

**Geography**

**Date: 27 / 06 /2022**

**Period: 8H30 – 11H30**



## **END OF TERM III EXAMINATIONS**

**GRADE / LEVEL:** **ADVANCED LEVEL**

**COMBINATIONS :** **HEG, MEG, MPG,BCG,HGL**

**DURATION:** **3HOURS**

**MARKS:** **..... / 100**

### **INSTRUCTIONS**

**There are 18 questions in this paper**

**This paper has two section A and B.**

**SECTION A: This section is compulsory. (55marks)**

**SECTION B: Attempt any three questions. (45marks)**

**Use only a blue or black pen.**

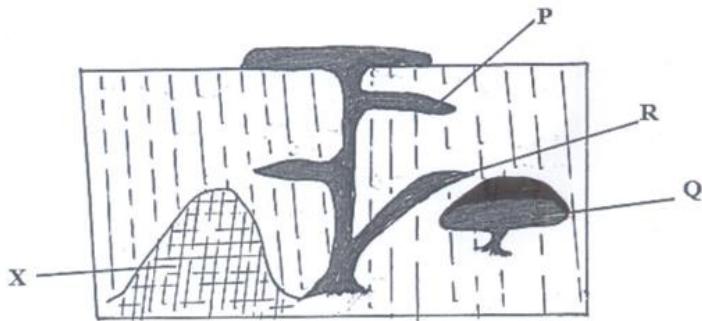
**SECTION A: ANSWER ALL QUESTIONS IN SECTION A (55MARKS)**

1. State four reasons why it would be necessary to visit the area before the day of the study. **(3marks)**
2. What is the difference between endogenic and exogenic process? **(4marks)**
3. List three characteristics of rural settlement in Rwanda **(5marks)**
4. Outline four causes of deforestation in Rwanda **(4marks)**
5. Show the factors that have favored power production in Rwanda. **(4marks)**
6. Outline problems affecting pastoralism in Rwanda. **(4marks)**
7. Outline problems affecting pastoralism in Rwanda. **(4marks)**
8. Explain three common methods of fishing in Rwanda. **(3marks)**
9. Identify the contribution of Tourism industry to the economic development of Rwanda. **(5marks)**
10. Explain the challenges that have hindered the implementation of the agricultural modernization in Rwanda. **(5marks)**
11. Identify the implications of industrialization to the socio-economic development of Rwanda. **(5marks)**
12. List the challenges faced by the mining sector in Rwanda **(5marks)**
13. Suggest solutions to the problems of slums in Rwanda **(4marks)**

**SECTION B: ATTEMPT ANY THREE QUESTIONS OF YOUR CHOICE.**

**(45MARKS)**

14. Use the diagram below of intrusive features of vulcanicity to answer the questions that follow.



(i) Identify features **(3marks)**

X

P

R

(ii) Describe how feature Q is formed. **(5marks)**

(c) Explain four ways in which volcanic features positively influence human activity. **(7marks)**

15. (a) Define the term Weather **(2marks)**

b) State three factors that cause inaccuracy of recording data in a school's weather station. **(3marks)**

(c) Identify the relationship between climate and the human activities in Rwanda **(10marks)**

16. (a) Describe three processes by which a river transports its load. **(6marks)**

b) Analyse three positive influences of rivers and their features to human activities. **(6marks)**

(c) Students are requested to carry out a field study on a river. Name two features they are likely to study. **(3marks)**

17. (a) Identify any five causes of migration in Rwanda. **(5marks)**

(b) Explain any six factors that influence population distribution in Rwanda. **(10marks)**

18. (a) Explain the challenges that affect transport and communication in Rwanda. **(5marks)**

(b) Assess the importance of road transport to the economic development of Rwanda. **(10marks)**

**END**

## **S4 GEOGRAPHY MARKING GUIDE**

### **SECTION A: ANSWER ALL QUESTIONS IN SECTION A (55MARKS)**

1. State four reasons why it would be necessary to visit the area before the day of the study. **(3marks)**
  - To help prepare a working schedule.
  - To be able to formulate the appropriate objectives and hypothesis.
  - To seek permission from the owners of the land/authorities near the river.
  - In order to establish contact possible respondent for data collection.
  - In order to help in preparing methods of data collection.
  - In order to identify possible problems likely to be faced and their possible solutions. (4x 1 = 3 marks)

2. What is the difference between endogenic and exogenic process? **(4marks)**

Endogenic processes are processes that operate inside of the earth's surface such as **faulting ,folding ,warping ,vulkanicity and earthquakes . / 2marks**

Exogenic processes are processes that take place on the surface of the earth like **weathering ,erosion and mass wasting. /2marks**

3. List three characteristics of rural settlement in Rwanda **(5marks)**

Characteristics of rural settlements in Rwanda are:

- Sparse settlements,
- Poor transport network
- Limited social amenities
- Less developed economy
- Cultural rigidity
- Poor sanitation
- Unemployment
- Low standards of living
- Most of the houses in the rural area are semi-permanent.
- Primary sector activities like agriculture dominate.

4. Outline four causes of deforestation in Rwanda **(4marks)**

In Rwanda deforestation is mainly caused by:

- Rapid population growth which leads to human encroachment on forest reserves due to lack of space for settlement and agriculture.
- Over exploitation of Forest: Because of the few forests existing in Rwanda. This causes them to be over exploited and deforestation may occur.
- A great number of Rwandan population uses wood as source of energy.
- The shortage of land which limits the forest plantation
- Many people are not interested in forest conservation and exploitation.

5. Show the factors that have favored power production in Rwanda.

**(4marks)**

- presence of water falls
- presence of space for a reservoir
- Large volume of water
- Regular and reliable water supply
- The level of technology. High level of technology encourages the development of HEP
- Presence of capital to invest in production of HEP
- Presence of market of power.
- Political climate: political stability encourages the development of HEP
- Availability of skilled labour
- Favorable government policy

6. Outline problems affecting pastoralism in Rwanda.

**(4marks)**

- Title
- Compass direction
- Key
- Scale
- Frame

7. Outline problems affecting pastoralism in Rwanda.

**(4marks)**

Problems affecting pastoralism in Rwanda

- Drought leads to low rainfall. During the dry season, the vegetation deteriorates leading to a shortage of pasture. As result animals starve to death.
- Shortage of water also associated with the season
- Pests and diseases such as foot and mouth diseases, pneumonia
- Limited veterinary services result in a low level of education for veterinaries.
- Poor animal breeds which yield low milk and meat.
- Limited land for animal grazing.

8. Explain three common methods of fishing in Rwanda.

**(3marks)**

The common methods of fishing in Rwanda

► **Spearing and shooting:** Using spears, arrows and bows etc. this method is used in shallow water.

► **Basket method:** Where by the basket is set in the flowing water so that fish enters through a wide opening which face upstream and cannot easily come out of a basket.

► **A gill net method:** It involves a net that hangs in water like a curtain the net is held on the surface of water by floats while weights carry the net down in water so that it hangs like a curtain.

► **Hooking:** This involves using a hook and bait, it is thrown into water and when a fish comes to eat the bait, the hook triggers it into its mouth.

► **Cast net method:** Cast net is a circular net that is tied on the wrist or held in hand, the net is thrown and spreads out so that it falls on water trapping the fish beneath.

9. Identify the contribution of Tourism industry to the economic development of Rwanda. **(5marks)**

Tourism plays a big role in the economy of Rwanda. It contributes to the development of the country in the following ways:

- It has contributed **to the market** for agricultural and other locally produced items. Many tourists have demanded craft from the country.
- It has promoted research for geographical studies. Tourists move from one country to another for discoveries. This improves on their level of research in the country. For e.g.: Many researchers from Digital services television Chanel, National Geographical Chanel from South Africa have visited Rwanda to study its nature
- Tourism has resulted into good relations between Rwanda and other countries. International relations have been improved about the country when they go back to their countries.
- It has led to the Improvement of opportunities and opens windows for training. There is training of manpower to work in the tourist industry.
- It has led to the Improvement of Transport facilities connecting the area of tourist attractions.
- It has increased the government revenue since the tourists pay fees when visiting any tourist attraction.
- Tourism has facilitated the development of local industries. There has been a revolution in areas of craft making where tourists visit.

10. Explain the challenges that have hindered the implementation of the agricultural modernization in Rwanda. **(5marks)**

Challenges that have hindered the implementation of the agricultural modernization in Rwanda are:

Poor transport networks to transport agricultural outputs from the farm to the markets.

- Limited of capital to buy enough farm inputs.
- Small land for agricultural activities operations.
- Insufficiency of factories to process outputs.
- Limited technology to use in agriculture
- Insufficiency of price on the world market,
- Climate change leading to prolonged drought.
- Lack of skilled people in agricultural domain.

- Low quality of products on the market fetching low price,hence low income.
  - Steep slope leading to higher flowing of water,
  - Large or limited amount of precipitation destroys crops.
  - Population increase leading to shortage of land to operate on.
11. Identify the implications of industrialization to the socio-economic development of Rwanda. **(5marks)**
- The implications of industrialization to the socio-economic development of Rwanda are:
- Employment opportunities to the people within and outside the country.
  - Products from local industries help in reducing dependency to imports
  - Manufactured products for export earn foreign exchange for the country
  - Industrial development is cumulative and stimulates growth in other sectors of the economy such as agriculture, livestock keeping and mining.
  - Industrial development contributes to the diversification of the economy, and reduces over reliance on the same sectors of economy.
  - Industrial development in a region encourages construction of basic infrastructure such as schools, hospitals, roads, ports equipment in that region.
12. List the challenges faced by the mining sector in Rwanda **(5marks)**
- The challenges faced by the mining sector in Rwanda are the following:
- The absence of high-grade ores
  - **Shortage** of enough Capital to invest in mining sector
  - Low level of technology, this is the major factor limiting exploitation of Natural gas, from lake Kivu
  - Shortage of Market for minerals extracted in Rwanda.
  - Competition between the mining industry of Rwanda and that of other sectors of the economy **inside and outside**.
  - Shortage of power to use in the processing of minerals.
  - Poor transport due to lack of good roads and rail ways.
  - Shortage of skilled man-power man for exploitation of minerals.
13. Suggest solutions to the problems of slums in Rwanda **(4marks)**
- Solutions to the problems of slums in Rwanda are:
- Scaling up of the delivery of basic infrastructural services
  - Resettling of people to better places
  - Provision of free primary education to all slum children
  - The government should provide family planning education
  - Recruitment of the unemployed youth in slums.

SECTION B: ATTEMPT ANY THREE QUESTIONS OF YOUR CHOICE.  
(45MARKS)

14. Use the diagram below of intrusive features of vulcanicity to answer the questions that follow.



(i) Identify features

**(3marks)**

X - Batholith

P - Sill

R - Dyke

(ii) Describe how feature Q is formed.

**(5marks)**

-Earth movement forms a vent in the rocks of the crust.

-Viscous magma is forced through the vent to intrude between the bedding planes.

-The magma is very thick and cannot flow/ spread out easily.

-The magma pile and spread upwards between the rock layers.

-The magma cool and solidify slowly.

-It forces the overlying rock layers to arch upward.

-This forms a mushroom-shaped dome of intrusive igneous rock with a flat base called a laccolith. (5 x 1= 5 marks)

(c) Explain four ways in which volcanic features positively influence human activity.

**(7marks)**

- -Volcanic rocks weather and form fertile soils which support agriculture.
- -Volcanic mountains/highlands attract high rainfall on the windward side which is a source of rivers that provide water for domestic/individual use.
- -Volcanic mountains/highlands attract high relief rainfall on the windward slope which encourage agriculture and settlement.
- -Volcanic mountains influence formation of relief rainfall that support forests on the mountain slope which are exploited for timber and construction materials.
- -Some volcanic rocks are important building and construction materials promoting this industry e.g. phonolites.
- -Steam jets and geysers provide suitable sites for generation of geothermal power.
- -Volcanic eruptions form pipes with valuable minerals which are mined and sold to generate income. (4 x 2= 8 marks)

15. (a) Define the term Weather

**(2marks)**

is the state of the atmosphere of a given place over a short period of time while climate is the average weather conditions of a place recorded over a long period of time. 30-35 years.

b) State three factors that cause inaccuracy of recording data in a school's weather station. **(3marks)**

- Human error/students unable to read the instruments.
- Interference with the instruments by people/students.
- Poor siting of a weather station.
- Extreme weather conditions cause inaccurate readings.
- Natural calamities may cause damage to some instruments. (3 x 1 = 3 marks)

(c) Identify the relationship between climate and the human activities in Rwanda **(10marks)**

The relationship between climate and the human activities in Rwanda

a) Positive aspect:

Climate as well, influences our day-to-day life as it gives us various opportunities for development.

- High and reliable rainfall favours agriculture, moderate to heavy rainfall is ideal for coffee and banana growing, cool temperature is ideal for wheat growth.
- Moderate or abundant rainfall support grass which livestock can feed on as pasture
- Heavy rainfall supports the growth of trees and thus forest existence (lumbering and forestry activities)
- Tropical warm and sunny climate is attractive to European and North American tourists especially when it is winter time in their countries of origin (tourism industry earning of foreign exchange).
- Human activities such agriculture depend on good climate.
- 6 .Fishing influenced by climate because the continued existence of wetlands and other water bodies is supported by the availability of rainfall.
- Favourable climates have led to the occurrence and presence of many features such as forest, grasslands, wetlands and water bodies that form tourist attraction sites, but tourist can destroy the environment if they leave fire.
- 8 .A good climate with reliable rainfall supports mining especially of alluvial mineral deposits.
- 9. Industrialization is affected by climate such agro-based industries depend on a good climate with reliable rainfall.
- 11. Settlement of all kinds both in rural and urban areas are influenced by climate (favourable climate).

**b) Negative aspects:**

Climatic conditions can, however, be a problem to development

1. Excessive rainfall may lead to flooding in low-lying areas (loss of life and destruction of properties)
2. Dry hot climatic conditions discourage the activity of cultivation (crops requiring abundant water may not be successfully grown in arid and semi-arid lands without irrigation)
3. Much tropical rainfall reduces the lifespan of roads, roads develop potholes and gradually deteriorate, this raises maintenance costs.
4. Certain vectors thrive best in hot tropical climatic conditions: mosquitoes and tsetse flies (malaria& sleeping diseases) are fundamentally tropical diseases
5. Wind uproots the trees and destroys properties

16. (a) Describe three processes by which a river transports its load. **(6marks)**

Solution- The soluble minerals/materials are dissolved in river water and carried away in solution form.

Suspension- Light insoluble materials such as sand, silt grains, dry leaves and grass are carried and maintained within the water by river turbulence and transported downstream.

Saltation- Some large fragments that cannot remain suspended in the water are momentarily lifted and dropped by water turbulence. The series of hops and jumps move the load down the river.

Traction- The large and heavy loads of the river are rolled/dragged along the river by the moving water and gravity.

- b) Analyse three positive influence of rivers and their features to human activities. **(6marks)**

-River water is used for both domestic and industrial use.

-Navigable rivers are used as transportation routes in many parts of the world.

-Some rivers are dammed and their water utilized for generation of H.E.P.

-Some river mouths provide ports authorities especially in their rias and estuaries which are exploited for port development.

-River water is used for irrigation of crops thus increasing food production.  $3 \times 2 = 6$  marks)

- (c) Name two features they are likely to study. **(3marks)**

Waterfalls.

Rapids

Potholes

Meanders

Interlocking spurs

Truncated spurs.  $2 \times 1 = 2$  marks

17. (a) Identify any five causes of migration in Rwanda. **(5marks)**

Any five causes of migration in Rwanda

- a .Availability of fertile land: This is mostly in areas where there is a problem of population pressure on land. People move to other areas in Rwanda where they expect to get fertile land for agriculture.
- b. Availability of employment opportunities: Areas such as Kigali and other urban centres with job opportunities have attracted many migrants
- c. Hope of obtaining wealth: Most migrants in Rwanda hope to improve on their present incomes and standard of living (get rich).
- d. In search of political freedom: Some Rwandans moved to other countries especially DR Congo, Kenya, Tanzania and Uganda to avoid political persecution or moved simply because they are dissatisfied with the form of government in Rwanda.
- e. Forced migration: Though Rwandans migrate voluntarily hoping to improve on their living conditions, some population movements are affected by force.
- f. The push-pull factors: In most cases, reasons which influence population migrations in Rwanda are not clear out and a combination of factors may force Rwandans to move from one place to another or region to region. For example, the present day rural-urban migration in Rwanda is not only governed by the pull or attractions of urban centres but also by the poor incomes, hard conditions or lack of employment which push people to leave their places of origin.

(b) Explain any six factors that influence population distribution in Rwanda. **(10marks)**

Six factors that influence population distribution in Rwanda are:

- Fertility of soils: The volcanic soils have a great influence over population settlement, especially in relation to agriculture.
- Availability of mineral resources: The spread of settlement especially in relation to the utilization of natural resource like mining has tended to alter. The pattern of human settlement over the last century. For example: population concentration is high in mining areas of Gatumba, Rwinkwavu, Musha, Mukingo, Rutongo, etc
- Ideal climate: Suitable climate (hot and humid tropical climate) favors the growth of various crops. This is so because of favorable rainfall, which is, well distributed and reliable in some areas. The temperatures are also moderate and this attracts people for settlement.
- The presence of communication networks: for example, roads in various parts of the country, have encouraged population growth especially in urban centers like Kigali, Huye, Musanze and Rubavu

- The development of urban centers has also influenced the nature of population distribution in Rwanda. Urban centres provide a good number of functions which attract people into them eg cheap HEP, Commercial activities improved housing facilities, ready healthy services, cheap and constant transport services, clean water and so on.
- Relief: The low lying and undulating hills such as the central plateaus and eastern plains have attracted many settlements. Rwandan plateaus are highly settled because of gentle slopes and almost flat tops.
- The influence of Kings Palace: In Rwanda dense population concentration are also found in areas which had strong political Kingdoms. For example, Nyanza and Gasabo palaces.
- Development of medical and educational facilities: the establishment of hospitals and school's facilities also encouraged many settlers. Such areas in Rwanda have dense population.
- Influence of modern administrative cities like Kigali city and other administrative factors also encouraged settlements
- Altitude: In mountainous areas, the difficulties of cold weather and lack of soils are aggregated by lack of sufficiently gentle sloping land. Only plateau where farming and communication are relatively easy, have been settled.
- Prolonged drought: In the low lying and hot areas such as Umutara and some parts of Bugesera where temperatures are very high while rainfall and humidity are very low all the year round. The climate in these areas is harsh and encourages the spread of certain pests and diseases hence low population.
- Poor soils: In areas where climate is favourable, yet soils are poor, population settlement is sparse because the soils are infertile.
- Lack of transport and communication networks: Hostile environments especially valleys and mountains are poorly served with transport links. This reduces the attractiveness of such areas for human settlement.

18. (a) Explain the challenges that affects transport and communication in Rwanda.

**(5marks)**

The challenges that affects transport and communication in Rwanda are the following:

- Lack of capital
- Poor infrastructure development
- Weak water vessels such wooden boats.

- Traffic congestion
- Lack of natural resources like oil and petroleum
- Unfavorable climatic conditions
- The rugged terrain in some parts of the country
- There is small proportion of population using modern facilities such as Television, Fax and internet because they are mainly used by people of high income.
- Developing country have inadequate capital for investing in communication sector.
- Low technology level also limits modernization of communication.
- Effects of natural occurrence such as heavy rains, floods and landslides may interfere with normal operation of communication systems.
- There is inadequate skilled labor in information technology many telecommunication concerns for example use of import experts.

(b) Assess the importance of road transport to the economic development of Rwanda.

**(10marks)**

Importance of road transport to the economic development of Rwanda are the following:

- Road transport promotes trade and industrialization through the transportation of raw materials to factories for production of goods and finished goods to consumers.
- Road transport offers employment opportunities to many people as Drivers.
- Road transport promotes urban development as many urban centers have developed where roads converge.
- Road transport promotes international relations since it brings leaders together and face-to-face talks.
- Road transport promotes tourist industry since tourists move using means of transport.
- Road transport stimulates the development of other sectors such as agriculture , fishing and mining.
- Road transport increases revenue through taxation to the government.

Road transport is the source of income to local transporters.