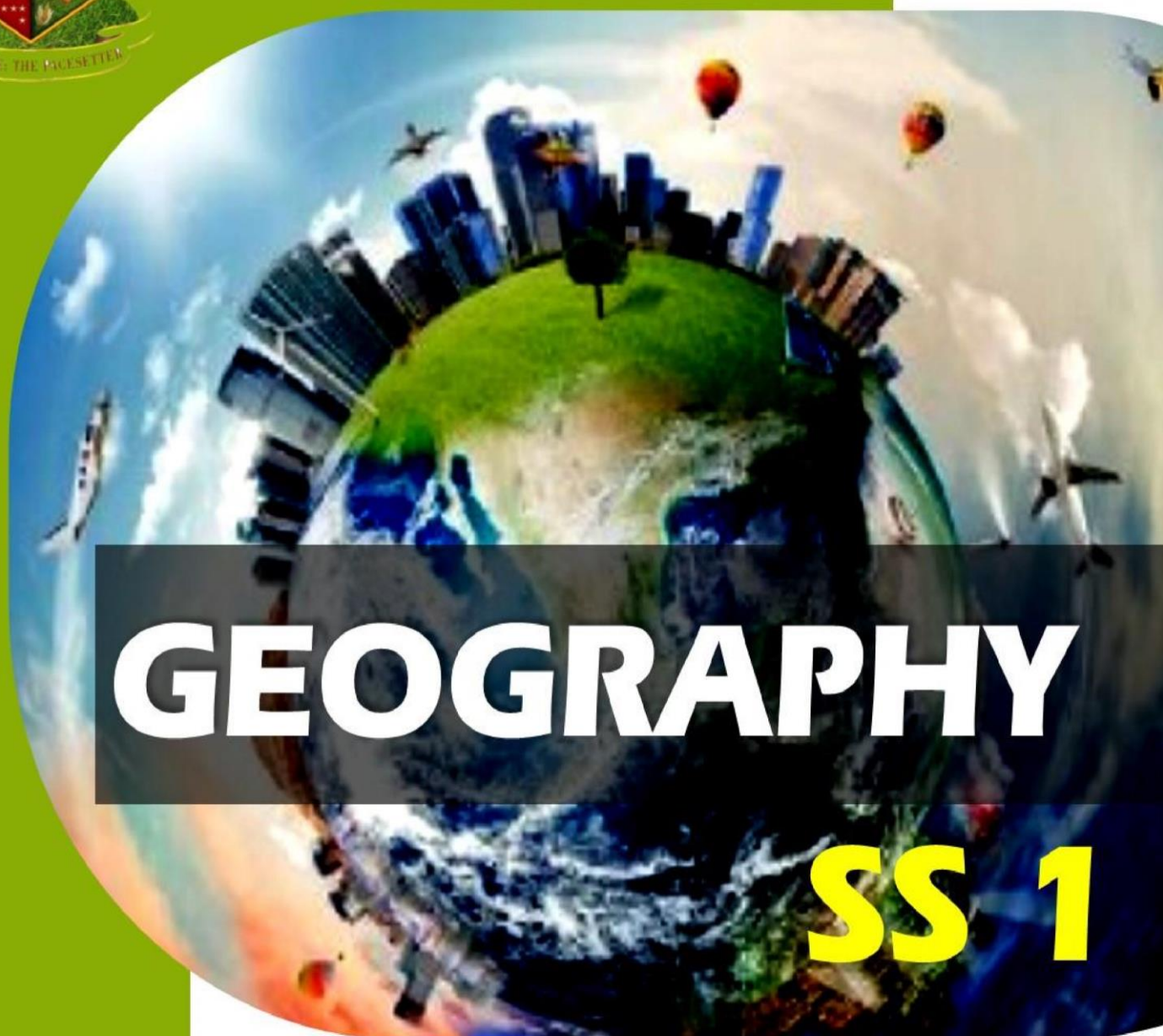




OYO STATE LECTURE NOTES



GEOGRAPHY

SS 1

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REVIEWED BY: Dr. O.J. Taiwo (Geography Department,
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MINISTRY OF EDUCATION science and
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AJUMOSE LECTURE NOTES
GEOGRAPHY

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SENIOR SECONDARY SCHOOL 1 (SS1)

**FIRST – THIRD TERM SUBJECT
NOTES ON GEOGRAPHY**

1ST TERM SUBJECT NOTES ON GEOGRAPHY FOR SS I

CONTENTS FOR FIRST TERM

[A] LOCAL GEOGRAPHY i. Town/Village ii. The
Local Government Area (LGA)

[B] THE EARTH AND THE SOLAR SYSTEM

- i. The Earth and Other Planets ii.
- Earth's rotation and revolution iii.
- Latitudes and Longitudes iv. The
- Earth's Structure
- v. Rocks
- vi. Major Landforms of the Earth

[C] ENVIRONMENT AND ITS RESOURCES

- i. The Environment ii. Weather and Climate

SUMMARY SUBJECT NOTES**[A] LOCAL GEOGRAPHY**

Involves the study of our immediate environment

i. Village: It is a rural nucleated settlement.**Characteristics:**

- (i) Relatively small with socially homogeneous people
- (ii) Formed from the combination of several hamlets
- (iii) It has limited services and lacks social amenities e.g. Electricity, Pipe-Borne Water e.t.c
- (iv) A population ranging from a few hundred to a few thousand.

Functions:

- (i) Agricultural
- (ii) Lumbering
- (iii) Small Scale Shopping
- (iv) Fishing and,
- (v) Religious Functions

ii. Town: A town is a large nucleated urban settlement.**Characteristics:**

- (i) Relatively large and dense settlement with socially heterogeneous people
- (ii) People have different cultural backgrounds and languages
- (iii) Has abundant social amenities e.g. Electricity, Pipe-Borne Water e.t.c.

Functions:

- (i) Industrial
- (ii) Commercial
- (iii) Socio-Cultural (iv) Mining
- (v) Fishing and
- (vi) Residential Functions

iii. Local Government Area (LGA): Is formed the combination of several towns and villages which have similar physical and cultural features.**iv. State:** Is the combination of several Local Government Areas. There are thirty six states in Nigeria and the Federal Capital Territory (FCT), Abuja in Nigeria.**[B] THE EARTH AND THE SOLAR SYSTEM I.****MEANING:**

The solar system consists of the sun, the moon and the nine planets with their satellites. The nine planets in their order of proximity to the sun are:

- (i) Mercury
- (ii) Venus
- (iii) Earth
- (iv) Mars
- (v) Jupiter
- (vi) Saturn
- (vii) Uranus
- (viii) Neptune

(ix) Pluto

The Sun: The sun is at the centre of the solar system. It has a surface temperature of 6000 Degree Celsius and serves as ultimate source of light and energy to all planets.

The Moon: It is the only satellite of the earth. It is often seen in the night to be the largest and the brightest object in the sky.

I. MERCURY

- Mercury is the smallest planet in the solar system.
- It is the closet planet to the sun (distance of 57,600,00 km) ♦ It is the hottest plant resulting from its closeness to the sun.
- It can not sustain life because of its hotness.
- It has no satellite.
- It takes only eighty-eight (88) days to complete its orbit (move around the sun)

II. VENUS

- Venus is the secod closest plant to the sun i.e distance of 107,200,00 km ♦ It is also very hot and cannot sustain life (no living things).
- Except for the sun and the moon, it is the brightest object in the sky.
- It is often regarded as the EARTH's TWIN because it is similar to the earth in size, mass and density.
- It takes Venus 25 days to complete its orbit around the sun (move round the sun). ♦ Like mercury Venus has no satellite.

3. EARTH

- This is the only planet which supports the existence of plants and animals because of its: relative favourable climate, presence of oxygen and balance gravitational pull.
- It has one satellite (the moon).
- The moon moves round the sun in eastward direction in every twenty seven days, the distance between the earth and the moon is 384,629 km.
- The distance between the sun and the earth is 148,800,000 km. ♦ It takes the earth 365 1/4 days (a year) to complete its orbit.

4. MARS

- Mars is believed to have the possibility of supporting some plants' life like the earth. ♦ It has two satellites.
- Its distance from the sun is 227,200,000 km.
- Mars has many earth – like features such as clouds, mountains, deserts and polar ice caps.
- Its takes Mars 687 days to complete its orbit.

5. JUPITER

- Jupiter is the largest planet in the solar system.
- It has twelve satelites.
- Jupiter is not solid and rocky like the earth, rather. ♦ It is made up of gas, at least in its outer parts.

6. SATURN

- Saturn is a very beautiful planet surrounded by a system of rings.
- Being far from the sun, it is a cold planet with an average surface temperature of about 18c
- It is the second largest planet after Jupiter.
- Its distance from the sun is 1,417,600,000 km. ♦ It takes saturn 29.5 years to complete its orbit.

7. URANUS:

- Uranus is the only planet that moves round the sun in a clockwise direction from east to west.
- Its distance from the sun is 2,854,400,00 km.
- It takes uranus 84 years to complete its orbit. ♦ Uranus has five satellites.

8. NEPTUNE

- Neptune is very cold because of its distance from the sun. ♦ Its distance from the sun is 4,468,800,000 km ♦ A takes about 164.8 years to complete its orbit. ♦ It has two satellites.

9. PLUTO

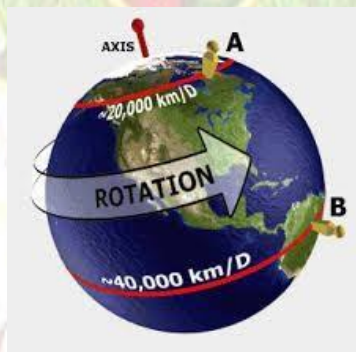
- Pluto is the coldest and the farthest planet from the sun. ♦ It has no satellite.

II. THE EARTH'S ROTATION AND REVOLUTION:

The earth moves in space in two different ways. These are:

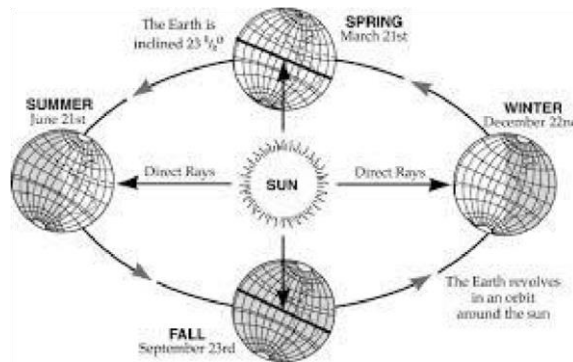
- Rotation
- Revolution

- Rotation of the Earth:** is defined as the movement of the earth on its axis. The earth moves or rotates on its axis from west to east.



Effects of rotation of the earth:

- It causes day and night
 - It causes sunrise and sunset etc.
- Revolution of the Earth:** is defined as the movement of the earth around the Sun in anticlockwise direction from West to East along its elliptical orbit in every $365\frac{1}{4}$ days



iii. LATITUDE AND LONGITUDE:

- (a) **LATITUDE:** Is the angular distance of a point on the earth's surface measured in degrees from the centre of the earth north and south of the equator. Latitude 0 degree is called the equator. Equator divides the earth into two equal halves, which is the Northern and Southern hemisphere.

Uses of Lines of Latitude:

- (i) Lines of latitude in conjunction with the lines of longitude are used to determine the exact location of places on the atlas.
- (ii) They are also used to calculate the distance between two places on the earth's surface.

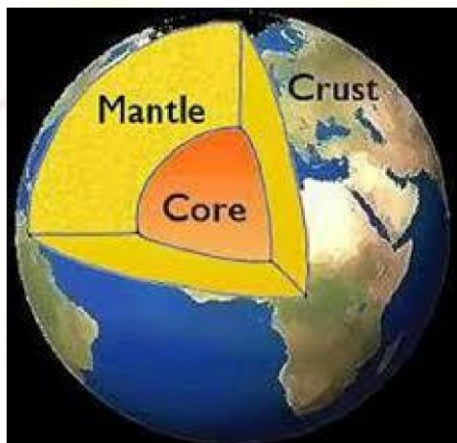
- (b) **LONGITUDE:** Is an imaginary line drawn on the earth running from North to South pole at right angle to the parallel. It is measured in degrees East and West of the Greenwich Meridian.

Uses of Lines of Longitude:

- (i) The lines of longitude in conjunction with the lines of latitudes are used to determine the exact location of places on the earth surface.
- (ii) They are also used to calculate local time between two places on the Earth.

IV. THE EARTH'S STRUCTURE

The Structure of the earth is grouped into two, (i) the outer structure and the (ii) internal structure.



- (a) **The outer structure** of the earth is made up of four layers, namely:
- (i) **Lithosphere:** It is the outermost and solid layer of the earth surface.
 - (ii) **Hydrosphere:** It is the liquid portion of the earth which covers about 70% of the earth's crust.

- (iii) **Atmosphere:** It is the gaseous portion of the earth and comprises layers of gases surrounding the earth.
- (iv) **Biosphere:** It is the zone of the earth occupied by living organisms.
- (b) **The Internal Structure** of the earth is made up of three concentric layers
 - (i) **Crust (Lithosphere):** Is sub-divided into the upper and the lower part. The upper part of the earth crust consists of granitic rocks and forms the continent while the lower part of the earth crust consists of basaltic rock and forms the ocean floor.
 - (ii) **Mantle (Mesosphere):** The mantle is found just beneath the earth crust and it is about 2897km thick.
 - (iii) **Core (Barysphere):** The core is the inner most part of the earth and it contains two minerals: iron and nickels, collectively referred to as **nife**.

V. ROCKS

A rock is any mineral material of the earth. It is a combination of different mineral elements.

TYPES OF ROCKS

- (i) **Igneous Rocks:** are formed through the cooling and the solidification of molten rocks called **magma** ejected from beneath the earth's crust
Types of igneous rocks are: Plutonic (intrusive) and Volcanic (extrusive) Igneous rock.
- (ii) **Sedimentary Rocks:** are formed by sediments deposited either by water, wind or ice. The sediments are deposited in layers or strata, and after some time, it becomes hardened by compression to form sedimentary rocks.

Types of sedimentary rocks based on their processes of formation

- (a) Mechanically formed sedimentary rocks
- (b) Organically formed sedimentary rocks
- (c) Chemically formed sedimentary rocks
- (iii) **Metamorphic Rocks:** are changed rocks. The rocks are formed from pre-existing igneous or sedimentary rocks which have been formed as a result of great heat and pressure.

Economic importance of rocks to man

- (i) Source of Minerals
- (ii) Source of Fuel
- (iii) Construction Purposes
- (iv) For Tourism
- (v) Formation of Soil e.t.c.

VI. MAJOR LANDFORMS OF THE EARTH

There are three major landforms of the earth's surface. These are mountains, Plateaux and Plains.

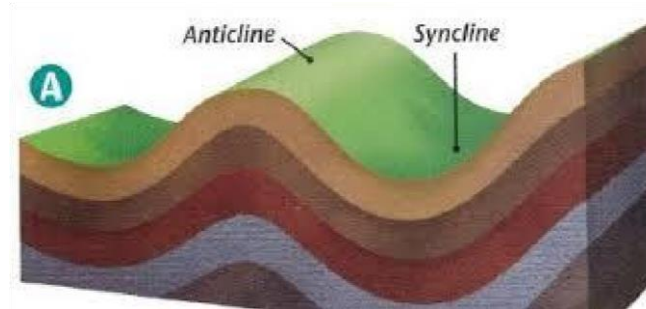
- (i) **Mountains:** They are great elevated land surface resulting from intense action of internal forces.

Types of Mountain:

- (a) Fold Mountain

- (b) Block Mountain
- (c) Volcanic Mountain and,
- (d) Residual Mountain

(a) Fold Mountain



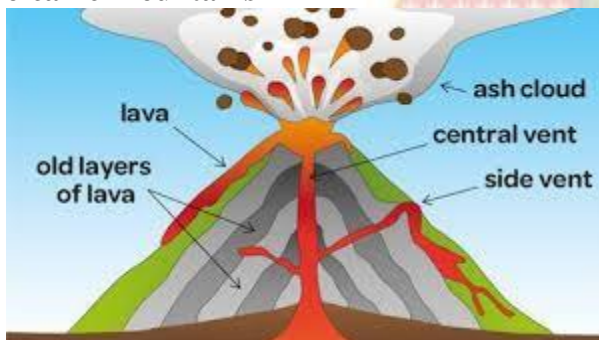
Fold Mountains are formed from wrinkling or folding of the earth crust. The up folds of the wrinkles are called anticlines while the downfolds are called syncline. The wrinkling or folding of the crust is produced by compressional forces.

(b) Block Mountain

Block Mountains are formed when the earth cracks due to faulting. Faulting may result from tensional forces or compressional forces.

Rift valley or graben is formed when a block in between two faults subside. (c)

Volcanic Mountains



Volcanic mountains are formed from volcanoes which are built from materials (molten magma) ejected through fissures or vents in the earth crust.

(d) Residual Mountains

Residual mountains are formed from the remains of already existing mountains which are lowered or reduced by agents of denudation such as running water, ice and wind.

- (ii) **Plateau:** A plateau is an elevated upland with extensive flat or level surface which usually descends sharply to the surrounding lowland.



Types of Plateau:

- (a) Tectonic Plateau
- (b) Volcanic or Lava Plateau and
- (c) Dissected Plateau

(1) Tectonic Plateau

This is formed as a result of earth movement which causes the uplift of some areas and the depression of others.

(2) **Volcanic or lava plateaux** This plateau is formed when molten lava comes out of the earth's crust through a vent and spreads out in successive layers.

(3) **Dissected plateaux** – These plateaux are formed due to weathering and agents of denudation.

(iii) **Plain:** Is an extensive area of level or gentle undulating land, usually a few metres above the sea-level.



Types of Plain:

- (a) Structural Plains
- (b) Erosional Plain
- (c) Depositional Plains

(a) **Structural Plains** – These are formed by bedded sedimentary rocks e.g great plains of U.S.A.

(b) **Erosional Plains** – These are formed by the agents of denudation such as rivers, wind, glacier and ocean waves which wear out irregular rock surface and smoothen them into plains eg. Canadian shield.

(c) **Depositional Plains** – These are formed by the deposition of materials or sediments transported there by the various agents of transportation.

(C) ENVIRONMENT AND ITS RESOURCES

(i) **ENVIRONMENT:** Is defined as the total surroundings of man.

(a) Types of Environment:

- (i) Physical environment includes mainly physical factors such as soil, climate, water etc.
- (ii) Social Environment
- (iii) Cultural Environment

(b) Spheres of the Environment

- (i) Lithosphere
 - (ii) Hydrosphere
 - (iii) Atmosphere
 - (iv) Biosphere
- (i) Lithosphere – This is the solid portion of the earth. It is made up of rocks and mineral materials.
 - (ii) Hydrosphere – This consists of the water bodies in man's environment e.g ocean, lake, river etc.
 - (iii) Atmosphere – This is the layer of gases surrounding the earth.
 - (iv) Biosphere – This is the zone of the earth occupied by living organisms.

(c) Importance of the Environment

- (i) It supports the life systems
- (ii) It provides raw material for good shelter and clothing
- (iii) It is a zero waste system where everything is recycled and consumed by others (iv) It provides mineral resources which aid international trade and foreign exchange.

(ii) WEATHER: Is defined as the atmospheric condition of a place over a short period of time.

CLIMATE: Is defined as the average weather conditions of a place observed over a long period of time, usually over 35 years.

(a) ELEMENTS OF WEATHER AND CLIMATE

- (i) Temperature
- (ii) Rainfall
- (iii) Wind
- (iv) Pressure
- (v) Relative Humidity
- (vi) Cloud
- (vii) Sunshine

- (i) Temperature – It is the degree of hotness or coldness of a place.
- (ii) Rainfall – Refers to water droplets from the atmosphere.
- (iii) Wind – This is defined as air in motion.
- (iv) Pressure – Pressure is the weight of air in a particular place.
- (v) Relative Humidity – This is the amount of water vapour in the atmosphere.
- (vi) Cloud – The particles of water droplet in the upper atmosphere suspended in the air.

- (vii) **Sunshine** – This is the visible part of the solar energy. It determines how dry the wind is.

(b) FACTORS AFFECTING WEATHER AND CLIMATE

- (i) Latitude
- (ii) Altitude
- (iii) Continentality or distance from the sea
- (iv) Ocean currents
- (v) Planetary winds and pressure belts
- (vi) Slope and Aspects
- (vii) Natural Vegetation

(c) IMPORTANCE OF WEATHER AND CLIMATE TO MAN

- (i) **Human Settlement** – Temperate areas are more habitable than desert areas because of differences in climate.
- (ii) **Health** – Humid or damp environment encourages the growth of micro-organisms which cause the diseases of man hence, death rate is higher in tropical countries than in the temperate.
- (iii) **Environmental Hazards** – Environmental Hazards like rain storm are caused by difference in weather and climate of a place.
- (iv) **Vegetation** – Temperature and rainfall are the major determinants of the type of vegetation in an area.
- (v) **Clothing** – The types and nature of clothing worn by different people in different parts of the world are the results of differences in climate.
- (vi) **Agriculture** – Rainfall and temperature are important elements that determine the types of crops to be cultivated in an area.

d) MEASUREMENT OF WEATHER

The following instruments are used in measuring elements of weather

- (i) **Rain-Gauge** is used in measuring **the amount of Rainfall**.
- (ii) **Wind Vane** is used in measuring **the direction of wind** while **Anemometer** is used in measuring the **speed of wind**.
- (iii) **Thermometer** is used in measuring **Temperature**.
- (iv) **Barometer** is used in measuring the **Atmospheric pressure**. (v) **Hygrometer** is used in measuring **Relative humidity**.

2ND TERM SUMMARY SUBJECT NOTES ON GEOGRAPHY FOR SS I

I. LOCATION

Nigeria is located between latitudes 4°N and 14°N of the equator and between longitudes 3°E and 15°E of the Greenwich Meridian. Latitudinal extent or stretch of the country is 10° (14°N – 4°N)

Longitudinal extent is 12° ($3^{\circ}\text{E} - 15^{\circ}\text{E}$)

II. POSITION:

Nigeria is in West Africa, it is bounded in the North by Niger Republic, North East by Chad Republic, East by Cameroon Republic, West by Benin Republic and South by the Atlantic Ocean.

III. SIZE:

Nigeria is the fourth largest country in West Africa in terms of landmass after Niger, Mali and Mauritania. Nigeria's total land area is approximately $925,768\text{Sqkm}^2$. (i) North- South distance is approximately 1100km (ii) East- West distance is 1,300 km.

IV. POLITICAL DIVISION OF NIGERIA:



- Nigeria came into existence in 1914 when Northern and Southern protectorates were amalgamated.
- In 1960, the country gained independence with three regions (North, East and West)
 - In 1976, the country was further divided into 19 States.
- Presently Nigeria has thirty six states and a federal capital territory (FCT).

V. PHYSICAL SETTING OF NIGERIA:

I. Relief (Lowlands and Highlands) Relief refers to surface configuration of the land above the sea level.

AREAS OF LOWLAND IN NIGERIA (BELOW 300M)

- i. The Sokoto plain in the North West – (200 – 300m)
- ii. The Niger-Benue trough/valley – (100 – 300m)
- iii. The Chad Basin or Borne Plain (100 – 300m)
- iv. The Niger Delta (0 – 100m)
- v. The Cross River Basin (120 – 180m)
- vi. The interior coastal lowland of western Nigeria (100 – 300m)
- vii. The Coastal Plain (0 – 100m)

AREAS OF HIGHLAND IN NIGERIA (ABOVE 300M)

- i. The North Central Highlands (200 – 1500m)
- ii. The Western Highlands (350 – 950m)
- iii. The Eastern Highlands (300 – 2000m)

II. Drainage of Nigeria:

Drainage refers to the system of rivers, their tributaries and other water bodies that are found in the geographical area called Nigeria.

Nigeria is drained by two main rivers:- Rivers Niger and Benue, Other rivers in Nigeria are grouped below according to the Hydrological Centres from where they took their sources.

- i. **Western Highlands:-** Ogun, Osun, Owena and Osse Rivers.
- ii. **North Central Highlands:-** Kaduna, Hadejia, Zamfara, Yobe, Gana, Gongola and Rima Rivers.
- iii. **Eastern Highlands:-** Donga and Kastina – Ala Rivers
- iv. **Eastern Scarplands:-** Anambra and Cross Rivers

Nigeria has one major natural inland drainage basin i.e. Lake Chad (North-East)

CHARACTERISTICS OF NIGERIAN RIVERS

- i. Volume changes with seasons
- ii. Presence of Rapids and Cataracts
- iii. Presence of Debris
- iv. Short courses with high speed
- v. Specific direction of flow
- vi. Shallowness
- vii. Seasonality.

IMPORTANCE OF NIGERIAN RIVERS

- i. Medium of transportation
- ii. Generation of hydro-electric power (H.E.P)
- iii. Irrigation purposes
- iv. Domestic uses
- v. Industrial uses
- vi. Provision of employment
- vii. Sources of food supply
- viii. Recreation/Tourism
- ix. Formation of Fertile alluvial plains.

III. CLIMATE OF NIGERIA

Climate is defined as the average weather conditions of a place over a long period of time (35 years).

SEASONS IN NIGERIA There are two (2) types of seasons in Nigeria; these are Dry Season and Rainy Season.

Wet Season:- March -November

Dry Season:- November -February

CHARACTERISTICS OF WET SEASON

- i. Low Temperature
- ii. High Pressure
- iii. Prevailing Wind:- South West Trade Wind.
- iv. Heavy Rainfall

CHARACTERISTICS OF DRY SEASON

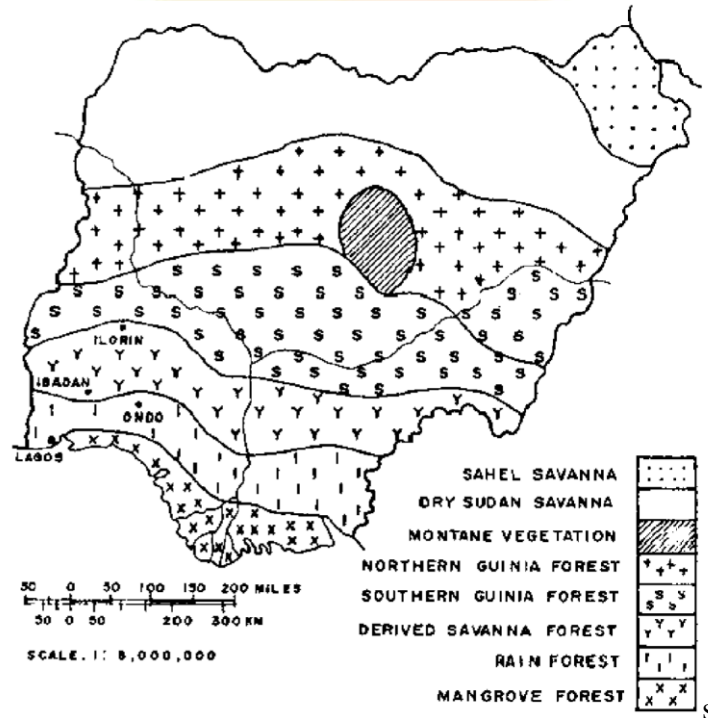
- i. High Temperature
- ii. Low Pressure
- iii. Prevailing Wind:- North East Trade Wind
- iv. Absence of Rainfall
- v. Harmattan

Types of Climate in Nigeria

- i. Sub-Equatorial Climate
- ii. Tropical Hinterland (Wet Climate)
- iii. Tropical Continental Climate (Dry)
- iv. High Plateau Climate

B. NIGERIA II

I. VEGETATION BELTS IN NIGERIA



The vegetation in Nigeria can be grouped into three major zones. These are:

A. FOREST ZONE

1. MANGROVE SWAMP FOREST (Salt and Fresh Water Swamp)

Location: Nigeria Coastal Areas such as: Delta, Port-Harcourt, Warri, Uyo and Calabar.

Characteristics:

- i. Tall, Woody Trees (White and red mangrove).
- ii. Aerial Roots (Breathing Root).
- iii. Evergreen Trees with broad leaves.
- iv. Types of trees include, Raffia Palms, White and Red Mangrove.

2. RAIN FOREST:

Location: It is found in the Southern part of Nigeria such as: Benin, Sapele, Akure, Ibadan, Abeokuta, Aba etc.

Characteristics:

- i. Tall trees with buttress roots
- ii. Evergreen trees and broad leaves
- iii. Trees exist in different heights/layers (three strata/layers can be identified)
- iv. Presence of little undergrowth
- v. Presence of climbers, creepers, epiphytes (plants that grow on another plants with no negative impact on the host) and parasites (plants that grow on another plants with negative impact on the host).
- vi. Presence of heterogenous species of trees like Iroko, Obeche, Mahogany and African Walnut.

- vii. Plant Species are not in pure stand.

B. SAVANNAH

There are three types of savannah vegetation in Nigeria. These are:

1. **Guinea Savannah:** This is found in Enugu, Lokoja, Ilorin, Makurdi etc.

Characteristics

- i. Largest vegetation belt in Nigeria ii. Few scattered trees iii. Tree types are oil palm, date palm, shea butter, isoberlina etc.
- iv. Trees are deciduous
- v. Grasses are green during raining season and brown during dry season

2. **Sudan Savannah:** This is found in Sokoto, Katsina, Kaduna, Kano, Dutse, Bauchi etc.

Characteristics:

- i. Short numerous grasses ii. Presences of short scattered deciduous trees iii. Plant species include acacia, date palm, silk cotton plants, baobab.
- iv. Some trees have thorns while others have thick backs

3. **Sahel Savanna:-** This is found in Maiduguri and Damaturu.

Characteristics

- i. Short scanty grasses ii. Presence of short and though shrubs/trees iii. Grasses are fewer, poorer and in patches iv. It has many drought resistant and scattered plants
- v. Popular plants include Acacia, Gum Arabic, Date Palm and Baobab.

C. MONTANE VEGETATION

This is a type of vegetation found on mountain tops. E.g Jos and Adamawa area.

Characteristics

- i. Associated with highland areas. ii. Presence of short, scattered and deciduous trees iii. It has grasses at its leeward side iv. It has varied trees at it windward side

B(ii) POPULATION OF NIGERIA

- a. **Population:-** Population can be defined as the number of people living in a particular area at a point in time.

Population Concepts

- i. **Over-Population**– This is defined as a situation whereby the population is considered too large for the available resources for people to enjoy the highest possible standard of living.
- ii. **Under-Population** – This is when the size of population is less than the available resources of a country.
- iii. **Optimum Population** – This is the number of people that can be supported by the available resources in an area so as to achieve the highest possible standard of living.

- iv. **Population Density**- This is defined as the number of persons per square kilometre of land i.e $\frac{\text{Total Population}}{\text{Land Area}}$

- b. **Distribution of Population in Nigeria:** Population of Nigeria is not evenly distributed. There are areas of high, moderate and low population densities.

Area of High Population Densities Over 250 Persons per SqKm **South**

West:-Lagos, Ibadan, Akure, Abeokuta.

North Central:- Kano, Kaduna, Jos, Sokoto.

South East:-Enugu, Onitsha, Owerri, Aba and Ebonyi.

Area of Moderate Population Densities Between 60&125 Persons Per SqKm Benin City, Ilorin, Kaduna, Calabar, Bauchi, Dutse, Uyo and Owerri.

Area of Low Population Densities Below 60 Persons Per SqKm The

Middle Belt:- Kwara, Kogi, Benue, Niger and Abuja Areas.

The Extreme North East:- Borno and Yobe State

C. POPULATION MOVEMENT (Migration)

Migration can be defined as the movement of people from one geographical area to another, for permanent or temporary residence or settlement.

Types of Migration

- i. Emigration ii. Immigration

- i. Emigration – This is defined as the outward movement of people from a geographical area.
- ii Immigration – This is defined as the inward movement of people into a geographical area.

Forms of Migration

- i. Rural – Urban Migration - This is the movement of people from rural to urban area.
- ii. Rural – Rural Migration – This is the movement of people from one rural area to another.
- iii. Urban – Rural Migration – This is the movement of people from one urban area to another.
- iv. Urban – Urban Migration – This is the movement of people from urban area to rural area.
- v. International Migration – This is the movement of people across international boundary i.e. from one country to another.
- vi. Seasonal Migration – This is the movement of people from one geographical area to another as the season changes.

D. POPULATION DATA

These are data or statistics describing or providing information about a population e.g. birth, death, migration, marriage, divorce etc.

B(iii) MINERAL RESOURCES IN NIGERIA

Some minerals mined in Nigeria include the following: Tin, Coal, Petroleum, Bitumen etc. Mineral resources in Nigeria can be grouped into

(i) POWER RESOURCES IN NIGERIA

These are Coal, Petroleum, Natural Gas, Water and Solar Energy.

(ii) WATER RESOURCES

Water is one of the most essential resources. Without water, the earth would be incapable of supporting life.

Importance of Water Resources to Man

- i. Sources of Food Supply
- ii. Generation of Hydro-Electric Power (H.E.P)
- iii. Agricultural Purposes
- iv. Medium of Transportation
- v. Domestic Use
- vi. Industrial Use
- vii. Provision of Employment
- viii. Recreation/Tourism
- ix. Sources of Minerals – eg salt, petroleum etc.

(iii) VEGETATION RESOURCES

Vegetation resources include all the resources one can get from the Forest and Savannah for the benefit of man, animals and plants.

These resources include: Timber, Roots, Leaves, Barks of Trees, Latex, Fruits, Fibre, Firewood and Wild Animals.

Importance of Vegetation Resources to Man

- i. Sources of Food Supply
- ii. Sources of Timber
- iii. Medicinal Herbs
- iv. Sources of Firewood
- v. Development of Game Reserves
- vi. Employment
- vii. Provision of Furniture
- viii. Prevention of Erosion

B(iv) LUMBERING IN NIGERIA

Lumbering is defined as the felling of economic trees in the forest, which can be used for domestic, industrial or commercial purposes.

Lumbering Areas in Nigeria

Benin, Sapele, Ondo, Port-Harcourt and Calabar

Economic Trees in Nigeria (Tropical Hard Woods)

Iroko, Obeche, Opepe, Sapele Wood, Mahogany and African Walnut.

Economic Importance of Lumbering

- i. Foreign Exchange
- ii. Employment
- iii. Raw Materials
- iv. Construction Purposes
- v. Source of Income
- vi. Trees help to control erosion

3RD TERM SUMMARY SUBJECT NOTES ON GEOGRAPHY FOR SS I

CONTENTS FOR THIRD TERM

[A] Map Work

- (i) Map
- (ii) Map Scale
- (iii) Measurement of Map Distances
- (iv) Measurement of Area
- (v) Map Reduction and Enlargement.

[B] Modes of Transportation

- (i) Meaning
- (ii) Types
- (iii) Merits & Demerits of each mode
- (iv) Importance

[C] Manufacturing Industries

- (i) Definition of Industry
- (ii) Characteristics of Manufacturing Ind.
- (iii) Classification of Industries
- (iv) Factors affecting industrial location
- (v) Problems of Manufacturing Industries in Tropical Africa.

[D] Basic Concepts of Geographic Information System (GIS)

- (i) Meaning
- (ii) Uses
- (iii) Geographic Data (iv) Geo Referencing.

[E] Components of Geographic Information Systems (GIS)

- (i) Hard Ware Components
- (ii) Other components of GIS

SUMMARY SUBJECT NOTES [A]

MAP WORK:

What is a map?

- i. A map is a representation of the earth's surface drawn on any flat medium.

Types of Map

- a. Topographical Map
- b. Cadastral Map
- c. Atlas
- d. Sketch Map etc.

II. Map Scale:

The scale of a map expresses the relationship between the distance of two points on a map and the actual distance on the ground.

Types of Scale

- a. Statement Scale
- b. Linear Scale
- c. Representative Fraction (RF)

III. Measurement of Map Distances

Distance on a map is the interval between two points on a map. The distance can either be a curved or straightened distance.

Curved distances are found in roads, rail-way lines, rivers or footpath. They are measured with the use of a piece of thread, a pair of divider or straight edge of a paper.

Straight line distance is measured with a ruler.

IV. Measurement of Area

Area can be regular or irregular shape.

a. Measurement of Regular Shape: Regular shapes can be a square or rectangle.

Areas of regular shapes are measured by multiplying their length by width.

b. Measurement of Irregular Shape: Irregular Shape like lake, town etc can be measured by two methods

i. The Square Method – This method requires the use of a tracing paper, a light transparent paper of a graph paper.

ii. The Strip Method – This method requires the use of parallel strips of equal width, based on a given scale.

V. Map Reduction and Enlargement

Map Reduction means reducing the size of the original map. When a map is reduced the scale becomes bigger.

Map enlargement means enlarging the size of the original map. When this happens the scale becomes smaller.

[B(i) MODES OF TRANSPORTATION]

Transportation is the movement of people and goods from one place to another either by land, water or air.

ii. Types of Transport

- a. Transport by Land e.g. Road & Rail Transport
- b. Transport by Water
- c. Transport by Air

iii. Merits and Demerits**a. TRANSPORT BY LAND****I) ROAD TRANSPORT****Merits:**

- i) Most common means of transportation.
- ii) It provides door to door services.
- iii) It facilitates movement over short distances.
- iv) It feeds water, rail and air transportation.

Demerits:

- i) Roads are expensive to construct
- ii) They are more prone to accident
- iii) Their volume of goods and passengers carried by roads is limited.

II) RAIL TRANSPORT**Merits:**

- i) The cost of transportation by rail is cheaper compare with others
- ii) It can transport goods and passengers over a very long distance
- iii) It opens up new land
- iv) Maintenance cost is relatively low
- v) It is relatively safe
- vi) Most convenient for transporting bulky goods

Demerits:

- i) High Cost of Construction
- ii) It is very slow
- iii) Constant stopping in each station waste a lot of time
- iv) It depends on roads to feed it with passenger and goods at different stations.

b. TRANSPORT BY WATER

Merits:

- i) It is the cheapest means of transport between countries
- ii) Cost of construction and maintenance is low and it is restricted to ship and ports
- iii) It is relatively safe
- iv) It is useful in transporting goods over long distances
- v) It is used to move bulky goods between countries

Demerits:

- i) It is the slowest means of transport
- ii) Cost of acquiring a ship is high
- iii) Cost of port construction is high

c. TRANSPORT BY AIR

Merits:

- i) It is the fastest means of transportation
- ii) It is very comfortable
- iii) There are no obstructions on its way
- iv) It can carry valuable and perishable goods urgently.

(v) It requires medicare supplies, machine parts, express mails which are easily dispatched by cargoes.

Demerits:

- i) It is expensive to operate and maintain
- ii) It is easily affected by bad weather
- iii) It is a very expensive mode of transportation
- iv) Aircraft accidents are usually disastrous

IMPORTANCE OF TRANSPORTATION

- i) Movement of people goods and services
- ii) National Integrations
- iii) Diffusion of Ideas and Technology
- iv) Stimulates International Trade
- v) Generation of Revenue

[C] CLASSIFICATION OF INDUSTRIES i. Manufacturing Industry

Manufacturing Industries are those that process raw materials into a new product by mechanical or chemical processes at home (cottage) or in industry.

ii. Characteristics of Manufacturing Industries in Tropical African Countries i)

They are dominated by foreign multi-national corporations

ii) They depend on imported machinery

iii) They are mainly light industries iv)

They produce mainly consumer goods. v)

They are labour- intensive

iii. Classification of Manufacturing Industries

Manufacturing industries can be classified in two ways 1)

According to goods produced

- a. **Light Industries** – These are industries which produce relatively light weight goods e.g. matches, television sets, books etc.
- b. **Heavy industries** – These are industries that produce heavy or bulky goods e.g. ship building and automobile industries.
- c. **Consumer goods industries** – They produce goods that are used directly by consumers e.g. shoes, beverages etc.
- d. **Capital good Industries** – These produce goods that are used in producing other goods e.g. machines

2) According to functions performed

- a. **Primary Industries** – These industries are concerned with the extraction of raw materials provided by nature. They are also called extractive industries e.g. mining industries.
- b. **Secondary Industries** – These Industries turn raw materials into consumable or finished goods.
- c. **Tertiary Industries** – These are concerned with rendering of services e.g, training, banking etc.

iv. Factors affecting Industrial Location

- a. Proximity to source of raw materials
- b. Nearness to markets
- c. Nearness to source of power
- d. Availability of Capital
- e. Availability of Labour
- f. Government Policies
- g. Political Stability
- h. Adequate Transport Network

v. Problems of Manufacturing Industries in Tropical Africa

- a. Shortage of Raw Materials
- b. Insufficient Capital
- c. Low Purchasing Power
- d. Inadequate Power Supply
- e. Competition from foreign goods

[D] BASIC CONCEPTS OF GEOGRAPHIC INFORMATION SYSTEM (GIS)

a. Meaning:

Geographic Information System (GIS) is a system designed to capture, store, manipulate, analyse, manage and present all types of geographical data.

b. Uses

Geographic information system can be used in the following fields of study/profession.

- a) Engineering
- b) Urban and Regional Planning
- c) Management
- d) Transport or Logistics
- e) Insurance
- f) Telecommunication
- g) Business

c(i). Geographic Data

Geographic Data refers to any data which possess locational characteristics

c(ii). Geo-Referencing

Geo-Referencing is the process of scaling, rotating and translating an image to match a particular size and position.

d. Components of Geographic Information System (GIS)

The components of Geographic Information System are: a.

Hardware e.g. computer, printer, digitizers etc

b. Software e.g. AutoCAD Map, Autodesk World, etc

c. Data: Data Sources could be from, Satellite Images, Field work, Maps, surveying etc.

d. People e.g. viewers, GIS Specialist, General Users

e. Procedure/Method

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