# FIRST TERM E-LEARNING NOTE

SUBJECT: GEOGRAPHY CLASS: SS2

# **SCHEME OF WORK**

#### **WEEK TOPIC**

- 1&2 REVISION/ACTION OF RUNNING WATER
- 3 ACTION OF WIND
- 4 ACTION OF GLACIER
- 5 ACTION OF WAVE
- 6 CLIMATE
- 7 CLASSIFICATION OF CLIMATE
- 8 ENVIRONMENTAL RESOURCES
- 9 RENEWABLE AND NON-RENEWABLE RESOURCES
- 10 ENVIRONMENTAL PROBLEMS
- 11 REVISION

## **REFERENCE MATERIAL**

• Essential Geography for Senior Secondary Schools, O.A. Iwena.

# WEEK ONE AND TWO ACTION OF RUNNING WATER (RIVER)

Running water is one of the most important agents of denudation. Rivers are involved in erosion transportation and deposition of materials.

# **TERMS ASSOCIATED WITH RIVERS**

- **Source of a river:** The source a river refers to where a river starts or begins, usually around highlands.
- (2) **Course of a river:** This refers to the path or channel through which the river flows.
- (3) **Mouth of a river:** This is where the river ends or where it enters into the sea, ocean or lake.
- **(4)** River basin or catchment area: It refers to all the areas drained by a river and its tributaries.
- (5) Water shed or water divide: It is the highland area which separatestwo or more rivers or two river basins. It is from the watershed that rivers take their sources.
- **River regime:** This refers to the seasonal changes in the volume of water in a river in a year. It could be single regime where there is one period of high volume and one period of low volume and double regime where there are two distinct periods of high volume of water in a year. Knowledge of a river regime is important to man in controlling floods, storing up water for irrigation and human consumption and also for planning H.E.P production.
- (7) **Confluence of a river:** This refers to the meeting point of two rivers.
- (8) **Tributaries:** These are smaller rivers or streams that join together to form a larger river.
- **(9) Distributaries:** These are channels formed by the division of a river as it flows into the sea. They are usually found in the delta region of a river.
- **(10) River energy: It** refers to the velocity of a river. The efficiency of a river to erode and transport the eroded materials depends very much on its velocity.

#### **FACTORS AFFECTING THE VELOCITY OF A RIVER**

- (a) The volume of water released. (b) Slope of the river valley.
- (c) Shape of the river valley. (d) Amount and size of materials.

## STAGES OF A RIVER

The entire length, valley or course of a river is divided into three main stages.

- **(1)** The upper course or mountain course (Youthful stage).
- (2) The middle course or valley course (Mature stage).
- **(3)** The lower course or plain course (Old stage).

# **UPPER COURSE OF A RIVER**

# **CHARACTERISTICS OF UPPER COURSE OF A RIVER:**

- (a) It marks the beginning or source of a River.
- **(b)** It is found around highland areas.
- **(c)** It has steep sides.
- **(d)** The river flows swiftly down the steep slope.
- **(e)** The dominant work of the river is vertical corrosion or erosion.

## PROCESSES OF RIVER EROSION

The load or materials carried by a river are the main agents of erosion, but the erosive work of a river consist of four processes. These are:

- **(a) Hydraulic action:** In this process, fast flowing water forces itself into cracks and joints within the valley under pressure and enlarges the cracks.
- **(b) Corrosion:** Corrosion is the wearing away of the sides and floor of the river with the aid of sand, pebbles, silts and boulders which are being transported. These materials eventually widen and deepen the river valley.
- **(c) Attrition:** This is the wearing down of the load as they collide with one another and with the floor and side of the valley. Large boulders are broken down into small pieces like pebbles.
- **(d) Solution:** This refers to...