**GEOGRAPHY SS 3**

**FIRST TERM**

**WEEK ONE**

**EARTHQUAKE**

**Earthquakes: A Phenomenon of Trembling Earth**

An earthquake is a sudden and vigorous shaking of the Earth's surface, capable of inflicting significant damage. This geological occurrence arises from the abrupt and rapid displacement of rocks in the Earth's crust, both beneath and within the surface. Earthquakes result from disturbances or movements within and beneath the Earth's crust.

**Understanding Key Concepts**

- Origin or Focus: This denotes the specific point within the Earth where the earthquake originates. It is the epicenter of the seismic activity, from which shock waves radiate.

- Epicenter: The epicenter is the point on the Earth's surface situated directly above the earthquake's origin. It is where the earthquake's effects are most intensely felt.

- Seismograph: An essential tool for gauging the intensity of an earthquake. Seismographs are instruments designed to measure and record seismic activity.

- Richter Scale: This scale serves to indicate an earthquake's point of origin or magnitude, helping to quantify the intensity of the seismic event.

**Impact of Earthquakes**

1. Destruction and Loss: Earthquakes are notorious for their capacity to cause widespread devastation to both human lives and property.

2. Infrastructure Damage: The seismic forces can lead to the collapse of roads, railways, bridges, power lines, and telecommunication networks.

3. Formation of Fissures: Earthquakes can create substantial fissures or cracks on the Earth's surface.

4. Altering Sea Levels: Seismic activity can result in temporary alterations of sea levels.

5. Crustal Displacement: Parts of the Earth's crust may experience vertical or lateral shifts due to earthquakes.

6. Ocean Floor Effects: Earthquakes can lead to the raising or lowering of portions of the ocean floor.

7. Landslides and Rock Cracks: These geological events are often associated with earthquakes, leading to landslides and the formation of deep crevices in surface rocks.

General Evaluation Questions

1. Causes of Earthquakes: Explain the various factors responsible for the occurrence of earthquakes.

2. Key Concepts: Elaborate on the concepts of focus, epicenter, and seismograph in relation to earthquakes.

3. Earthquake Effects: List and provide descriptions for four significant effects of earthquakes.

4. Weather vs. Climate: Differentiate between the terms "weather" and "climate.

5. Elements of Climate: Enumerate five essential elements that constitute the climate of a region.

**Weekend assignment**

1. The intensity of an earthquake is measured with (a) Seismograph(b) Ritcher’s scale (c) Campbell stoke (d) Barometer
2. The point an earthquake first appears directly above the surface is called(a) Epicentre (b) Focus (c) Origin (d) Core
3. The point at which the earthquake first began is called(a) Focus (b) Epicentre (c) Vent (d) Lithosphere
4. Earth tremor is simply the \_\_\_\_\_\_\_ of the earth crust (a) folding (b) shaking (c) weathering (d) formation
5. The magnitude of the earthquake is measured by \_\_\_\_\_\_ (a) Seismograph (b) Ritcher’s scale (c) Campbell stoke (d) Barometer

**Theory**

1. State two causes of earthquake.
2. Outline three effects of an earthquake.

**WEEK TWO**

# Volcanicity

Volcanicity is the process by which molten rock or magma is forced into the earth’s crust or onto the earth’s surface.

Volcanicity also involves all the processes through which igneous activities may occur at or near the earth’s surface. These are those processes in which molten rocks (magma), liquid-solid or gaseous materials move towards the earth’s surface or onto the earth’s crust.

#### Mode of formation

Volcanicity/Vulcanicity is formed when molten rock or magma forces its way into planes of weakness or vent of the earth’s crust to escape quietly or explosively to the surface.

Volcanoes are mountains or conical hills with craters from which molten rock, gasses and steam are blown out. Volcanoes are very different from ordinary mountains because they are not formed by folding and compression or by uplift or erosion. They are built up by the accumulation of their own eruptive product e.g. Lava bomb, ash and dust.

**Evaluation**

1. Define Vulcanicity.
2. Explain its mode of formation.

#### The intrusive landform of volcanicity

These are features produced when magma solidifies within the earth’s crust without reaching the surface of the earth. Such rocks are called **Plutonic Rocks**.

##### Features

1. **Sill:**Sill results when an intrusion of magma is made horizontally along the bedding planes of sedimentary rocks.
2. **Dyke:** A vertical or steeply inclined igneous rock band which crosses across the bedding plane.
3. **Laccolith:**A massive dome-shaped intrusion of solidified magma with a level base.
4. **Batholith:**A very massive igneous rock mass that cuts across the bedding plane. It is the largest of all plutonic rocks. It usually occurs deep below but can be exposed by denudation.

Other features are Lopolith and Phacolith.

#### Extrusive volcanic features

These are volcanic features built on the surface. They are

1. **Caldera:**This is a depression formed when the top of a volcano is blown up. Occasionally, it is occupied by a lake called Crater lake.
2. **Acid lava dome:**It does not flow for a long distance before solidifying and it, therefore, builds up a dome-shaped volcano with steep convex slides.
3. **Lava plateau or Shield volcano:**These two features are similar because they do not form great height. They are formed by basic lava which flows for a long distance before solidifying.
4. **Ash and cinder cone:** This is a volcano of moderate height built up by fragmented materials such as ash, cinder, dust and volcanic bombs. It is usually steep since these materials do not flow like lava.

**Evaluation**

1. Mention three features of intrusive landform.
2. Explain four intrusive and extrusive features of vulcanicity.

###### General evaluation

1. What is vulcanicity?
2. Mention four intrusive landforms and three extrusive features of vulcanism.
3. What do you understand by Caldera and Lava plateau?
4. Mention the three types of rocks.
5. Explain the mode of formation of the three types of rocks.

**Weekend assignment**

1. The composite cone is a volcano having successive layers of (a) ash and cinder only (b) cinder, ash and pyroclasts (c) ash, acid lava and parasitic cones (d) pyroclasts and parasitic cones.
2. Crater lakes are most likely to occur in (a) areas of active erosion (b) region of extinct volcanoes (c) areas of fold mountains (d) heavily faulted region.
3. An active volcano is one that (a) has not erupted recently (b) will not erupt (c) erupts periodically (d) has earlier erupted violently.
4. When the magma solidifies at the crest of an anticline or the bottom of a syncline, the feature formed is called (a) batholith (b) laccolith (c) phacolith (d) lopolith
5. Which of the following is a feature of extrusive vulcanicity (a) Lopolith (b) Sill (c) Composite cone (d) Batholith

**Theory**

1. Mention the three types of volcano**.**
2. Explain two of the types mentioned above.

**WEEK THREE**

# Karst (Limestone) Topography

A limestone region refers to a large stretch of land occupied by limestone which possesses a unique type of topography. Limestone is a sedimentary rock of organic materials made up of calcium carbonate.

#### Characteristics of the limestone region

1. **Solubility:** Limestone is dissolved in rainwater containing carbon dioxide to form a weak acid. Such rainwater acts on limestone and dissolves it.
2. **Presence of depressions:** Limestone regions contain depressions of different sizes and depths.
3. **Absence of surface drainage:**Due to easy permeability of water into the soil in a limestone region, most of the streams flow for a short distance and disappear underground.
4. **Absence of thick vegetation cover:**The region is very dry hence, there is a complete absence of thick or luxuriant vegetation cover.
5. **Presence of dry surface valleys:**Due to easy penetration of water in this region, all the valleys are dry. When water meets hard rocks underground, it may re-emerge below the limestone as spring or resurgence.
6. **Presence of joint and rugged topography:** The blocks of rocks are joined together with fissures which allow water to pass through them and the surface is undulating.

#### Surface features of the limestone region

1. **Grike:**It is formed as a result of progressive widening of cracks or joint by a solution to form a limestone pavement. Such enlarged pavements are called*grikes.*
2. **Clints:**They are surface features of isolated and rectangular blocks which exist between joints or grikes.
3. **Swallow Holes or Sink Holes:**These are small depressions carved out by solution where rainwater sinks into the limestone at a point of weakness.
4. **Doline:**This is formed when several swallow holes join together to form a larger depression.
5. **Uvala:** This results when several lines join to form a larger depression.
6. **Polges:** These are formed partly by faulting, to form a larger depression.

#### Underground features of a limestone region

1. **Caves or Caverns:**They are large underground spaces that are formed as a result of sinking and flowing of water into the limestone region through joints and bedding planes. They may contain stalactites and stalagmites. They may also contain rivers or ponds.
2. **Limestone Gorge:**This has a vertical side formed when the roof of an underground cave collapses or when a river cuts across and runs down into a limestone region.
3. **Resurgence or Spring:**This results from water sinking underground. When the water meets hard rocks underground, it re-emerges at the surface to form spring or resurgence.
4. **Stalactites:**They are found in caves and they grow from up downward and may join stalagmite to form a pillar. Stalactites are sharp, slender and hang on the roof of caves. They are formed when water dripping down the cave carves out sharp and slender pinnacles. They are precipitates of calcium carbonate in the solution of the underground water.
5. **Stalagmites:**These are also found in caves but they grow from down-upwards and may join stalactite to form a pillar. They are shorter, fatter and more rounded.

Stalagmites are formed when water drips down from stalactite to the floor; evaporation then occurs while calcium is deposited to form stalagmite.

1. **Pillars:**Natural pillars are formed when stalactites growing from the roof join stalagmites growing from the floor of the caves.

Important limestone regions in Nigeria include Ewekoro, Sagamu (Ogun State), Okpella (Edo State), Nkalagu (Anambra State), Ashaka(Benue State) etc.

##### Importance of the limestone region

1. Limestone region provides limestone which is an essential raw material for making cement.
2. Limestone is also used in the smelting of tin and iron.
3. Limestone area is a beautiful site of tourism.
4. It is also a source of underground water.
5. It provides grazing lands for animals.

**Evaluation**

1. Mention four characteristics of a limestone region.
2. Limestone is made up essentially of what mineral?

###### General evaluation

1. What is an artesian well?
2. Differentiate between an artesian basin and a well.
3. State the importance of limestone region.
4. Mention factors that can affect the weather and climate of an area.
5. How does climate affect man’s activities?

**Weekend assignment**

1. Stalagmite and stalactite are found in ………. (a) caves (a) huts (c) desert regions (d) plunge pool
2. The main element in the limestone region is (a) oxygen (b) nitrogen  (c) calcium carbonate (d) oxygen
3. One of these areas in Nigeria is not a limestone region(a) Okpella, Edo State (b) Ewekoro, Ogun State (c)Kafanchan, Kaduna State (d) Shagamu,  Ogun State
4. A place where water issues out from the ground naturally is called a ……… (a) pond (b) spring (c) pool (d) well
5. When a hole is sunk into the ground far below the water table and water seeps out of the rocks into the hole, it refers to a ……… (a) well (b) river (c) spring (d) fountain

**Theory**

1. Write three differences between a stalactite and a stalagmite.
2. What is the mode of formation of a pillar?

**WEEK FOUR**

# Denudational Processes/Weathering

Denudation is a process of lowering and levelling of the earth surface by gradual breaking and wearing away of the surface of the earth or soil. The agents or forces which promote these breaking and lowering of the earth’s surfaces are called the agents of denudation. Examples of agents of denudation are wind, running water, ice and waves.

#### Factors affecting denudation

The rate of denudation depends on the following factors:

1. **Nature of relief:** The higher the relief, the higher the rate of denudation.
2. **The structure of the earth:** The softer the rocks, the greater the rate of denudation and vice versa.
3. **The local climate of the area:** Wet climate tends to increase the rate of denudation more than dry climate.
4. **Influence of man:** The higher the level of man’s activities on the earth surface, the greater the rate of denudation.

#### Sequences of denudation

Denudation involves four sequences or stages which include:

1. **Weathering:** This is the gradual disintegration of rocks by physical, biological and chemical processes.
2. **Erosion:** This is the active wearing away of the earth’s surface by agents of denudation such as running water, wind, ice and waves.
3. **Transportation:** This is the active removal of eroded materials to new positions or areas.
4. **Deposition:** This is the dumping of the debris carried by the process of transportation in certain parts of the earth where it accumulates to form soils.

**Evaluation**

1. What is denudation?
2. State the processes of denudation.

#### Weathering

Weathering is defined as the gradual breaking down or disintegration of rocks by either physical (mechanical) or chemical processes.

##### Factors affecting weathering

The following factors affect the weathering of rocks:

1. **Climate:** Climatic elements like temperature and rainfall are the major factors affecting weathering. While physical (mechanical) weathering is aided by temperature and water to break down rocks, chemical weathering is aided by water and other gases in the atmosphere. Generally, chemical weathering is common in hot and wet climate (i.e humid regions with high temperature) while mechanical weathering is common in arid and cool temperate climates.
2. **Types of rock:** Rocks are made up of different minerals, while some are resistant to weathering, others are not, simply because of their differences in structure, texture, composition and size of the rocks.
3. **Relief:**Steep slopes like high mountains encourage weathering especially frost action while gentle and even slopes favour chemical weathering.
4. **Living organisms:**Plants and animals have a great influence on weathering. Roots of plants promote physical weathering as the root penetrates into rocks and breaks them. Chemical weathering occurs due to vegetative cover which conserves water to produce weak acid in the soil. Animals bore holes into it and break them, besides, to allow other agents of chemical weathering to take place.

###### Weekend assignment

1. An extensive area of level or gentle undulating land which is usually a few meters above the sea level is known as (a) Plain (b) Mountain (c) Valley (d) Plateau
2. Which of these plain is associated with glacier (a) Deltaic plain (b) Flood plain (c) Outwash plains (d) Lacustrine plains
3. Plains formed by agents of denudation are known as (a) Dissected plain (b) Residual plain (c) Erosional plains (d) Structural plain
4. Which of the following is not a depositional plain (a) Outwash plain (b) Pedi plain (c) Deltaic plain (d) Flood plain
5. Great plains of USA is a good example of (a) Volcanic plains (b) Structural plains (c) Erosional Plains (d) Depositional plains

**Theory**

1. Explain briefly the difference between chemical weathering and physical weathering.
2. State three effects of weathering.

**WEEK FIVE**

**Denudational Processes/Weathering II**

**Types/processes of weathering**

There are two major types or processes of weathering. These are physical (mechanical) weathering and chemical weathering.

**Physical or mechanical weathering:** This process promotes the physical disintegration of rocks. Agents of physical weathering include:

1. **Temperature Changes:**This is common in arid regions like the hot desert where rocks are exposed to the blazing sun during the day. The outer layers of the heated rocks expand much faster than the cooler interior of the rocks. At night, the temperature drops and the outer layers of rocks cool more rapidly than the interior. This alternate expansion and contraction of the rock later result in the peeling off of the rock surface. The process involved in the peeling off of the rock surface is called**exfoliation**. The pieces of rock that peel off are called **screes or tallus**which are deposited at the base of the rock. The remaining parent material is smoothened into a dome-shaped structure called **exfoliation dome.**
2. **Alternate Wetting and Drying:** This occurs in tropical areas of the world where rocks absorb water, resulting in swelling. When the rocks dry out, the outer surface of the rocks shrinks. The alternate wetting and drying weaken the rocks and they begin to crack.
3. **Frost action:** This occurs in polar and temperate regions of the world where rocks on high mountains with cracks or joint collect water or snow in them. When the temperature drops during the night or in winter, the water in cracks freezes and then melts during the day or summer. Such repeated freezing and melting widen and deepen the cracks will eventually breakdown the rock. The pieces which peel off from rock surface accumulate at the base of the mountain to form **screes.**
4. **The action of Plants and Animals:**This is often referred to as **biological weathering.**As plants grow, their roots penetrate the rocks below usually along the joints and other areas of weakness, thereby breaking the rocks apart. Some animals like rodents, earthworm, etc. bore holes into rocks and cause them to break into pieces in addition to allowing other agents of chemical weathering to take place. The activities of man in the course of mining, road construction and farming also contribute to the breaking down of rocks mechanically.

**Chemical weathering:**Chemical weathering is the gradual disintegration of rocks due to their exposure to air and water. It is common in hot-wet climate or humid regions with high temperature. The processes or agents involved in chemical weathering include:

1. **Solution:**Rainwater attacks dissolve rock salts to form solution e.g. rainwater dissolves calcium carbonate of limestone, thereby, widening the cracks and joints of the rocks.
2. **Oxidation:**Oxidation is the reaction of oxygen in air or water with minerals in the rocks. Oxidation takes place actively in rocks which contain iron. When oxygen combines with iron, it forms iron oxides.
3. **Carbonation:**Atmospheric carbon dioxide mixes with rainwater to form a weak carbonic acid. This acid dissolves rocks, resulting in their breakdown.
4. **Hydration:** This occurs when rock mineral absorbs water, resulting in the chemical alteration of the minerals, e.g. the conversion of iron in rocks to hydrated rocks.
5. **Hydrolysis:**This is the reaction of water with rock minerals to produce a rock entirely different from the original one.

The purpose of weathering is to form the soil. The remains of the rock i.e. weathered materials which eventually form the soil are called **regolith.**

**Evaluation**

1. Explain mechanical weathering.
2. What is talus?

**General evaluation**

1. Define weathering.
2. Mention the processes of weathering.
3. Explain physical weathering.
4. What is exfoliation?
5. Explain biological weathering.

**Weekend assignment**

1. An extensive area of level or gentle undulating land which is usually a few meters above the sea level is known as (a) Plain (b) Mountain (c) Valley (d) Plateau
2. Which of these plain is associated with glacier (a) Deltaic plain (b) Flood plain (c) Outwash plains (d) Lacustrine plains
3. Plains formed by agents of denudation are known as (a) Dissected plain (b) Residual plain (c) Erosional plains (d) Structural plain
4. Which of the following is not a depositional plain (a) Outwash plain (b) Pedi plain (c) Deltaic plain (d) Flood plain
5. Great plains of USA is a good example of (a) Volcanic plains (b) Structural plains (c) Erosional Plains (d) Depositional plains

**Theory**

1. Explain briefly the difference between chemical weathering and physical weathering.
2. State three effects of weathering.

**WEEK SIX**

# Mass Movement

Mass movement or mass wasting is defined as the movement (sliding, falling, creeping or flowing) of rock materials from one place to another under the influence of gravity.

#### Factors affecting mass movement

Mass movement or wasting could be gradual or rapid, depending on the following factors:

1. **Gradient of the slope:** The gradient of the slope affects the movement of rock materials. Rock materials move faster in steep slopes than in gentle slopes.
2. **Human activities:** The activities of man on the slope of mountains or highlands could promote or reduce the movement of rock materials.
3. **Nature and weight of materials:** Loose rock materials tend to move faster than tightly held materials. On the other hand, the heavier the weight of materials, the slower the movement and vice versa.
4. **Pressure of lubricating moisture:** The presence of lubricating moisture like rainwater, ice, etc. tends to promote or increase the movement of rock materials down the slope.
5. **Presence of vegetation:** The presence of thick vegetation tends to reduce the rate of the movement of rock materials down the slope.

#### Types of mass movement

There are four types of mass movement. These are;

1. **Soil Creep:** This is a slow, downward movement of soil materials down a gentle slope. This movement is aided by water which acts as a lubricant which enables rock materials to creep over each other. Alternate wetting and drying, heating and cooling of the soil, etc. are other factors that can promote soil creep.Soil creep can be noticed when fences or trees bend toward the direction of movement of the soil in a gentle slope.
2. **Soil flow or Solifluction**: Soil flow is formed when the soil receives heavy rainfall which turns it into a semi-liquid state. Under this condition, the soil then acts like a liquid and flows down the slope as mudflow or soil flow.
3. **Rockfall**: This occurs when a large mass of rocks fall from a steep cliff. This type of mass wasting is the most rapid of all. If a rockfall goes on repeatedly for a long time, the broken rocks collect at the base of the slope in mound (talus).
4. **Landslide**: This occurs when large quantities of loosened surface rocks and soil suddenly slide down a steep slope. Landslides are caused by

* Lubricating action of water down the steep slope
* When a steep slope is undercut by a river
* The pull of gravity
* Earthquake or volcanism and
* The activities of man on steep or base of the slope during farming, mining or housing.

**Evaluation**

1. Differentiate between weathering and mass movement.
2. Explain the process of exfoliation.

##### General evaluation

1. What is mass wasting?
2. Mention three processes of mass movement.
3. What factors can affect mass movement?
4. Mention three fast forms of mass movement.
5. Explain landslide.

**Weekend assignment**

1. The movement of rock materials from one place to another under the influence of gravity is known as (a) Weathering (b) Denudation (c) Mass wasting (d) Exfoliation
2. When the soil receives enough rainfall and turns into a semi-liquid state thereby flowing like a liquid, it is a result of (a) Rockfall (b) Solifluction (c) Soil Creep (d) Land Flow.
3. The process involved in the peeling off of the rock surface is called (a) Screes (b) Carbonation (c) Exfoliation (d) Hydrolysis.
4. The reaction of water with rock minerals to produce a rock entirely different from the original one is known as (a) Oxidation (b) Solution (c) Hydrolysis (d) Hydration.
5. The first action in the sequence of denudation is (a) Deposition (b) Weathering (c) Erosion (d) Transportation

**Theory**

1. Describe the four stages of denudation.
2. State two processes involved in chemical weathering.

**WEEK SEVEN**

**Climatic Change**

Climate change is a change in the distribution of weather patterns for an extended period of time (decades to millions of years). It may also refer to a change in average weather conditions of a place.

**Causes of climate change**

1. Biotic processes
2. Variation in solar radiation
3. Plate tectonics
4. Volcanic eruption
5. Human activities/anthropogenic factors (burning of fossil fuel, Co2 released by cement manufacturing, agricultural activities and deforestation).

**Evaluation**

1. What is climate change?
2. State some of the causes of climate change.

Global warming refers to surface temperature increase while climate change includes global warming and everything else that increases greenhouse gas.

**Indicators of climate change**

1. Reduction in Glacier
2. Loss of Arctic sea ice
3. Changes in vegetation
4. Variation in plant species
5. Variation in cloud cover and precipitation
6. Sea level changes
7. Expansions of desert
8. Heavy rainfall and heavy snowfall
9. Drought
10. Extinction of species
11. A threat to food security due to decreasing crop yields.

The greenhouse effect is the process by which absorption and emission of infrared radiation by Gasses in a planet’s atmosphere warm its lower atmosphere and surface. Major greenhouse Gasses are water vapour, carbon dioxide, methane and ozone.

**Evaluation**

What are the effects of climate change?

**General evaluation**

1. Define climate change.
2. State the causes of climate change.
3. Mention some of the effects of climate change.
4. What is global warming?
5. List two greenhouse gasses.

**Weekend assignment**

1. Animals, man and parasites are grouped as \_\_\_\_\_ (a) decomposers (b) heterotrophs (c) autotrophs (d) ecosystem
2. The relationship between organisms and their physical environment is called \_\_\_\_\_\_ (a) ecology (b) ecosystem (c) community (d) biosphere
3. The process of wind erosion which involves the lifting and blowing away of loose sand is (a) abrasion (b) deflation (c) attrition (d) saltation
4. Which of these is formed by the deposition action of wind (a) dunes (b) yardang (c) zeugen (d) rock pedestal
5. The major cause of climate change can be traced to (a) high rainfall (b) increase temperature (c) human activities (d) melting of ice

**Theory**

1. Mention two factors that can reduce global warming.
2. What is the Ozone layer?

**WEEK EIGHT**

# ECOWAS

The Economic Community of West African States (ECOWAS) was created by a treaty in Lagos (Lagos Treaty), Nigeria, on 28th May 1975. It was created to promote economic trade, national cooperation and monetary union, for growth and development throughout West Africa.

The administrative headquarters of the community is located in Abuja, while the fundraising headquarter is located in Lome, Togo. The establishment of the organization was masterminded by General Yakubu Gowon of Nigeria and President Eyadema of Togo.

There are currently 15 member countries in the Economic Community of West African States. The founding members of ECOWAS were: Benin, Cote d’Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania (left 2002), Niger, Nigeria, Senegal, Sierra Leone, Togo and Burkina Faso ( which joined as Upper Volta). Cape Verde joined in 1977.

#### Aims and objectives of ECOWAS

1. To unite West African countries economically.
2. To promote trade among member states.
3. To promote free movement of people within ECOWAS states without a visa.
4. To promote cultural integration through sports, arts, education etc.
5. To ensure that there is peace within the West African Sub-region.
6. To erase all forms of colonialism and neo-colonialism from ECOWAS sub-region.
7. To eventually ensure the use of common currency.
8. To develop foreign investment.

**Evaluation**

1. How many countries make up ECOWAS and what is the name of the country that joined the organization last?
2. Mention any three objectives of ECOWAS.

##### Achievements of ECOWAS

1. **Free Movement of People:** The use of visa has been replaced with the ECOWAS passport that allows members free entry and exit within the sub-region.
2. **Economic Liberation:** Common market has been developed for members within ECOWAS sub-region.
3. **Development of International Communication:** Recently, Several ECOWAS roads and telecommunications network have been created to link several ECOWAS sub-region.
4. **Peace and Tranquility:** ECOWAS has ensured peace in War-torn regions e.g. Liberia, Sierra-Leone, Cote D’Ivoire etc.
5. **Military Co-operation:** The ECOWAS Monitoring Group (ECOMOG) has ensured military cooperation through training and exchange of ideas among members.
6. **Right to Settle Anywhere:** ECOWAS citizens via the ECOWAS passport have the right to live and settle in any ECOWAS country without any form of discrimination.
7. Promotion of Sports through WAFU (West African Football Union).
8. Educational Integration and Interaction.
9. Scientific and Technical Co-operation.
10. Trade Liberalization.

##### Problems facing ECOWAS

Some of the problems hindering the achievement of ECOWAS include:

1. **The similarity of products:**  Almost all ECOWAS members produce similar agricultural goods due to the similarity of climate. This makes trade among member states difficult.
2. **Strong ties with colonial masters:** Majority of ECOWAS members are still tied to the aprons of their colonial masters hence, move to favour their individual aims rather than that of the organization.
3. There is the fear of domination by bigger countries e.g. Nigeria and Togo.
4. **Political instability:** This had been a strong limitation because it retards growth and development.
5. **Language barrier:** The Francophone countries still find it difficult to mix-freely with the Anglophone countries. This makes trade difficult.
6. Differences in currency limit trade liberation.
7. **High demand for foreign currencies:** Most ECOWAS members prefer to trade with the USA and Europe than with member states due to the high currency value of the U.S Dollars and Euros.
8. There is also the problem of transportation and communication. Transportation is still largely limited to road and still very expensive.
9. Non-implementation of agreed programmes and resolutions e.g. common market & currency.
10. Some members are very poor that they do not pay their dues regularly. This hinders the implementation of ECOWAS projects

##### Solutions to some of the problems of ECOWAS

1. West African Countries should diversify their economy. That is, they should not only depend on one sector such as oil but in manufacturing, tourism and agriculture.
2. Common currency should be quickly adopted to facilitate trade within the sub-region.
3. Member countries should ensure political stability and not encourage factions and rebels.
4. Members should learn to detach themselves from the control or influence of colonial masters.
5. Agreed resolutions and programmes should be implemented.
6. Good roads, railway network, air-routes and other transportation links within ECOWAS sub-region should be developed and maintained.

###### General evaluation

1. Outline any three-benefits of ECOWAS since inception.
2. Mention any four problems hindering ECOWAS from attaining her goals.
3. What year was ECOWAS founded?
4. Where the financial headquarter of ECOWAS?
5. Explain denudation processes.

**Weekend assignment**

1. The focus of ECOWAS is on \_\_\_\_\_ growth. (a) Political (b) Economic (c) religions (d) ethnic
2. The last country to join ECOWAS is \_\_\_\_\_\_(a) Nigeria (b) Guinea (c) Guinea Bissau (d) Mali
3. The Administrative Headquarters of ECOWAS is \_\_\_\_\_\_ (a) Abuja (b) Dakar (c) Lome (d) Accra
4. One of these is not a problem of ECOWAS \_\_\_\_\_\_\_\_(a) political instability    (b) strong ties with colonial masters (c) free movement (d) similar climate
5. The military arm of ECOWAS is called \_\_\_\_\_\_\_ (a) UNO (b) NATO (c) ECOMOG (d) UNESCO

**Theory**

On a map of West Africa, name and locate five ECOWAS countries and their capital.

**WEEK NINE**

# World Trade

Trade refers to the buying and selling or exchange of goods and services between one region and another in the same country or between one country and another.  The former is called internal trade while the later is called international trade.

#### Types of international trade

1. **Import trade:** This trade involves the buying of goods and services from another country into your own country.
2. **Export trade:** This trade involves the selling of goods and services produced in one’s country to another country.

#### Importance of international trade

1. **It fosters international cooperation:** International cooperation is fostered between two nations which are involved in international trade.
2. **Provision of new products:** New products that would otherwise have been unavailable in a country are provided.
3. **Provision of foreign exchange:** Through international trade, countries do get foreign exchange from the sales or export of their goods to another country.
4. **Provision of employment:** Jobs are provided through activities involved in the exportation and importation of goods and services.
5. **Growth of ancillary services:** Ancillary services are usually stimulated through international trade like the establishment of Trade Bank and Export Processing Zone (EPZ) in Nigeria.
6. **Diffusion of ideas:** Through world trade, people from different regions of the world interact and exchange new ideas leading to the acquisition of new knowledge.
7. **It stimulates the production of exportable goods:** Export goods or products are easily stimulated through increased production in the source region.
8. **Growth of Industries:** Through international trade, the growth of industries is enhanced from either the exportation or importation of raw materials for these industries.
9. **Improved living standard:** Provision of goods from another country can reduce the prices of goods which are easily affordable by the people hence, the standard of living will improve.
10. **Generation of revenue:** Government generates revenue from import and export duties imposed on commodities involved in international trade.
11. **The need to exchange skills and expertise:** Through international trade, skills and expertise are exchanged between nations.

##### Factors affecting international (volume) trade

Factors which determine the volume of trade between the two countries include:

1. **Differences in natural resources:** The higher the differences in the presence of natural resources like minerals between two countries, the greater the volume of trade between them and vice versa.
2. **Differences in technology:** The higher the differences in the level of technology (i.e. comparative advantage of specialization) the greater the volume of trade between two countries and vice versa.
3. **Differences in import duties:** The higher the import duties imposed on imported goods and services, the lesser the goods that will be imported and vice versa.
4. **Differences in the prices of goods:** The higher the differences between the prices of goods, the greater the volume of trade between two countries and vice versa.
5. **Colonial ties:** Countries with former colonial ties tend to trade or have favourable trade with their colonial masters e.g. trade between Nigeria and Britain.
6. **The need to earn foreign exchange:** This also helps to increase the volume of trade between nations.
7. **Political consideration:** A country may decide to trade with another, based on political consideration e.g. the enthronement of democracy in a nation may warrant a trade relation with another country.
8. **Comparative cost advantage:** A country as a result of its comparative cost advantage it has over some other countries may engage in a trade relation with another which has a lesser comparative cost advantage in the production of certain goods.

##### Reasons for the high volume of trade between Nigeria and developed countries

The high volume of trade exists between Nigeria and developed countries like Britain, U.S.A, Japan etc. because of the following reasons;

1. **Non-Similarity of Products:** Both countries produce goods and services which are not similar.
2. **High Level of Technology:** The increase for a high volume of trade between developing and advanced countries is due to the high level of technology in the latter.
3. **High Level of Savings:** The high level of savings in developed countries makes production cheaper; hence they can easily export their products to developing countries.
4. **Colonial ties:** The inclination of some developing countries to their colonial masters, has helped to increase the volume of trade between the nations.
5. **Differences in import duties:** There are higher differences in import duties imposed on imported goods in both countries.
6. **Differences in prices of goods:** There are higher differences in the prices of goods produced by both countries to earn foreign exchange. Foreign goods are cheaper than the local ones.
7. **Preference for imported goods:** Developing countries like Nigeria has a preference for goods produced by advanced countries; here the high volume of trade.
8. **Absence of trade unions:** There is an absence of trade union between developing and advanced nations; hence, the increase in the volume of trade.
9. **Differences in Climate:** There are differences in the climate which results in the production of different agricultural products.
10. **Industrial requirements:** The raw materials produced in Nigeria are needed in factories in developed countries.
11. **Favourable market:** Nigeria has large markets for some goods manufactured in developed countries e.g. computers, electronics.

##### Factors which may limit international trade

1. **Strained International Relations:** Strained international relations between the two countries involved in international trade can lead to non-importation or exportation of goods.
2. **Inadequate production of goods:** Inadequate production of goods, either by the importing or exporting country can limit international trade.
3. **Low demand for products:** There will be low sales when the other country’s demand for products is low.
4. **Inadequate foreign exchange:** Inadequate foreign exchange can seriously affect the volume of trade between the two countries.
5. **High tariffs on goods:** High tariffs charged by a certain country can affect the rate of import or export of goods to that country.
6. **Political instability:** Political instability in either country can limit the volume of trade.  In most cases, there will be no trading at all.

##### How to improve trade between Nigeria and developed countries

1. Increased international cooperation between both countries.
2. Through technical cooperation between the countries.
3. Membership of the same international economic organization.
4. Provision of loans to enhance or increase production.
5. Liberalization and simplification of export/import procedures by both countries.

##### Reasons for the low volume of trade between Nigeria and the rest of African countries

1. **The similarity in products:** Both Nigeria and other African countries produce goods or products that are similar.
2. **Low level of technology:** They have the same level of technology; hence, they produce or operate at the same low level.
3. **Low level of savings:** Both Nigeria and other African countries have a low level of savings and this affects their purchasing power.
4. **Preference for imported goods:** African countries have that strong preference for imported goods, thereby neglecting goods produced locally.
5. **Colonial ties:** Most African countries are still tied to their colonial masters in terms of trade to the detriment of fellow African countries.
6. **Trade restrictions and high tariffs:** There are lots of trade restrictions within African countries: hence, a reduction in the volume of trade.
7. **The similarity in Climate:** Majority of African countries have almost the same climate: hence, they produce almost the same type of crops.
8. **Existence of regional trade unions:** The presence of many regional trade unions tends to create a barrier for international trade among African countries.
9. **Poor transport links:** There is poor transportation network, linking African countries and this also, creates some barriers to international trade in Africa.
10. **Differences in currencies:** They use different currencies and this makes trade difficult.
11. **Political instability:** Political instability does not allow them to explore their potentials to the fullest.

##### How to improve the volume of trade between Nigeria and the rest of African countries

1. Encouraging specialization in production.
2. Formation of an African Economic Community.
3. There should be an improvement in technology.
4. Encouraging the patronage of locally made goods by other countries in Africa.
5. There should be protected from foreign competition.
6. There should be the construction of a trans-continental transport network.
7. The saving capacity of the people should be improved by way of salary/wages.

##### Problems facing international trade

1. **Inadequate capital:** Inadequate capital among the countries involved in international trade may limit the volume of trade.
2. **Export of raw materials:** Most exports to European markets are mainly in its raw form. This is a major problem for developing countries.
3. **Colonial history:** The existence of colonial ties between developed and developing countries has posed some problems in international trade.
4. **Unfavourable balance of trade:** Unfavourable balance of trade could lead to low production of goods by the country affected.
5. **Low value of a currency:** When the value of a country’s currency is very low, such a country finds it difficult to transact meaningful trade with another country.
6. **High cost of transportation:** This has some negative effects on the final cost of finished goods as the consumers will find it difficult to buy.
7. **Port congestions:** Owing to low management capability to handle imported and exported goods, the ports are always congested.
8. **Government policies:** Deliberate government policies in most cases can lead to problems in trade between the two nations.

##### Solutions to the problem of international trade

The solutions to the problems of international trade between countries are:

1. There should be political stability in the country.
2. Countries should sign treaties and peace accords.
3. There should be a reduction in tariffs.
4. There should be proper government policies on trade restrictions.
5. Well trained port personnel should be employed to handle port management.
6. Loans should be granted to facilitate trade.
7. Processing facilities should be provided to process the raw materials to finished goods before export.

##### Remedies for the unfavourable balance of trade

A country with an unfavourable balance of trade can take certain steps to improve it.  These steps may include:

1. Import restriction.
2. Tax relief for young industries.
3. Bilateral trade agreement.
4. Exporting semi-finished goods.
5. Creation of export processing zones.
6. Granting of loans to indigenous entrepreneurs.
7. Manufacturing of import substitution goods.

##### World’s major ocean (shipping) routes

The ocean navigation is the major means of transportation used in international trade. The following are some of the major ocean trade routes:

1. **The North Atlantic Route:** This is the busiest and the most important route that links two most populous and heavily industrialized parts of the world (Western Europe and the Eastern part of North America). About 1/10 of the world’s shipping trade and about half of the world’s major ports are located in these regions.
2. **The Panama Canal Route:** This is a domestic route between the east and west coasts of the U.S.A.
3. **Trans-Pacific Route:** This route is the longest in distance and has increasing significance in view of the rapid economic development of U.S.A, China, Japan, Australia, etc.
4. **The South African or Cape Route:** This is the oldest route. It serves Europe through South America to Colombo.
5. **The South Atlantic route:** This is an important east-west route between South America, Europe, West Africa and South Africa. The largest volume of trade is between Eastern Brazil and Argentina.
6. The Mediterranean – Asiatic route (Suez Canal route)
7. The North pacific route.

##### Nigeria’s trading partners

Nigeria’s trading partners are mainly with advanced countries.  These include:

1. **Western Europe:** The countries are Britain, Germany, France, Italy, Holland, Spain, Portugal, Belgium, Netherlands, etc. The sea-route through which Nigeria and Europe exchange their products is North Atlantic Sea route and the following seaports are used:

* Lagos-Antwerp (Belgium)
* Lagos-Rotterdam (Netherlands)
* Lagos-Hamburg (West Germany)
* Lagos-Southampton (Britain)

1. **The North and South America:** The countries include the U.S.A. Canada, Brazil, Venezuela, Argentina, etc. The sea-route through which Nigeria and America exchange their products is the South Atlantic route and the following seaports are used:

* Lagos-New York (America)
* Lagos-Montreal (Canada)

**Taiwan and South Korea:**  The trade routes used are South Atlantic route and the Cape route and the following seaports are used.

* Lagos-Yokohama (Japan)
* Lagos-Osaka (Japan)

##### Major commodities involved in international trade

**(a) Nigeria’s Exports:**

Nigeria usually exports agricultural goods and mineral products to her foreign partners.

1. Agricultural Goods: e.g. cocoa, palm oil, palm kernel, groundnut, rubber, timber, cotton, hides and skin.
2. Mineral Products: e.g. Petroleum or crude oil, tin, columbite, etc.

**(b) Nigeria’s Imports Manufactured Goods:**

Nigeria usually imports manufactured goods from these foreign countries e.g. computers, motor

vehicles, tractors and machines, electronics and consumer goods like baked beans, sardine,

corn beef, drinks, books and other publications.

**Evaluation**

1. List three major countries outside Africa that trade with Nigeria.
2. Name any three major products which Nigeria imports from the countries mentioned above.

###### General evaluation

1. Discuss two factors responsible for the present pattern of trade between Nigeria and China.
2. Describe two effects of this observed pattern of trade on the economy of Nigeria.
3. With specific examples, give four reasons why countries exchange goods and services.
4. Account for the low volume of trade between Nigeria and the rest of Africa.
5. State four reasons for the economic recession in Nigeria.

**Weekend assignment**

1. The cheapest means of transportation is (a) Air (b) water (c) Rail (d) Road
2. The best way to get an urgent Medicare service internationally is by (a) water transport (b) Road transport (c) Air transport (d) Rail transport
3. The safest means of moving goods and passengers from one country to another is by \_\_\_\_\_\_\_\_ transport (a) Air (b) Road (c) Rail (d) water
4. The means of transport that is more prone to an accident is (a) water (b) air (c) road (d) rail
5. One advantage of inland water-ways is that (a) they are flexible (b) they are fast (c) goods are transported cheaply (d) it is affected by seasonality

**Theory**

1. List four Ocean trade routes.
2. Mention two causes of an unfavourable balance of trade.