of over grazing
  - Planting of cover crops
4. **Desert Encroachment:** It is the spread of desert to areas that were not desert.

### **Causes**

- Excessive bush burning
- Over grazing
- Deforestation
- Climate fluctuation

### **Effects**

- Exposure of soil to wind erosion
- Hot and dusty and dry environment
- Shortage of water
- Migration

## **Control**

- Afforestation
- Irrigation
- Conservation of trees, surface and underground water
- Creation of shelter belts
- Rotational grazing

5. **Flooding:** It is the occurrence of excessive flood of water in areas not usually waterlogged. Flooding is also defined as the accumulation of an abnormal large volume of water in an area which has refused to percolate or flow away. It usually occurs when there is heavy rainfall in an area

## **Causes**

- Excessive rainfall
- Dumping of refuse
- Establishments of settlements along the river
- Inadequate urban planning
- Presence of steep slopes in the area
- Poor drainage systems

## **Effects**

- Flooding causes loss of lives and properties
- Interruption of socio economic activities
- Washes away roads and railways
- It leads to diversion of public funds
- Spread water borne disease
- Leads to destruction of farm lands

## **Control**

- Construction of wider gutters
- Environmental sanitation
- Regular clearance of drainage channels
- Avoid dumping in water channels

- Construction of dams to acts as flood reservoirs

## **ASSESSMENT**

1. What is environmental problems?
2. List the types of environmental hazards
3. What are the causes of erosion?
4. What are the effects of desert encroachment?

# **SECOND TERM NOTES ON GEOGRAPHY**

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## **SECOND TERM**

**WEEK 1    Topic: Agriculture**

**WEEK 2    Topic: Transportation in Nigeria**

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**Week 4    Topic: Manufacturing Industries**

**Week 5    Topic: Measurements of direction and bearing**

**Week 6    Topic: Representation of relief**

**Week 8    Topic: Representation of relief**

## **WEEK 1**

### **Topic: Agriculture**

#### **Content:**

1. Definition
2. Benefits of Agriculture
3. Problems of Agriculture
4. Solution of Agricultural Problems

Agriculture is the cultivation of crops and rearing of animals for man's use. Agriculture can be defined as the art and science that deals with cultivation of crops and the rearing of animals for man's use

#### **Benefits of Agriculture**

1. Provides food for man and animals
2. Provides employment
3. It is a mean of foreign exchange
4. It provides raw materials for industry
5. It allows the development of cities, nations and ultimately industry and leisure

#### **Problems of Agriculture**

1. Us of crude implementation
2. Lack of capital
3. Pest and diseases
4. Lack of research
5. Poor transportation
6. Ignorance
7. Drought
8. Town attraction

#### **Solution of Agriculture problems**

1. Granting of loans to farmers
2. Provision of agricultural equipment through the assistance of government
3. Education of farmers
4. Provision of good roads
5. Farmers should use fertilizers
6. Active pest and disease control
7. Government should provide more research centres for farmers

### **ASSESSMENT**

1. What is Agriculture?
2. List some benefits of agriculture?
3. List 5 problems of agriculture.
4. What are some of the solutions to these problems?

## WEEK 2

### Topic: Transportation in Nigeria

#### Content:

1. Definition of transportation
2. Modes of transportation

#### Definition of Transportation

Transportation is the movement of people, goods and commodities from one place to another.

#### Modes of Transportation

There are 5 major modes of transportation in Nigeria namely:

- Human portage and the use of animal
- Water Transportation
- Land Transportation
- Air Transportation

**Human Porterage** and the use of animal were very common in precolonial days in Nigeria. Human Porterage. It is the means of transportation used in olden days. These involve the use of animals such as camel, horse, donkey, oxen and mules e.t.c. It is very common in Southern and middle belt areas of Nigeria to move goods and food stuff from production centres to the market. Transport by animal is common in the North for the movement of goods.

**Water Transportation** in Nigeria includes the use of oceans, lagoons and inland water ways and oceans. The inland water ways which includes the lagoons, canals, rivers, lakes,. Ocean navigation is operated from the seaports like Lagos, Sapele, Warri, Pot Harcourt, Calabar e.t.c. the means

of water transport are canoes, ships, yacht, and ferry. water transport is good for international business.

**Land transportations** are majorly of two types: road and rail transportation  
Three types of road are:

- Trunk A road: constructed and maintained by the federal government
- Trunk B road: constructed and maintained by the state government
- Minor roads: maintained by the local governments

The means are cars, motorcycles, buses; truck e.t.c. road transport is very flexible

**Rail transport:** is the first modern means of transportation in Nigeria, which involves the use of car, bike, and train. The rail is the first modern means of transportation in Nigeria. The rail lines were constructed between 1890 and 1930 and consisted of a total of about 3,500kmof single tracks. It was built mainly for agricultural and mining purposes

Background – contd – 2 – Railway Lines



**Air Transportation:** it is the fastest and most efficient mode of transportation in Nigeria. It provides domestic and international services. Lagos State is the major hub of air transport in Nigeria

**Pipelines** are a mode of transportation used to move liquid commodities from one place to another e.g petroleum and gas. Pipeline linking warri and Kaduna is a very important example in Nigeria

## ASSESSMENT

1. Define Transportation.

2. What are the modes of transportation?
3. What are the types of road?

### **Week 3**

#### **Topic: Manufacturing Industries**

#### **Content**

1. Definition of Manufacturing Industries
2. Characteristics of manufacturing industries
3. Classification of industries
4. Factors affecting the location of industries

#### **Definition of Manufacturing Industries**

**Manufacturing industry** is defined as the turning of raw material into new products by mechanical or chemical processes at home (cottage) or in the factory

#### **Characteristics of manufacturing industries**

1. Most manufacturing industries are concentrated in few locations, especially urban centres
2. Manufacturing industries emphasize on the production of consumer goods
3. Manufacturing industries require hard labour
4. Manufacturing industries products are mainly consumed in local market
5. Manufacturing industries are mainly larger than small scale

#### **Classification of Industries**

Industries can be classified into Primary, Secondary and Tertiary industries

(a) Primary Industries are industries which are concerned with the extraction of raw materials provided by nature. Primary industries are also

called extractive industries. Examples are mining, fishing, lumbering, farming and live stock

(b) Secondary Industries are industries that turn raw materials into consumable goods or finished goods. Examples include building, textile, ship building, iron and steel and chemical industries

(c) Tertiary Industries are industries concerned with the rendering of services. It could be directed service like trading, banking, teaching, medical and transportation. Tertiary industries could be indirect service like the work of police, custom, soldiers, navy etc.

### **Factors affecting the location of industries**

1. Proximity to source of raw materials: bulky products like cements should be located close to source of raw materials to reduce cost of production. Perishable goods like fruits, palm oil industries etc should also be located near the raw materials
2. Nearness to Markets: There should be ready market for the products of any industry to be sited in a place. Fragile goods like glass, bulky goods like cement and other perishable goods should be located near the markets. Nearness to the market reduce the cost of transportation and meet high demand by the consumers. Such industries located towards the market are called market oriented industries
3. Nearness of source of power: There should be ready and dependable source of power. Source of power could be electricity, coal, thermal, petroleum product etc
4. Availability of capital: There should be enough capital to purchase industries input before setting up industries. Entrepreneur should have access to loans fixed capital should be easily required.
5. Availability of labour: There should be highly quality skilled labour. There should also be enough unskilled labour. Industries which require large labour force are called labour intensive industries
6. Adequate transport network: Transport is required essentially to move raw materials to industries sites. Transport is also required to convey finished goods to the market or areas of consumption.

7. Political Stability: A stable government encourages industries growth. It attracts foreign investors. Political instability scares off foreign investors

## **ASSESSMENT**

1. Define manufacturing industry
2. List some characteristics of the manufacturing industries
3. What are the classifications of industries?
4. What are the factors affecting the location of industries?

**Week 4**  
**Topic: Manufacturing Industries**

**Content:**

1. **Problems of Manufacturing Industries**
2. **Solution to Industrial Problem**
3. **Importance of Industries**

**Problems of Manufacturing Industries**

1. Lack of sufficient raw materials available to industries hinder large scale of production
2. Insufficient capital
3. People depends on foreign goods
4. Large scale poverty makes people have low purchasing power
5. Inadequate power supply
6. Due to the high demand of foreign goods, local goods produced by local industries are not patronized
7. Corruption and negligence of duty leads to poor management of industries
8. Transportation network like road, rail etc and communication facilities are inadequate
9. Skilled man power required for high industrial growths are inadequate
10. Inadequate large market that can accommodate industrial goods produced

**Solution to Industrial problem**

1. Skills should be acquired by people through regular training

2. There should be good government policies to protect local industries
3. There should be government participation in industrial development
4. There should be incentives to local industries e.g tax holiday
5. There should be provision of transport facilities
6. Availability of industrial zones in a conducive environment with all infrastructural facilities for the industries
7. Industrial banks should be set up to provides loans to industries
8. There should be exploitation of raw materials locally for industries
9. Infrastructural facilities such as roads, telephone, water, electricity etc should be built and maintained
10. There should be increase in wages/ salaries of workers in industries to boost their morale and increase productivity

### **Importance of industries**

1. There is abundance of raw materials such as coal, ore, iron, limestone, petroleum, natural gas for engineering etc greatly enhanced the industries
2. Power from coal, thermal and hydro electricity aids industrial growth
3. Transport by water, roads, railways system contributes to the growth of industries

### **ASSESSMENT**

1. List 6 problems facing the manufacturing industries
2. List some of the solution to the problems facing the industries
3. What are the importance of industries?

## Week 5

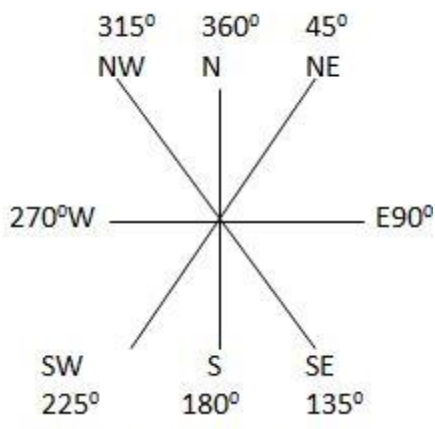
### Topic: Measurements of direction and bearing

#### Content

1. The major Cardinal points
2. Measurement of direction
3. Measurement of bearing

**Direction:** the direction of one place to another is expressed by the means of compass points or cardinal point

There are four compass or cardinal points which include North, South, East and West. For better accuracy the measurement of directions of eight cardinal points are used. These are North, North-East, North-West, South, South-East, South-West, East and West. There is also 16 cardinal points.

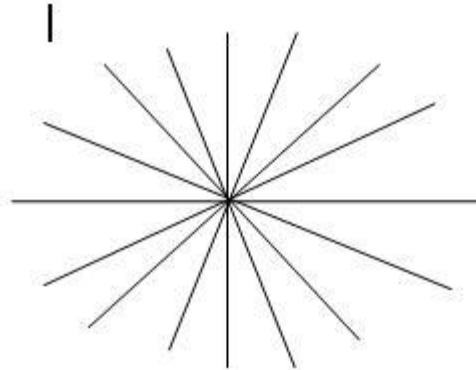


The Eight cardinal

Point

The Eight Cardinal Points

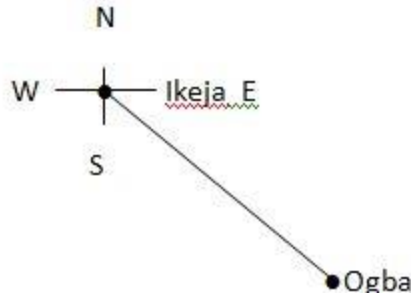
In order to determine the actual direction of one place from the other map, the orientation of the map is given by showing an arrow, pointing



the direction of the north

The sixteen cardinal points

Example: what is the direction of Ogba in Ikeja



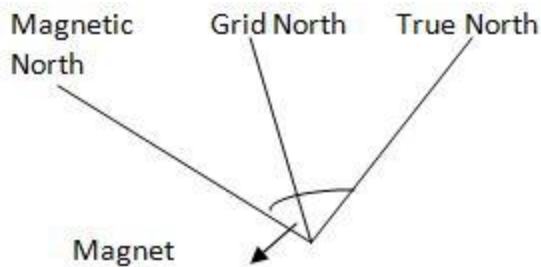
- Ikeja

The direction of Ogba from Ikeja is South East.

### Measurement of Bearing

Bearing is described as the direction of one place to another. Bearing is expressed in degrees, using the protractor, measured from North in a clock wise direction. The corresponding degrees in relation to the eight or sixteen cardinal points.

Example: what is the bearing of ikeja to Ogba



### **Variation or declination**

**True North** is derived from a line (meridian) of longitude is the direction of the North Pole

**Grid North** is the direction which is shown by North – South grid lines on the map

**Magnetic North** is obtained through the use of magnetic compass  
The angle between the magnetic North and the true North is called **magnetic variation** or **declination**

### **ASSESSMENT**

1. What is used to measure direction?
2. What are the four cardinal points?
3. What is the measurement of bearing?
4. What is the magnetic variation?

## Week 6

### Topic: Representation of relief

#### Content

1. Definition of Relief
2. Physical features
3. Contour representation of land forms

#### Definition of Relief

**Relief** of an area refers to the position and character of the highlands and lowlands. The methods of representing such relief on maps include the following:

1. **Contour** are lines drawn to join places of equal heights, level or altitude. The sea level is taken as the starting point in all measurement in metres or feet. The height of a particular point is written in line; Contour Interval in a particular map, contours are equal intervals
1. **Form Lines** are lines drawn on a map like contours but are based on estimators. They are not accurate as contours and they are represented in broken lines
2. **Contour layering** as an aid to visual impression, the space between contours are often coloured or tinted. Different shades of colours are used to denote different heights, green is used for lowlands, yellow and brown are for highlands and white is for snow capped peak. Water bodies such as seas are represented with blue and the deeper the sea, the darker the blue colour
3. **Hill shading** is the method in which only one contour is used but the intensity (thickness) of the colour tone depends on the steepness of the hill slope. That is the deeper shade representing it becomes
4. **Hachures** are short lines drawn down the slope in the direction of the steepest gradient. The steeper the slope, the heavier the lines which are used.
6. **Spot heights** are simply spots or points on the map whose height above the sea level has been accurately measured. The exact height is represented by a dot and the height is written beside it

7. **Trigonometrical stations** are simple points on the ground marking the angles of triangulation when mapping an area. They are usually indicated by a triangle and a dot in the middle with the height written beside it. There are three types of trigonometrical station. These are primary, secondary and minor trigonometrical stations
8. **Bench Mark** is a permanent mark made on objects like walls, building and bridges. It indicates the actual heights which are usually written on the objects and in most cases, it is written along on the road.

### **Contour representation of landforms**

The following are some common landforms or relief features that can be represented on map by using contour lines.

1. **Valleys** are lowland between two highlands. Valleys are represented by V- shaped contour lines with the apex of the V- shape pointing towards the highland. When a valley contains water, it is called a river valley but when it contains no water, it is called a dry valley
2. **Spur** are projection of highlands into low ground. That is the V-shape points to the lowland spurs separate one valley from another and the contour numbering decreases outward.
3. **Conical Hill** are usually circular in shape and become smaller and smaller towards the centre
4. **Round top** hill are contours showing round top hills that are circular but do not taper to a points. The inner most circle of contour is fairly large
5. **Isolated Hill** is a hill which stands apart or is far removed from other hills or highlands. It may either be round or conical in shape
6. **Knoll** is an isolated peak of few metres high, associated with a highland.
7. **Ridge** is a strip of highland which is elongated and narrow. The contour run almost parallel to each other
8. **Col or Saddle** is a stretch of lowland which separates two highland areas on a ridge, two peaks are usually separated by a col. There is no much difference between a cola and a saddle. The only difference is that the saddle is wider than the col
9. **Pass or Gap** is also a col but is found at lower parts of highland. A pass separates two highlands but at lower level. A pass is always a col, but a

col is not always a pass. A col becomes a pass when it is used or likely to be used as a route way, either for footpath, road or railway

10. **Plateau** is an extensive and broad highland area with a comparatively level surface. Plateaux usually have steep sides, if a plateau is cut off by a number of river valleys, most of the original level surface is removed by erosion, leaving behind flat top peaks. Such plateau is dissected plateau
11. **Escarpment/ Cuesta**: Escarpment refers to steep slope or the precipitous face of a ridge. The contour lines are closely packed, **Cuesta** refers to a hill with a steep slope (dip) on one side and a gentle slope (scarp) on the other. Therefore dip + scarp = Cuesta
12. **George** is a steep sided valley with a river or stream.
13. **Watershed** is a highlands area which separates the head stream of rivers flowing in different directions but rising from the same mountainous source
14. **Undulating Lowland** gently rises and falls with low level is usually shown by irregular and well spaced contours
12. **Flood Plain** is a low land, bordering a river, formed by deposits of sediments carried down by a river. It is generally referred to as area liable to flooding; it is very good for the cultivation of swamp rice.

## **ASSESSMENT**

1. Define relief
2. What are contours?
3. List and define 7 landforms

## Week 8

### Topic: Representation of relief

#### Content

1. Definition of Relief
2. Physical features
3. Contour representation of land forms

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**SS 2**

**THIRD TERM NOTES ON**

**GEOGRAPHY**

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## **THIRD TERM**

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- Week 2      Topic: Contour representation of landforms**
- Week 3      Topic: world population**
- Week 4      Topic: Problems of rapid population growth**
- Week 5      Topic: Settlement**
- Week 6      Topic: Types of settlement**

## Week 1

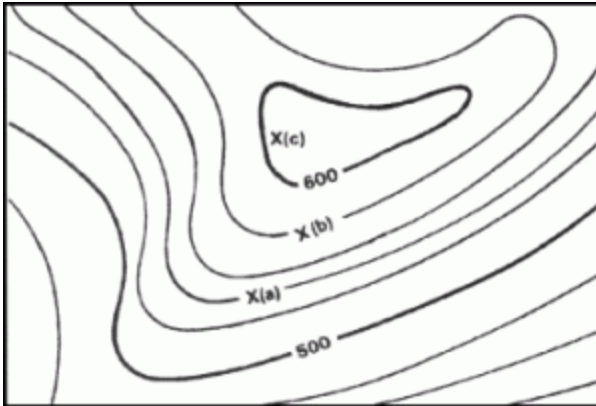
### Topic: (Revision/Method of representing relief on (maps))

#### Content:

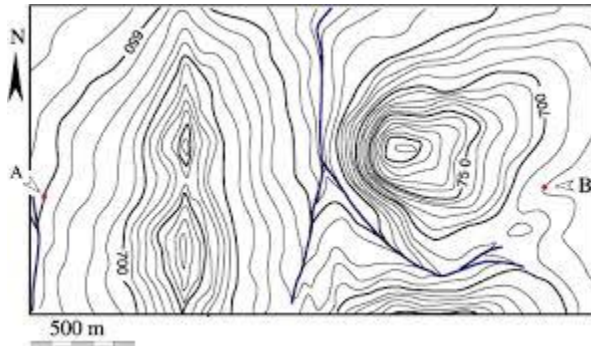
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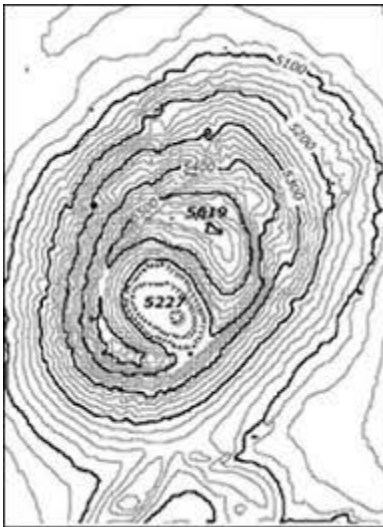
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### **ASSESSMENT**

1. Define relief
2. What are the methods for representing reliefs?
3. What are contours?

## Week 2

### Topic: Contour representation of landforms

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7. **Ridge:** is a strip of highland which is elongated and narrow. The contour run almost parallel to each other
8. **Col or Saddle:** is a stretch of lowland which separates two highland areas on a ridge, two peaks are usually separated by a col. There is no much difference between a cola and a saddle. The only difference is that the saddle is wider than the col
9. **Pass or Gap** is also a col but is found at lower parts of highland. A pass separates two highlands but at lower level. A pass is always a col, but a col is not always a pass. A col becomes a pass when it is used or likely to be used as a route way, eiber for footpath, road or railway
10. **Plateau** is an extensive and broad highland area with a comparatively level surface. Plateaux usually have steep sides, if a plateau is cut off by a number of river valleys, most of the original level surface is

removed by erosion, leaving behind flat top peaks. Such plateau is dissected plateau

11. **Escarpment/ Cuesta:** Escarpment refers to steep slope or the precipitous face of a ridge. The contour lines are closely packed,
12. Cuesta refers to a hill with a steep slope(dip) on one side and a gentle slope (scarp) on the other. Therefore dip + scarp = Cuesta
13. **George:** It is a steep sided valley with a river or stream.
14. **Watershed:** It is a highlands area which separates the headstream of rivers flowing in different directions but rising from the same mountainous source
15. **Undulating Lowland:** It gently rises and falls with low level is usually shown by irregular and well spaced contours
16. **Flood Plain:** It is a low land, bordering a river, formed by deposits of sediments carried down by a river. It is generally referred to as area liable to flooding; it is very good for the cultivation of swamp rice.

### **ASSESSMENT**

- List 10 common type of landforms and describe them in detail.

## Week 3

### Topic: world population

#### Content

1. Factors affecting the growth population
2. Pattern of world population

#### **Factors affecting the growth of Population**

Factors affecting the growth of population can be classified broadly into physical and human factors

##### **(a) Physical factors**

(i) *Climate*: areas with favourable climate like U.S.A, China etc do attract population while areas of unfavourable or harsh climate like desert and Polar Regions do not attract population

(ii) *Availability of water*: areas where water is available, both human and agricultural purposes like U.S.A, India etc attract the population

(iii) *Relief*: lowlands and river valleys like Nile delta, India etc and lowland plateaux attract population while high mountains and rugged hills like Rockies, Andes etc repel population

(iv) *Soil*: fertile soil tends to attract population like Ganges of India, Java etc. While infertile soil like those in desert and Polar Regions do not

(v) *Presence of mineral resources*: the presence of mineral resources like coal, iron, petroleum etc does not attract population

##### **(b) Human factors**

(i) *Agriculture*: areas where agriculture is widely practised like India, China and Java do not attract population

(ii) *Religion belief*: The Islamic religion believes in polygamy and early marriages, and these promote high population concentration in an area where it is practised

(iii) *Industry*: concentration of industries attract people because of job opportunity

(iv) *Immigration*: the movement of people from one parts of the world to an area due to the availability of employment opportunities in these areas usually leads to high population concentration

(v) *Transportation network*: the presence of good transportation network in an area promotes and facilitates migration to increase the population

### **Pattern of world population distribution**

Pattern of world population distribution is distributed into three

(a) **The very densely populated parts of the world**: the most densely populated areas of the world include

(i) *Industrial North* – West Europe: this include countries like Great Britain, France, German, Denmark, Belgium. These areas are highly industrialized due to the presence of coal and iron

(ii) *Industrial North* – Eastern U.S.A: this is the great industrial belt of the United States and Canada stretching from the shore of the Great lakes though Pittsburg to New York which is very rich in Coal and iron

(iii) *Agricultural Monsoon Asia*: This includes populous countries like China, India, Japan, Pakistan, Indonesia etc. This area of largest population concentration of the world, known for fertile soils, warm climate and abundant rainfall which promote agriculture.

(iv) *The Nile Valley and Delta*: This essentially Egypt. It is an area within the sahara desert which through irrigation has converted a desert into an area of high agricultural activities and consequently high population

(b) **The moderately populated parts of the world**: These include

- Areas of cool temperate forest Europe, Canada and Asia.
- The temperate and tropical grass land of Southern continents
- Agricultural U.S.A
- Mediterranean Europe
- Africa
- Most part of South Asia

- The very sparsely populated part of the world include:
- The cold polar lands of arctic and Antarctica which are inhabited due to cold weather
- The Canadian and Eurasian tundra and Greenland also due to cold weather
- The hot deserts of the world like Kalahari, the Atacama, the Sahara etc. Due to the hot weather and dryness no rainfall
- The dense tropical rain forest like the Amazon basin (South America), Congo (Zaire) basin (Central Africa). Both are uninhabited jungles

### **ASSESSMENT**

1. What are the factors affecting the growth of a population?
2. Where are the moderately populated parts of the world?
3. What are the physical factors affecting population growth?
4. What are the human factors affecting population growth?

## **Week 4**

### **Topic: Problems of rapid population growth**

#### **Content**

- 1. Problems of rapid population growth**
- 2. Advantages of High Population Densities**
- 3. Disadvantages of high population densities**
- 4. Advantages of low population densities**
- 5. Disadvantages of low population densities**

#### **Problems of rapid population growth**

1. High rate of infant mortality is certain in a growing population because of social pressure
2. High mobility will also result in a rapidly growing population
3. Rapid population growth is always accompanied by food shortages
4. The pressure on the low lean social services may led to low life expectancy
5. Malnutrition and diseases
6. Overpopulation always breeds vices such as armed robbery, prostitution etc
7. Inflation is bound to occur, in a situation of growing population
8. Over crowding: growing population always leads to overcrowding

#### **Advantages of High Population Densities**

1. High population provides large labour force for industries
2. High population is a source of large market for the goods produced by the industries
3. With large population concentration in an area, there i need for effectiveness planning so that the town can function properly
4. Many people are brought together and this can promote unity among the diverse people in the country
5. Manpower is exported to these regions to enable them earn foreign exchange
6. Organized army in such area is possible

### **Disadvantages of high population densities**

1. Natural resources like fertile farmlands, become over exploited where there is high population growth
2. Areas of high population densities are usually associated with high crime rate like armed robbery, car snatcher, hired assassin etc. These may be due to lack of jobs; hence people resort in crimes
3. Areas of high population densities usually do not have enough jobs for the ever increasing influx of people. This leads to unemployment and underemployment
4. High population concentration leads to scarce or poor accommodation as the house available may not be enough for the high population
5. Many people travel on roads at the same time and ; this leads to traffic congestion most of the time
6. Poor housing, pressure on natural resources and social facilities do lead to environmental pollution

### **Advantages of low population densities**

1. There will be abundance of resources in areas where there and resource endowment
2. The rate of armed robbery, car snatching etc is generally reduced
3. There is no traffic congestion in areas of low population
4. Goods and agriculture products are cheap and easily available due to low population

### **Disadvantages of low population densities**

1. Pipe borne water, electricity etc are grossly under utilized
2. Defense maybe difficult in case of attack
3. As a result of few number of people, the level of revenue may be low
4. There may be inadequate market for manufactured goods

## **ASSESSMENT**

1. List 5 advantages of high population densities
2. List 5 disadvantages of high population densities
3. List 5 problems of rapid population growth
4. List 3 advantages of low population densities
5. List 3 disadvantages of low population densities

## **Week 5**

### **Topic: Settlement**

#### **Content:**

1. Meaning of Settlement
2. Favourable condition for siting a settlement
3. Factors affecting population growth

#### **Meaning of Settlement**

*Settlement* is a collection of buildings with people living in them. It is centre of human activities and it consists of houses, communication network, roads, tracks, railways etc. It could be one house, a village, a town or a city.

#### **Favourable conditions for siting a settlement**

1. There must be adequate and dependable water supply for man use
2. The soil must be fertile to produce agricultural activities
3. Such lands must be lowland and well drained for easy erection of buildings
4. The presence of good roads, railways, airport etc
5. The area should be well protected against invading enemies

#### **Factors affecting the growth of settlement**

1. People are likely to settle in areas that are easily accessible by roads, rails etc and these tend to increase the growth of settlement
2. Absence of both natural and man made disasters in a place tends to attracts people to such areas, hence the growth of such settlement
3. Favourable climate also tends to attract people to an area which equally leads to the growth of a settlement
4. The presence of low relief or low lands favours settlement unlike rugged relief and highlands which repel settlement of people
5. People also settled in places which are seats of government as social amenities and other facilities are often provided in such areas

## **ASSESSMENT**

1. Define settlement.
2. What are some of the favourable conditions for siting a settlement?
3. What are the factors affecting the growth of a settlement?

## Week 6

### Topic: Types of settlement.

#### Content:

1. **Types of Settlement**
2. **Types of rural settlement**
3. **Functions of rural settlement**
4. **Urban settlement**
5. **Types of urban settlement**
6. **Functions of urban settlement**
7. **Classification of settlement according to pattern or shape.**
8. **Characteristics of linear settlement.**
9. **Reasons for linear settlement**

There are two types of settlements. These are (a) Rural settlements (b) Urban settlements

#### (a) **Rural Settlement**

- A rural settlement is a relatively small area with socially homogenous people that know one another
- It could be nucleated, dispersed or linear
- They have people with the same cultural background and language
- They have few social amenities and the life style is important
- They are normally involved in primary activities such as farming, fishing and lumbering

#### **Types of rural settlement**

There are three types of rural settlement. These are:

1. *Homestead*: this is one family residence. These are disperse settlement which are separated from one another by bushes or by geographical barriers and contain few people with little opportunity for social gathering
2. *Hamlet*: this settlement may be nucleated with few houses, usually less than hundred with many people living in them

3. *Village*: this is a large nucleated rural settlement formed from the combination of several hamlets. It contains several hundred or thousands of people with limited services

### **Functions of rural settlement**

1. Agriculture is usually the main occupation of rural dwellers, leading to the production of abundant food
2. Most rural areas with forest engage in lumbering activities
3. There are few commercial activities, mostly in petty trades, using their small shops and local markets
4. Most rural areas with rivers are also involved in fishing
5. Rural areas with churches and mosques are involved in religious activities.

### **(b) Urban Settlement**

(i) An urban settlement is relatively large, densely populated settlement with socially heterogeneous people who do not know one another

- They are usually compact in nature
- They have nucleated settlement
- There is presence of developed infrastructure
- They are usually well built areas
- They have centers of innovation and ideas
- They are made of many buildings; thousands of people live in them

### **Types of urban settlement**

There are four main types of urban settlement and these are:

1. Town: it has several thousands of people
2. City: this is a large town with greater number of people than town
3. Conurbation: this is made up of several towns joined together but, each town still maintains its identity
4. Megalopolis: this is the largest type of urban settlement made up of large cities with several millions of people

## **Functions of urban settlement**

1. Urban centers are involved in the manufacturing of finished goods
2. The presence of markets and banks enables urban dwellers to engage in commercial activities
3. Most urban centers are the seats of government
4. Urban settlements are centers for the establishment of universities, polytechnic, schools, churches, mosques and hotels
5. Where minerals are present in some towns, the inhabitants tend to perform mining function

## **Classification of settlement according to pattern or shape.**

The pattern or shape of settlement refers to the arrangement of buildings. There are three main patterns of settlement. These are dispersed, nucleated linear and isolated settlements

1. Dispersed (scattered) settlements

## **Characteristics**

- The buildings are scattered or far from each other
- It has few social amenities
- It has a feature of rural settlement
- Distinct boundaries separate one family land from another
- Behind the buildings, there are family parcels of land
- Individual compounds are widely spread from one another.

## **Reasons for Dispersed settlement**

- The quest for a quiet environment
- Distinctiveness of family land
- Reduction in the level of conflict
- The need to have enough land

## **2. Linear Settlement**

### **Characteristics**

- The buildings are located along the routes
- Where two or more routes e.g roads, railways, a sub-linear settlement called nodal settlement is formed
- Gardens are located behind houses
- Farmlands are also located behind houses
- It could be several kilometers in length

### **Reasons for linear settlements**

- There is need to be near transport network
- For easy accessibility to other areas
- The need to transport farm produce to markets
- Reduction in transport cost due to nearness to road
- Nucleated or Dense settlement

### **Characteristics**

- The building are very close to each other
- It has social amenities
- It has feature of urban settlement
- There is an obvious center called nucleus
- Farmland are located outside the settlement
- The level of interaction between the inhabitants is very high

### **Reasons for Nucleated settlement**

- There is need to maintain social ties
- There is easy communication
- The need for defense
- There is commercial development
- There is highly developed organization with well defined leadership structure.
- Isolated settlement

## **Characteristics**

- It consists of a single house or few houses
- The level of interaction is very low
- Farmlands are high
- The houses are very far from each other
- The area is poorly connected with roads

## **Reasons for isolated settlements**

- Availability of vast agriculture
- Absence of social cohesion
- Presence of wealthy landlords
- There is special pattern of agriculture

## **ASSESSMENT**

1. What are the types of settlement?
2. What are the properties of rural settlements?
3. What are the types of rural settlements?
4. What are the functions of rural settlements?
5. What are the properties of urban settlements?
6. What are the reasons for nucleated settlements?
7. What are the three main patterns of settlements?