

IMENTI SOUTH
312/1
GEOGRAPHY PAPER 1

SECTION A (25 marks)

Answer **all** the questions in this section

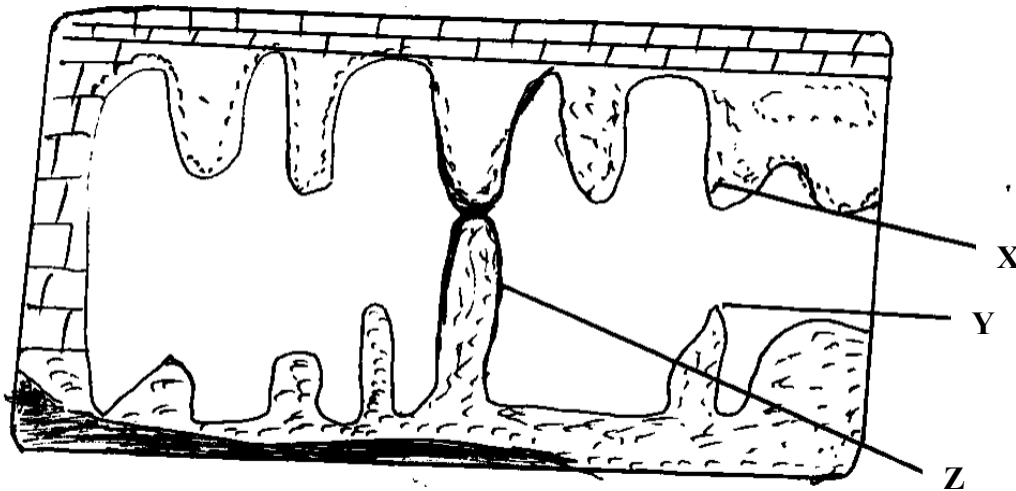
1. a) Differentiate between physical and human environment. (2 marks)
- b) State **three** reasons why it's important to study Geography. (3 marks)
2. a) Define a meteor. (2 marks)
- b) State **three** characteristics of comets. (3 marks)
3. a) What is a mineral? (2 marks)
- b) Give **three** examples of non-metallic minerals. (3 marks)
4. a) Define climate change. (2 marks)
- b) List **three** common events that are associated with climate change. (3 marks)
5. Give **five** characteristics of tundra climates. (5 marks)

SECTION B (75 marks)

Answer question 6 (compulsory) and any other two questions from this section

6. Study the map provided (Kisumu East map extract, East Africa 1:50,000 Kenya) and answer the questions that follow.
 - a) i) Give six figure grid reference for the trigonometric station SKP 21. (2 marks)
 - ii) Measure the distance of the provincial /regional boundary from the water works station 0199 to 0997 in kilometers. (2 marks)
 - b) Describe how relief has influenced settlement in the area covered by the map. (6 marks)
 - c) Name **two** types of natural vegetation found in the area covered by the map. (2 marks)
 - d) Citing evidence from the map, state **three** social functions of Kisumu East. (6 marks)
 - e) i) Draw a rectangle measuring 16cm by 12cm to enclose the area bound by Eastings 95-98 and Northings 80-83. On the rectangle mark and name;
 - Lake
 - Swamp
 - River Luando (6 marks)
 - ii) Name the title of the map. (1 mark)
7. a) i) What is soil degeneration? (2 marks)
- ii) Name **three** types of soil degeneration. (3 marks)
- b) i) State **two** factors that contribute to soil leaching. (2 marks)
- ii) List **five** characteristics of desert soils. (5 marks)
- iii) State **three** importance of soil texture. (3 marks)
- c) Students from your school carried out field study of soils found in Nyika Plateau.
 - i) State **three** methods they are likely to use to collect data. (3 marks)
 - ii) Give **three** characteristics of soils that they are likely to study. (3 marks)
- d) State **four** ways of managing and conserving soils in Kenya. (4 marks)
8. a) i) What is a river divide. (1 mark)
- ii) Describe **three** ways by which a river transports its load. (6 marks)
- b) Describe the characteristics of a river in its Old Stage. (7 marks)
- c) Describe each of the following drainage systems and patterns.
 - i) Superimposed drainage system. (3 marks)
 - ii) Centripetal drainage pattern. (2 marks)
- d) You have planned to carry out a field study of a river in its youthful stage.
 - i) State **two** ways in which you would prepare for the study. (2 marks)
 - ii) Name **two** features you are likely to study. (2 marks)
 - iii) List **two** problems you are likely to experience during the study. (2 marks)

9. a) i) What are earthquakes. (2 marks)
 ii) Name **three** belts of the world associated with earthquakes. (3 marks)
 iii) Give **four** reasons why the above belts are associated with earthquakes. (4 marks)
- b) Describe the characteristics of the following earthquake waves. (3 marks)
 Primary waves.
- c) Explain **four** natural causes of earthquakes. (8 marks)
 d) Give **five** effects of earthquakes to human activities. (5 marks)
10. a) i) What is underground water. (2 marks)
 ii) List **three** sources of underground water. (3 marks)
 iii) State **four** factors that influence the occurrence of underground water. (4 marks)
 iv) State **three** importance of underground water. (3 marks)
- b) Give **three** conditions necessary for the development of Karst scenery. (3 marks)
 c) The following diagram represents a feature found in a Karst Scenery. Use it to answer the questions that follow.



- i) Name the parts labelled X and Z. (2 marks)
 ii) Describe the formation of the feature marked Y (3 marks)
 d) State the significance of a Karst landscape. (5 marks)

IMENTI SOUTH
312/2
GEOGRAPHY PAPER 2

SECTION A (25 marks)

Answer **all** the questions in this section

1. a) State **two** factors that are considered in determining mining method. (2 marks)
 b) List down **three** uses of soda ash mined in L. Magadi. (3 marks)
2. a) Differentiate between forests and forestry. (2 marks)
 b) State **three** features of soft wood forests. (3 marks)
3. a) Identify **two** characteristics of intensive commercial agriculture. (2 marks)
 b) List down **three** physical factors favouring dairy farming in Denmark. (3 marks)
4. a) State **two** aims of setting up of Perkerra irrigation scheme. (2 marks)
 b) List down **three** physical factors that influenced the location of Mwea-Tebere irrigation. (3 marks)
5. a) Define the term fishing. (2 marks)
 b) State **three** ways in which the convergence of cold and warm ocean current affect fishing. (3 marks)

SECTION B (75 marks)

Answer question 6 (compulsory) and any other two questions from this section

6. a) i) List down **three** factors that determine the distribution of forests in Kenya. (3 marks)
 ii) Study the data in the following table and answer questions that follows.

The table shows the status of forests in Kenya between 2006 to 2009. In hectares.

Year Area	Open woodland	Indigenous	Tree farm lands	Private plantation forests
2006	6800	4700	2400	800
2007	7200	3800	2000	400
2008	6400	1400	1900	500
2009	5400	4600	2000	700

Calculate the percentage decrease in the area under open woodland forest in Kenya.

- (3 marks)
- b) i) Draw a compound bar graph to represent the data above. Use a scale of 1cm represent 1000 hectares. (8 marks)
 ii) State **three** advantages of using compound bar graph to represent data. (3 marks)
- c) Explain the differences of exploitation of soft wood in Kenya and Canada under the following headings.
- i) Period of harvesting. (2 marks)
 ii) Transportation. (2 marks)
- d) Highlight **four** ways in which the clearing of forests has affected the natural environment in Kenya. (4 marks)
7. a) i) Name **two** fossil fuels and energy minerals found on the earth crust. (2 marks)
 ii) State **two** alluvial mining methods applied in East Africa. (2 marks)
- b) i) List down **three** main conditions needed for the formation of petroleum reservoir. (3 marks)
 ii) Describe the process of gold processing in South Africa. (8 marks)
- c) Students of Mbea school wanted to carry out a field study on mining around their school.
- i) The students used questionnaire to collect data. State **three** considerations they had while preparing the questionnaire. (3 marks)
 ii) The students wanted to analyse the data collected from the field. List down **four** ways they could use in data analysis. (4 marks)
- d) What **three** problems could the students have experienced during the field study? (3 marks)
8. a) i) Name **two** areas within western region sugar Belt where large scale sugarcane cultivation is practiced. (2 marks)
 ii) Explain **three** human requirements that favour sugarcane growing in Kenya. (3 marks)
- b) i) Name **two** diseases which affect sugarcane. (2 marks)
 ii) List down **two** disadvantages of shade trees in cocoa cultivation. (2 marks)
- c) Explain **four** contributions of cocoa to Ghana's economy. (8 marks)
- d) Briefly describe the process of cocoa cultivation in Ghana. (5 marks)
- e) Name **three** cocoa growing areas in Ghana. (3 marks)
9. a) i) Define the term fisheries. (2 marks)
 ii) State **two** importance played by the presence of indented coastline in fishing industry. (2 marks)
- b) i) Apart from indented coastline explain **four** factors that have contributed to large scale fishing in North-west pacific. (8 marks)

- ii) Name **three** fish species found in inland fishing grounds which have large economic value. (3 marks)
- c) Give **five** limitations hindering the development of marine fishing in East Africa. (5 marks)
- d) i) State **three** conservation methods advocated by Kenya Government in fishing industry. (3 marks)
- ii) Name **two** methods used in deep sea fishing. (2 marks)
10. a) i) Differentiate between wildlife and tourism. (2 marks)
- ii) List down **two** features of game reserve. (2 marks)
- b) Explain **four** factors influencing the distribution of wildlife in E. Africa. (8 marks)
- c) i) State **three** reasons why National parks have been established in Kenya. (3 marks)
- ii) List down **four** reasons why domestic tourism is encouraged in Kenya. (4 marks)
- d) Explain **three** differences between tourism in Kenya and Switzerland. (6 marks)

IMENTI SOUTH

GEOGRAPHY PAPER 1

MARKING SCHEME

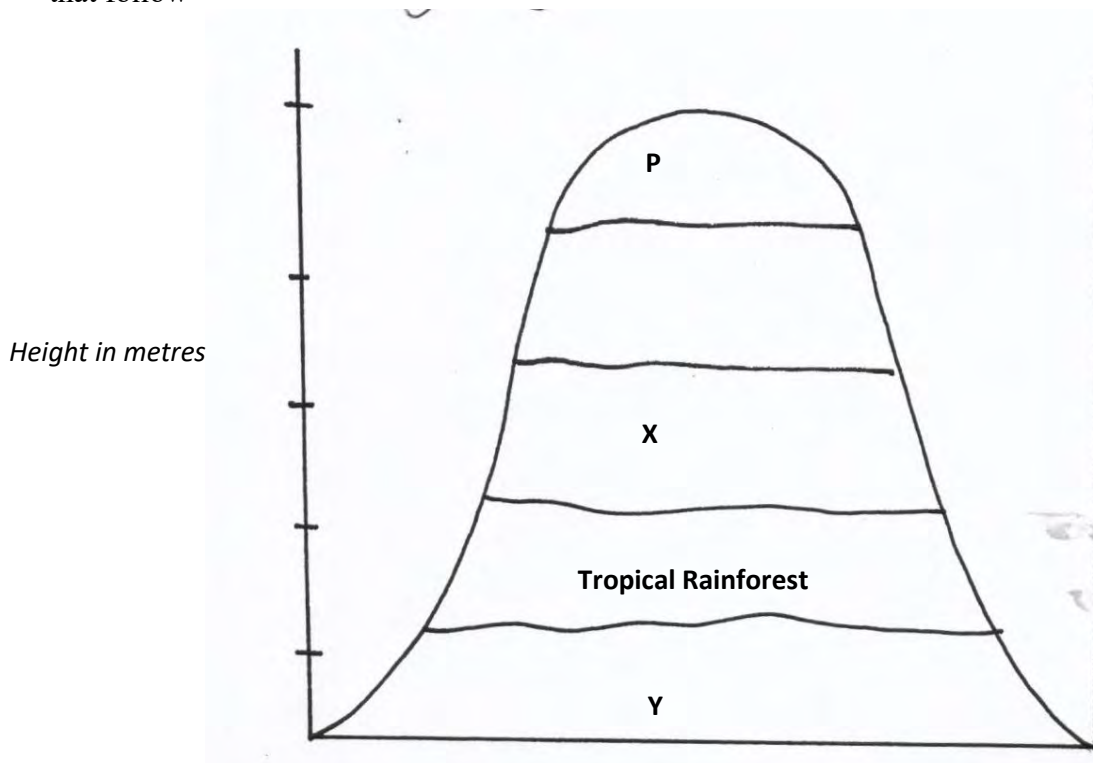
1. a) **Differentiate between physical and human environment. (2mks)**
- Physical environment refers to features that are natural although their presence have influenced human activities while human environment comprises of activities of people on the earths surface. (2mks)
- b) **State three reasons why it is important to study Geography. (3mks)**
- It promotes awareness on sustainable use of resources.
 - It prepares one for career opportunities.
 - It enables learners to manage time properly.
 - It promotes the development of skills and critical thinking.
 - It creates awareness about the country and the rest of the World.
 - It helps promote national and international understanding.
2. a) **Define a meteor (2mks)**
- These are heavenly bodies which burn up and disappear as they enter the earths atmosphere from the universe.
- b) **State three characteristics of comets. (3mks)**
- They move along oval-shaped orbits.
 - Have a head made up of frozen gases, Dust particles and rocks.
 - The sun is located at one end of their orbit.
 - The tail disappears as the move near the sun.
3. a) **What is mineral (2mks)**
- This is naturally occurring, crystalline, organic substance with a definite chemical and physical properties.
- b) **Give three examples of non-metallic minerals.**
- | | | |
|-------------|--------------|-------------|
| - Coal | - Sulphur | - Petroleum |
| - Potash | - Silicates | - Graphite |
| - Asbestos | - Nitrates | - Trona |
| - Flousphar | - Phosphates | - Diamond |
- (3mks)
4. a) **Define climate change. (2mks)**
- This is the establishment of a new environmental and atmospheric states with change sin elements such as temperature and precipitation, or long term shifts in temperatures and other weather patterns.
- b) **List three common climatic events that are associated with climate change. (3msk)**
- Floods
 - Drought
 - Frost
 - Heat waves
 -

MOKASA 1 JOINT EXAMINATION

312/1

GEOGRAPHY PAPER 1**SECTION A: 25 MARKS***Answer ALL questions in this section.*

1. (a) What is physical Geography? (2marks)
(b) Give **three** divisions of physical Geography. (2marks)
2. State **four** effects of rotation of the earth (4marks)
3. The diagram below represents zones of natural vegetation on a mountain. Use it to answer questions that follow



- a) Identify the vegetation zones marked X and Y. (2marks)
- b) State **four** characteristics of tropical rainforest vegetation. (4marks)
4. (a) Identify **two** erosional processes in a desert landscape. (2marks)
(b) Describe deflation as wind erosional process (3marks)
5. (a) Define a lake (2marks)
(b) Give **three** reasons why some rift valley lakes are fresh water. (3marks)

SECTION B**Answer question 6 and any other two question in this section.**

6. (a) Study the map of Kisumu East 1:50,000 (sheet 116/2) provided and answer the following questions.
 - i) What type of map is Kisumu East map extract? (1mark)
 - ii) Give two scales that have been used in the map extract. (2marks)
 - iii) What is the bearing of the trigonometrical station at grid square 0383 from the Air Photo Principal Point at grid square 0281? (2marks)
- (b). i). Measure the length of the All Weather Road Bound Surface B2/1 from the junction at Grid square 9793 to the western edge of the map extract. Give your answer in kilometer. (2marks)
- ii). What is the altitude of the highest point in the area covered by the map? (2marks)
- (c). Draw a rectangle measuring 16cm by 10cm to represent the area enclosed by Eastings 02 and 10

and Northing 90 and 00.

(1mark)

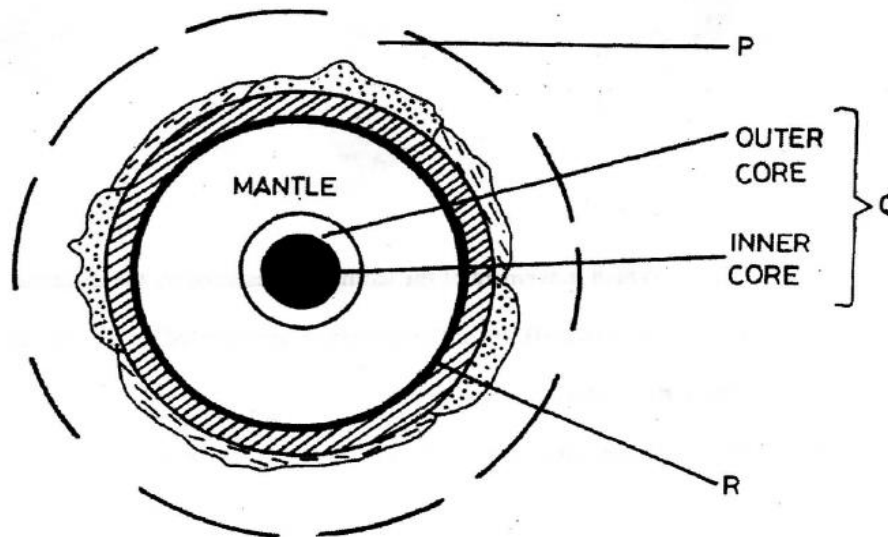
On the rectangle, mark and name the following.

(4marks)

- Nyando escarpment.
- All Weather Road Bound Surface C543/1
- Prison
- Agricultural Sugar Research Station.

- (d). i. Describe the drainage of the area covered by the map. (5marks)
 ii. Citing evidence from the map, identify three social services offered in Kisumu Municipality. (6marks)

7. a). The diagram below shows the structure of the earth. Use it to answer the question that follows.



- i. Name the parts marked : (2marks)
- P
 - Q
- ii. Describe the composition of the crust (5marks)
- (b). i. Define the term solar system. (2marks)
 ii. Using a well labelled diagram describe the occurrence of the solar eclipse. (5marks)
- (c). i. What is climate change? (2marks)
 ii. State four human activities which contribute to greenhouse effect. (4marks)
 iii. Mention effects of global warming on human activities. (5marks)
8. (a) (i) What are earth movements? (2marks)
 (ii) State **three** causes of earth movements? (3marks)
- (b) Describe how a recumbent fold is formed. (4marks)
- (c) (i) Apart from a recumbent fold, name **two** other types of folds. (2marks)
 (ii) Name four features resulting from folding apart from fold mountains. (4marks)
 (iii). Name two examples of fold mountains in Africa. (2mks)
- (d) Explain **four** significance of folding to human activities. (8marks)
9. (a). i. Define the term hydrological cycle. (2marks)
 ii. Give three processes of hydrological cycle. (3marks)
- (b). i. State three factors that influence river erosion. (3marks)
 ii. Describe the following river erosion processes. (3marks)
- Abrasion (3marks)
 - Solution. (3marks)
- (c). i. Apart from arcuate delta, name two other types of coastal delta. (2marks)
 ii. Explain three conditions necessary for delta formation. (6marks)
- (d). State three factors which influence the formation of river drainage patterns. (3marks)

- 10) a.) Give two places in East Africa that are permanently covered by ice (2marks)
- b.) i.) Identify three ways in which glaciers move (3marks)
- ii.) Explain factors that influence the movement of ice. (4marks)
- c.) i.) Describe how the hanging valleys are formed (6marks)
- ii.) State three significance of lowland glacial features to human activities (3marks)
- d) Your class plans to carry out a field study on glaciation on the slopes of Mt. Kenya.
- i.) What preparations will you make before the actual study (4 marks)
- ii.) Identify three methods that you will use to collect data during your study (3 marks)

MOKASA I JOINT EXAMINATION

312/2

GEOGRAPHY Paper 2

SECTION A: 25 MARKS

Answer **ALL** questions in this section

- State **five** importance of studying geography. (5 marks)
- (a) Define the term mining. (2 marks)
- (b) State **four** benefits of soda ash to the economy of Kenya. (4 marks)
- Reasons why a country should deserve her forest. (5 marks)
- (a) What is mixed farming? (2 marks)
- (b) State **three** characteristics of shifting cultivation. (3 marks)
- Identify stages involved in land reclamation in Netherlands. (5 marks)

SECTION B

Answer question 6 and any other **TWO** questions from this section.

6. The table below shows the value of some Kenya's mineral exports from 2000 to 2003. Use it to answer questions (a).

Value of Kenya's mineral exports (million Ksh.)

MINERAL	YEAR			
	2000	2001	2002	2003
Soda Ash	13,200	8,300	7,300	12,400
Petroleum products	4,200	4,500	4,700	6,100
Cement	7,300	7,800	7,400	8,900

- (i) Using a scale of 1cm represent 1000 million Kenya shillings, draw a comparative bar graph to represent the data shown. (8 marks)
 - (ii) State **three** advantages of using comparative bar graphs to represent statistical data. (3 marks)
 - (b) Describe how deep shaft mining method is used in exploitation of minerals. (6 marks)
 - (c) (i) Name **two** leading gold mining areas in South Africa. (2 marks)
 - (ii) Explain **three** ways in which gold mining has contributed to the economy of South Africa. (6 marks)
- (a) (i) Name **three** counties in Kenya where maize is grown in large scale farming. (3 marks)
 - (ii) Explain **three** physical conditions that favour maize cultivation in Kenya. (6 marks)
 - (iii) Explain measures that the government of Kenya had undertaken to improve maize farming.
 - (b) (i) Name **two** exotic breeds of dairy cattle reared in Kenya. (2 marks)
 - (ii) Explain **three** ways in which dairy farming in Kenya is different from dairy farming in Denmark. (6 marks)
- (a) (i) Distinguish between forests and forestry. (2 marks)
 - (ii) Name **three** exotic species of softwood trees in Kenya. (3 marks)

- (iii) State **four** reasons why the government encourages agroforestry. (4 marks)
- (b) Explain the following problems facing forestry in Kenya.
- (i) Encroachment. (2 marks)
 - (ii) Game damage (2 marks)
 - (iii) Forest fires (2 marks)
 - (iv) Excision. (2 marks)
- (c) Compare softwood forests in Kenya and Canada under the following subheadings.
- (i) Distribution of soft woods. (2 marks)
 - (ii) Tree harvesting (2 marks)
 - (iii) Period of harvesting (2 marks)
 - (iv) Transportation of logs. (2 marks)
9. (a) What is land reclamation? (2 marks)
- (b) Explain **four** methods used to rehabilitate land in Kenya. (8 marks)
- (i) and gabions.
 - (ii) Mulching of land
- (c) (i) State **four** significance of irrigation schemes in Kenya. (4 marks)
- (ii) Outline **four** problems facing irrigation schemes in Kenya. (4 marks)
- (d) (i) Give **four** factors influencing the location of Mwea-Tebere irrigation schemes. (4 marks)
- (ii) Mention **three** difference between land reclamation in Kenya and Netherlands. (3 marks)
10. (a) (i) Distinguish between a national park and a game reserve. (2 marks)
- (ii) State **three** reasons why the government establishes national parks in Kenya. (3 marks)
- (b) (i) Name three tourist attractions at the coast of Kenya. (3 marks)
- (ii) Explain the socio-economic benefits of tourism in Kenya. (6 marks)
- (c) (i) Give **three** reasons why high tourism potential areas benefit more from tourism. (3 marks)
- (ii) Explain **four** measures that Kenyan government should take in order to attract more tourists. (8 marks)

MOKASA 1 JOINT EXAMINATION.

312/1

GEOGRAPHY PAPER 1

MARKING SCHEME.

SECTION A: 25 MARKS

Answer ALL questions in this section.

1. a) What is physical Geography? (2marks)
- It is the branch of geography that deals with the formation of physical features/land forming processes.
- b) Name three divisions of physical Geography. (3marks)
- geomorphology
 - spatial geography
 - climatology
 - oceanology
 - pedology
2. State **four** effects of rotation of the earth. (4marks)
- Cause day and night
 - Causes falling and rising of ocean tides.
 - Causes deflection of winds and ocean currents.
 - Causes variation in the speed of air masses.

IMENTI SOUTH

312/1

GEOGRAPHY PAPER 1

SECTION A (25 marks)Answer **all** the questions in this section

1. a) Differentiate between physical and human environment. (2 marks)
- b) State **three** reasons why it's important to study Geography. (3 marks)
2. a) Define a meteor. (2 marks)
- b) State **three** characteristics of comets. (3 marks)
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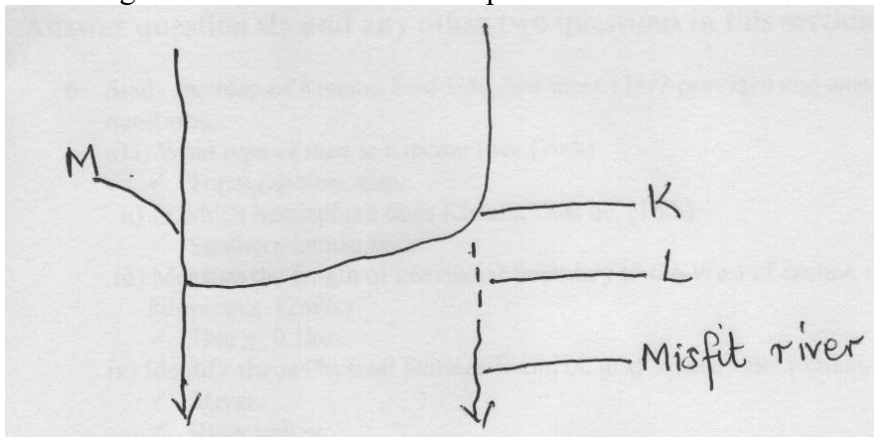
SECTION B (75 marks)Answer question 6 (compulsory) and any other two questions from this section

6. Study the map provided (Kisumu East map extract, East Africa 1:50,000 Kenya) and answer the questions that follow.
 - a) i) Give six figure grid reference for the trigonometric station SKP 21. (2 marks)
 - ii) Measure the distance of the provincial /regional boundary from the water works station 0199 to 0997 in kilometers. (2 marks)
 - b) Describe how relief has influenced settlement in the area covered by the map. (6 marks)
 - c) Name **two** types of natural vegetation found in the area covered by the map. (2 marks)
 - d) Citing evidence from the map, state **three** social functions of Kisumu East. (6 marks)
 - e) i) Draw a rectangle measuring 16cm by 12cm to enclose the area bound by Eastings 95-98 and Northings 80-83. On the rectangle mark and name;
 - Lake
 - Swamp
 - River Luando
 (6 marks)
 - ii) Name the title of the map. (1 mark)
7. a) i) What is soil degeneration? (2 marks)
- ii) Name **three** types of soil degeneration. (3 marks)
- b) i) State **two** factors that contribute to soil leaching. (2 marks)
- ii) List **five** characteristics of desert soils. (5 marks)
- iii) State **three** importance of soil texture. (3 marks)
- c) Students from your school carried out field study of soils found in Nyika Plateau.
 - i) State **three** methods they are likely to use to collect data. (3 marks)
 - ii) Give **three** characteristics of soils that they are likely to study. (3 marks)
- d) State **four** ways of managing and conserving soils in Kenya. (4 marks)
8. a) i) What is a river divide. (1 mark)
- ii) Describe **three** ways by which a river transports its load. (6 marks)
- b) Describe the characteristics of a river in its Old Stage. (7 marks)
- c) Describe each of the following drainage systems and patterns.
 - i) Superimposed drainage system. (3 marks)
 - ii) Centripetal drainage pattern. (2 marks)
- d) You have planned to carry out a field study of a river in its youthful stage.
 - i) State **two** ways in which you would prepare for the study. (2 marks)
 - ii) Name **two** features you are likely to study. (2 marks)
 - iii) List **two** problems you are likely to experience during the study. (2 marks)

- Encourage domestic tourism through intensified local marketing to increase number of tourists during low peak tourist season.

WETHAGA JOINT EXAMINATION.**END OF TERM 2 EXAMINATION - YEAR 2023****312/1.****GEOGRAPHY PAPER 1.****SECTION A .(25 MARKS).**

- 1 a) What is geography? (2mks)
b) Name **three** divisions of physical geography. (3mks)
- 2 a) Give **two** theories that explain the origin of the Solar system. (2mks)
b) State **three** characteristics of the moon. (3mks)
- 3 a) Differentiate between a watershed and a catchment area. (2mks)
b) The diagram below shows a river capture.

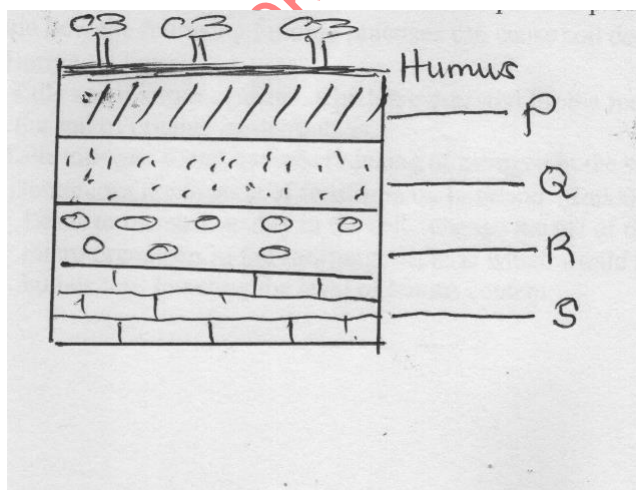


- Name the parts marked: K , L & M (3mks)
- 4 a) Define the term earthquake. (2mks)
b) Give **three** earthquake zones of the world. (3mks)
- 5 a) Name **three** forms of precipitation common in Kenya. (3mks)
b) Give **two** reasons why recording of data at school weather station may be inaccurate. (2mks)

SECTION B.**Answer question six and any other two questions in this section.**

- 6 Study the map of Kisumu East 1:50,000 sheet 116/2 provided and answer the following questions.
 - a) i) What type of map is Kisumu East. (1mk)
ii) In which hemisphere does Kisumu East lie. (1mk)
iii) Measure the length of provincial boundary to the West of easting 00 and give your answer in kilometres. (2mks)
iv) Identify **three** Physical features found on grid square 9594. (3mks)
v) Give the longitudinal extent of the map. (2mks)
 - b) i) Using a scale of 1cm to represent 20 metres, draw a cross section from grid reference 950950 to grid reference 020970. (5mks)
ii) On your cross section indicate the following features.
 - a) River Awach. (1mk)
 - b) All weather road bound surface (1mk)
 - c) Sugar plantation (1mk)
 - iii) Calculate the vertical exaggerator of the map. (2mks)
 - c) Explain **three** factors that have favored the growing of sugarcane in the area as evidenced from the map. (6mks)
- 7 a). i) Define the term folding. (2mks)

- ii) State **two** factors influencing the extent to which sedimentary rocks can be folded. (2mks)
- b) i) Apart from Nappe fold, name **three** other types of folds. (3mks)
 ii) With aid of a well labeled diagram, describe how a nappe fold is formed. (8mks)
 iii) Name **three** countries where Alps mountains are found. (3mks)
- c) Apart from fold mountains name **two** other features that result from folding. (2mks)
- d) Students from a school are planning to carry out a field study on folded area.
 i) State **three** activities they would carry out during the study. (3mks)
 ii) Name **two** secondary sources of information they would use to prepare for the field study. (2mks)
- 8 a) i) Define the term Sea. (2mks)
 ii) Give **two** types of oceanic islands. (2mks)
 b) Explain **three** factors that determine the rate of coastal erosion. (6mks).
 c) i) Give **three** causes of ocean currents. (3mks)
 ii) Name **three** ocean currents along the Western coast of Africa. (3mks)
 d) You are planning to carry out a field study on coastal features.
 i) Identify **three** resultant features of emerged highland coast you are likely to find. (3mks)
 ii) State **three** reasons why it is important to conduct a pre-visit. (3mks)
 iii) State **three** follow ups activities you would do after study. (3mks)
- 9 a) i) What are hypabyssal rocks. (2mks)
 ii) Name **three** examples of hypabyssal rocks. (3mks)
 b) i) State **three** factors that influence rock metamorphism. (3mks)
 ii) Describe the following processes of formation of metamorphic rocks.
 a) Dynamic metamorphism. (4mks)
 b) Thermal metamorphism. (4mks)
 c) i) State **three** characteristics of sedimentary rocks. (3mks)
 ii) Highlight **two** characteristics of minerals. (2mks)
 d. Identify **four** uses of rocks. (4mks)
- 10 a) The diagram below shows a well developed soil profile. Use it to answer questions.



- i) Name the soil layers marked. Q, R & S
 ii) Describe the characteristics of layer marked P. (4mks)
- b) i) What is soil catena? (2mks)
 ii) Identify **three** classes of soil based on soil order. (3mks)
- c) i) Name **two** soil forming processes. (2mks)
 ii) State **three** factors that determine the soil colour. (3mks)
- d) i). State **four** factors that influence soil formation. (4mks)
 ii) Explain how the following farming practices can cause soil degradation.

- a) Burning. (2mks)
 b) Continuous application of fertilizers on farmland. (2mks)

WEITHAGA JOINT EXAMINATION.**312/2****GEOGRAPHY PAPER 2****SECTION A.(25 MARKS)****Answer all questions in this section.**

1. a) Name **two** countries to which Kenya exports petroleum products. (2mks)
 b) State **three** factors that influence external trade in Kenya. (3mks)
2. a) Apart from the sun, name **three** other sources of electricity. (3mks)
 b) Give **two** advantages of using solar energy. (2mks)
3. a) What is industrial inertia. (2mks)
 b) Mention **three** examples of cottage industries in Kenya. (3mks)
4. a) Name **two** exotic breeds of commercial beef cattle reared in Kenya. (2mks)
 b) Give **three** challenges facing nomadic pastoralism in Kenya. (3mks)
5. a) Name **two** forests reserves found in the coastal region of Kenya. (2mks)
 b) State **three** ways in which the clearing of forests has affected the natural environment. (3mks)

SECTION B:***Answer questions 6 and any other two questions.***

6. Use the table below to answer the questions that follows.

Kenya's agricultural production in '000 tonnes.

YEARS	2010	2011	2012	2013
CROPS.				
TEA	81,000	62,000	44,000	101,000
COFFEE	37,000	53,000	71,000	68,000
WHEAT	12,000	8,000	12,000	16,000

- (a) i) Using a vertical scale of 1cm represents 10,000 tonnes, draw a comparative bar graph to represent the above data. (8mks)
 ii) State **three** advantages of using comparative bar graph to represent statistical data. (3mks)
- (b) Give **four** physical factors that influence the growing of tea in Kenya. (4mks)
- (c) i) Explain **four** problems facing small scale tea farming in Kenya. (8mks)
 ii) Mention **two** ways in which processed tea is marketed in Kenya. (2mks)
7. a) i) Name **three** categories of minerals. (3mks)
 ii) Identify **three** factors that influence the occurrence of minerals. (3mks)
 b) Explain how the following factors influence exploitation of minerals.
 i) Transport. (4mks)
 ii) Level of technology. (4mks)
 c) i) Describe shaft mining method. (5mks)
 ii) Outline **three** challenges faced by shaft miners. (3mks)
- d) Name the areas where the following minerals are mined in Kenya.
 i) Diatomite. (1mk)
 ii) Salt. (1mk)

- iii) Titanium. (1mk)
8. a) (i) Name the method of irrigation used in Perkerra irrigation scheme. (1mk)
 (ii) Identify **three** crops grown in Perkerra irrigation scheme. (3mks)
- b) State **four** problems facing irrigation farming in Kenya. (4mks)
- c) i) Define a polder. (2mks)
 ii) Name **three** areas which makes the zuider zee project in Netherlands. (3mks)
 iii) State **four** ways in which the salinity of the polders is reduced in the Netherlands. (4mks)
- iv) Explain **four** benefits of the Zuider Zee project in Netherlands. (8mks)
9. a. i) Define environmental conservation. (2mks)
 ii) Apart from floods and drought name **four** environmental hazards. (4mks)
- b) State **four** importance's of conserving the environment. (4mks)
- c) i) Name **two** areas in Kenya which are prone to flooding. (2mks)
 ii) Explain **four** measures to control floods. (8mks)
- d) Students from Gitige Secondary School carried out a field Study on land pollution in Nairobi city.
 i) State **two** methods they used to collect the data. (2mks)
 ii) Outline any **three** reasons they found to be contributing to high rate of land pollution in Nairobi. (3mks)
10. a) Define the term eco-tourism. (2mks)
- b) Explain how the following factors influence tourism in Kenya.
 i) Climate. (2mks)
 ii) Tour companies. (2mks)
 iii) Scenery. (2mks)
- c) i) Identify **two** physical tourist attraction sites in Switzerland. (2mks)
 ii) State **four** problems associated with tourism in Kenya. (4mks)
- d) i) Give **three** problems that are associated with low tourist season in Kenya. (3mks)
 ii) Explain **four** ways in which the County Governments in Kenya would promote sustainable tourism. (8mks)

WEITHAGA JOINT EXAMINATION
PAPER 1 - 312/1
MARKING SCHEME.

SECTION A : 25 Marks.

Answer all questions in this section.

- 1 a) What is geography? (2mks)
 – It is the study of earth as a home of mankind.
 – Study of distribution and interrelationship of various phenomena on the earth in relationship to man.
- b) Name **three** divisions of physical geography. (3mks)
 – Geology.
 – Biogeography.
 – Geomorphology.
 – Pedology.
 – Hydrology.
 – Climatology.
- 2 a) Give **two** theories that explain the origin of the Solar system.(2mks)
 – Passing star theory.
 – Nebula Cloud theory.

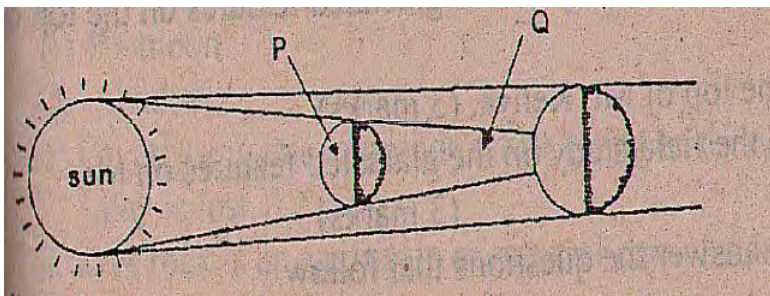
MURANG'A EXTRA COUNTY JOINT EXAMINATION

312/1

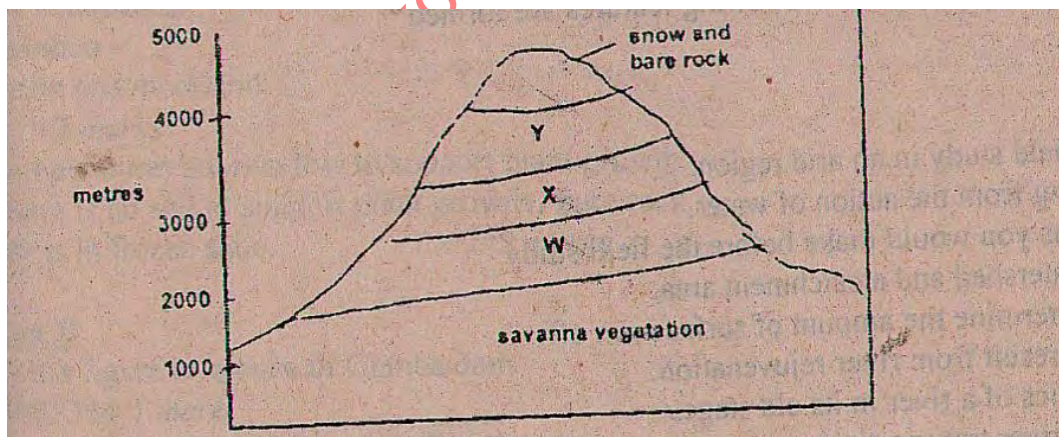
GEOGRAPHY

SECTION A.

1. a) Define the following terms.
 - i) Geography (1mk)
 - ii) Habitat (1mk)
- b) Give **three** branches of geography. (3mks)
2. a) Name **two** elements of weather that can be recorded at a school station. (2mks)
- b) Give **three** reasons why the recording of data at a school station may be inaccurate. (3mks)
3. a) What is a hydrological cycle (2mks)
- b) State **three** factors that influence the amount of surface run-off. (3mks)
4. Use the diagram below to answer questions that follow.



- i) What type of eclipse is represented by the diagram? (1mk)
- ii) Name the parts marked P and Q (2mks)
- iii) what is the effect of the international date line on crossing the line? (2mks)
5. The diagram represents zones of natural vegetation on a mountain in Africa. Use it to answer Question (a)

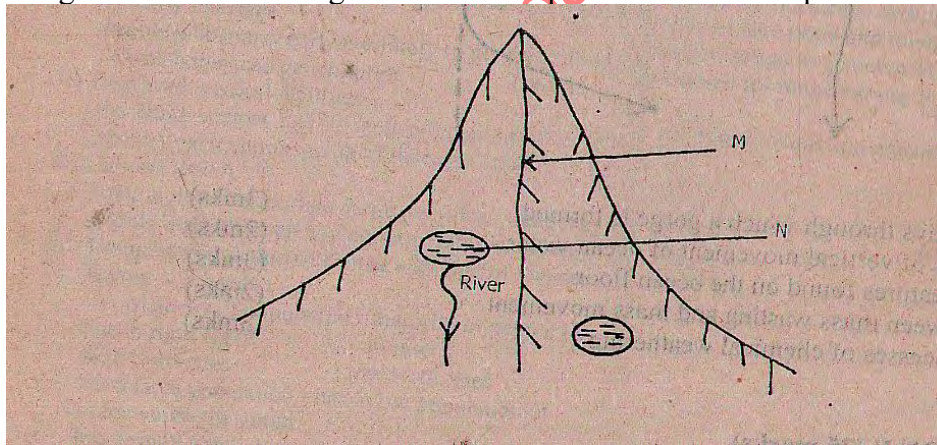


- a) Name the vegetation zones marked W, X, & Y.
- b) Give **two** reasons why mountains tops have no vegetation

SECTION B: ANSWER QUESTION SIX AND ANY OTHER TWO QUESTIONS. (75MKS)

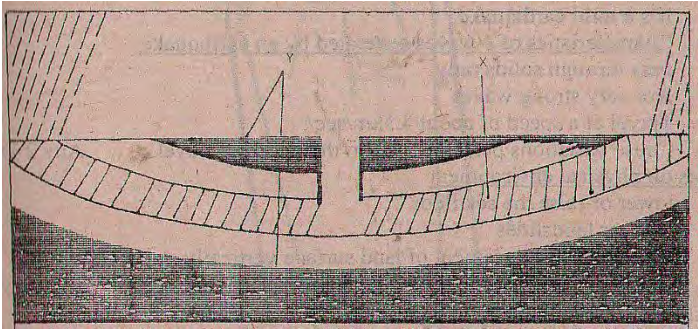
6. Study the map of Kisumu East 1:50,000 (sheet 116/2) provided and answer the following questions.
 - a) i) Give the **four** figure grid reference of Obwolo school. (1mk)
 - ii) What is the approximate height of point 000960? (1mk)
 - iii) Name **two** physical features found at grid square 0384. (2mks)
 - iv) Name **two** types of natural vegetation in the area covered by the map (2mks)

- b) Calculate the area of the Kisumu municipality. Give your answer in square kilometers (km²) (2mks)
- c) Measure the length of the all-weather road(bound surface) from the junction at grid reference 974911 to the edge of the map, grid reference 950968 (2mks)
- d) Citing evidence, give three social functions of Kisumu town. (6mks)
- e) i) Using a scale of 1cm to represent 200 metres, draw a cross-section from grid reference 970980 to 030989. (4mks)
- ii) On it mark and name the following (1mk)
- Steep slope (1mk)
 - Motor able road (1mk)
 - Nyangori river (1mk)
- iii) Calculate the vertical exaggeration. (2mks)
7. a) i) Define the term folding (2mk)
- ii) State **three** factors that influence folding. (3mks)
- b) i) Briefly describe the continental drift theory. (5mks)
- ii) State **2** evidences supporting the above theory of continental drift. (2mks)
- c) i) Using a well labelled diagram, explain how conventional currents theory may lead to formation of Fold Mountains. (6mks)
- ii) Highlight the signficance of Fold Mountains to human activities. (5mks)
- iii) Give **two** theories that explain the formation of Fold Mountains apart from convectional currents theory. (2mks)
8. a) Define the following terms (1mk)
- i) Glaciation (1mk)
- ii) Ice-berg (1mk)
- b) Give **two** reasons why there are no ice sheets in Kenya (2mks)
- c) The diagram below shows a glaciated landscape use it to answer questions that follow.



- i) Identify the feature labelled **M** and **N** (2mks)
- ii) Name **two** process through which **N** is formed. (2mks)
- iii) Describe how feature marked **N** is formed. (5mks)
- d) i) Name **two** types of moraines. (3mks)
- ii) Explain **two** factors that determine the speed of ice movement. (4mks)
- d) Students from a school near Mt. Kenya were planning to carry out afield study of the glaciated features on top of the mountain.
- e) i) State **two** reasons why they needed a route map. (2mks)
- ii) Give three challenges they would likely face during their field study. (3mks)
9. a) i) Define the term underground water. (1mk)
- ii) Give **three** sources of underground water. (3mks)
- iii) Explain **3** factors that influence the occurrence of underground water. (6mks)

- b) The diagram below shows an artesian well.



- i) Name the parts marked X and Y. (2mks)
 ii) State **four** conditions necessary for the formation of artesian wells. (4mks)
 iii) Explain **two** significance of underground water to human activities. (4mks)
- c) You intend to carry out a field study in a Karst landscape.
 i) Give **two** reasons why it is necessary to carry out a pre-visit before the study. (2mks)
 ii) Give **three** follow –up activities that you were engaged in after the actual study. (3mks)
10. a) i) Name **three** factors that influence the formation of soil. (3mks)
 ii) Name three processes of soil formation. (3mks)
 b) Apart from texture, name other properties of soil. (3mks)
 c) i) What is soil degeneration? (2mks)
 ii) Explain **three** ways in which farming practices may lead to loss of soil fertility. (6mks)
 iii) State how soil acidity is reduced. (2mks)
 d) i) Draw a simple – labelled diagram of profile of a mature soil. (4mks)
 ii) Distinguish between soil profile and soil catena. (2mks)

MURANG'A EXTRA COUNTY JOINT EXAMINATION
312/2
GEOGRAPHY

SECTION A (25MARKS)

Answer all the questions in this section

- 1 (a) Give the relationship between Geography and Agriculture. (2mks)
 (b) State three significance of learning Geography. (3mks)
2. (a) What is horticulture? (2mks)
 (b) State three advantages of using green house in horticulture farming (3mks)
3. (a) Name two minerals mined in South Africa (3mks)
 (b) State three problems facing mining industry in South Africa (3mks)
4. (a) State two factors necessary for a land to be reclaimed (3mks)
 (b) Give three uses of polder land in Netherlands (3mks)
5. Give four ways in which Kenya will benefit as a result of oil discovery in Turkana County (4mks)

SECTION B**Answer question 6 and any other two questions in this section.**

6. The table below shows total number of livestock in Kenya in 1986 and 1996

Type of livestock	Number in millions	
	1986	1996
Cattle	19.0	20.7
Sheep	17.0	26.7
Goats	18.5	27.3
Chicken	20.0	40

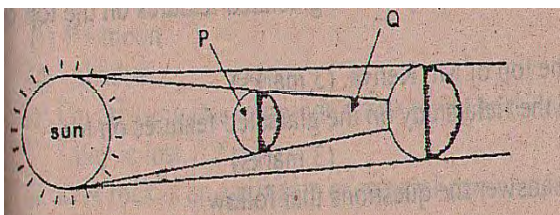
- (a) (i) Using a scale 1cm representing 5 million livestock, draw a comparative bar graph to represent the above given data. (8mks)
- (ii) State three advantages of comparative bar graph (3mks)
- (b) (i) Explain three factors that favour beef farming in Argentina (6mks)
- (ii) Name two exotic breeds of cattle reared in commercial ranches in Kenya (2mks)
- (c) Explain three ways which the government of Kenya assists nomadic pastoralists to improve the quality of their livestock (6mks)
7. (a) (i) Name three tree species found in the softwood forest of Canada. (3mks)
- (ii) State physical factors that favor the growth of softwood forest in Canada (3mks)
- (b) State four characteristics of softwood forest in Canada (4mks)
- (c) Give three reasons why it is necessary to carry out afforestation programmes in Kenya forest (3mks)
- (d) State the differences between softwood forest of Canada and Kenya under the following sub-headings:
- i) Species (2mks)
- ii) Mode of transportation (2mks)
- iii) Harvesting (2mks)
- e) Explain three significance of forests in Kenya to human activities. (6mks)
8. (a) State three physical conditions that favour sugar cane growing in the lake Victoria basin in Kenya. (3mks)
- (b) Describe the cultivation of sugarcane in Kenya. (6mks)
- (c) Explain five problems facing sugarcane farming in Kenya. (10mks)
- (d) Your class visited a sugar factory for a field study on sugar processing.
- i) Outline four stages of sugar processing that the class may have observed. (4mks)
- ii) Name two by-products of sugar that the class may have identified during the study. (2marks)
9. (a) (i) What is wildlife? (2mks)
- (ii) Give three factors that favour the establishment of national park at Tsavo (3mks)
- (iii) Mention four tourists attractions in Kenya. (4mks)
- (b) Explain four factors that hinder the development of domestic tourism in Kenya (4mks)
- (c) State four problems associated with tourism industry in Kenya (4mks)
- (d) Explain four benefits of tourism in the economy of Kenya (8mks)
10. (a) (i) Name TWO types of fishing. (2mks)
- (ii) State THREE reasons why marine fisheries are under developed in Kenya. (3mks)
- (iii) State FOUR solutions to the problems facing the fishing industry in Kenya. (4mks)
- (b) (i) Give TWO modern methods of fish preservation. (2mks)
- (ii) Describe the basket method of fishing. (5mks)
- (c) (i) Name THREE countries in the North West Atlantic fishing ground. (3mks)

- (ii) Compare fishing in Kenya and Japan under the following subheadings:
- | | |
|-------------------|--------|
| Continental shelf | (2mks) |
| Coastline | (2mks) |
| Ocean currents | (2mks) |

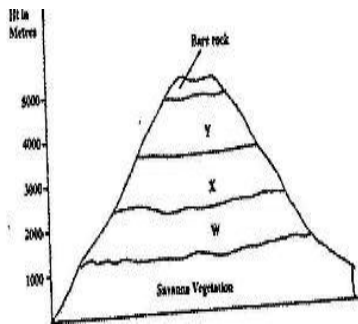
**MURANG'A EXTRA COUNTY JOINT EXAMINATION
MARKING SCHEMES GEO PPI**

SECTION A.

1. a) Define the following terms.
 - i) Geography (1mk)
 - The scientific study of earth as the home of mankind
 - Study of distribution and interrelationship of the natural and human phenomena on earth's surface
 - ii) Habitat (1mk)
 - Physical condition that influence development and behavior of living organisms
- b) Give **three** branches of geography. (3mks)
 - Physical geography
 - Human
 - Practical Geography
2. a) Name two elements of weather that can be recorded at a school station.(2mks)
 - Wind
 - Rain
 - Temperature
 - Humidity
 - Sunshine
 - Atmosphere pressure
 - Cloud cover
- b) Give three reasons why the recording of data at a school station may be inaccurate. (3mks)
 - Human error
 - Interference with instruments
 - Poor siting of weather stations
 - Extreme weather conditions
 - Natural calamities
3. a) What is a hydrological cycle(2mks)
 - Hydrological cycle is the continuous interchange of water in a cycle between water bodies land and the atmosphere.
- b) State 3 factors that influence the amount of surface run-off. (3mks)
 - Amount/Nature of rainfall
 - Gradient of the land
 - Nature of rocks/soil
 - Water table/level of soil/saturation
 - Vegetation cover
 - Human activities
4. Use the diagram below to answer questions that follow.

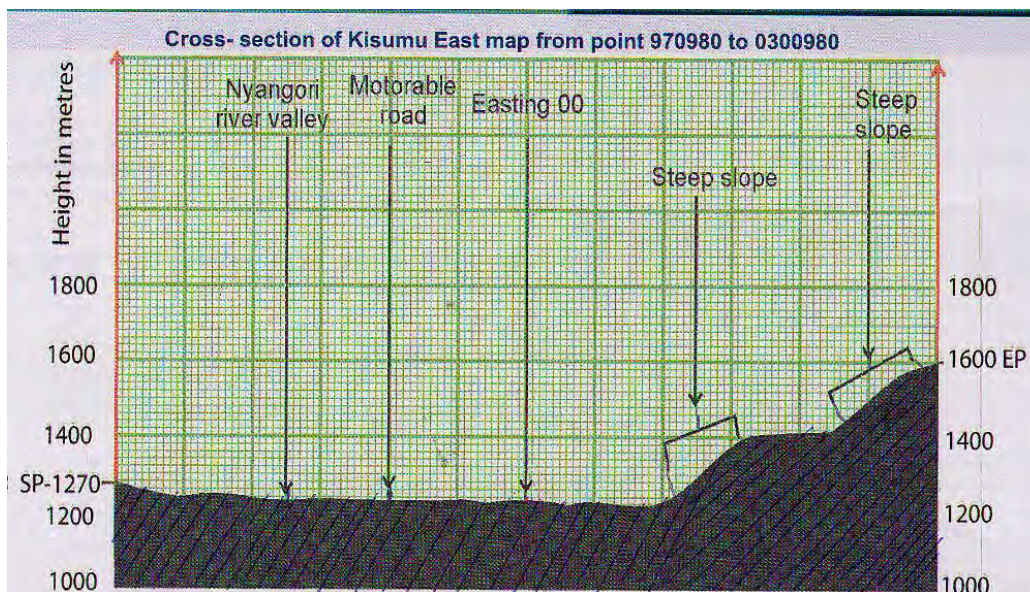


- i) What type of eclipse is represented by the diagram? (1mk)
- Solar eclipse
- ii) Name the parts marked P and Q(2mks)
- P – Moon
 - Q – umbra
- iii) What is the effect of the international date line on crossing the line?(2mks)
- On crossing this longitude while going to the east, a day is gained while crossing to the west a day is lost.
5. The diagram represents zones of natural vegetation on a mountain in Africa. Use it to answer Question (a)



- a) Name the vegetation zones marked w,x,& y.
- W-Rainforest
 - X-Bamboo
 - Y- Health and Moorland
- b) Give two reasons why mountains tops have no vegetation
- Temperatures are too low to support plant growth
 - There is thin soil/no soil to support plant growth/bare rock.
 - Water is in frozen state
6. a) i) Give the four figure grid reference of Obwolo school.(1mk)
- 9995
- ii) What is the approximate height of point 000960?(1mk)
- 1200m
- iii) Name two physical features found at grid square 0384.(2mks)
- River
 - River Valley
 - Seasonal swamp
- iv) Name two types of natural vegetation in the area covered by the map(2mks)
- scattered trees
 - Scrub vegetation
 - Woodland vegetation
 - Papyrus swamp vegetation
- b) Calculate the area of the Kisumu municipality. Give your answer in square kilometers (km²) (2mks)
- Full squares =5
 - Half square = $\frac{17}{2}$
 - = $5 + \frac{17}{2} = 13.5 \text{ km}^2 + 0.5$
- c) Measure the length of the all-weather road(bound surface) from the junction at grid reference 974911 to the edge of the map, grid reference 960959.(2mks)
- 5.4km \pm 0.1
- (5.3 – 5.5 km)

- d) Citing evidence explain three social functions of Kisumu town.(6mks)
- Water supply centre evidenced by water works
 - Education center evidenced by prison
 - Health center evidenced by a school
 - Religious center evidenced by church
 - Administrative center evidenced by prison
- e) i) Using a scale of 1cm to represent 200 metres, draw a cross-section from grid reference 970980 to 030989. (4mks)
- ii) On it mark and name the following
- Steep slope(1mk)
 - Motor able road(1mk)
 - Nyangori river(1mk)



(T-1mrk, y-1mk, SP and EP-1mk, labelled y axis- 1mk)

- iii) Calculate the vertical exaggeration.(2mks)

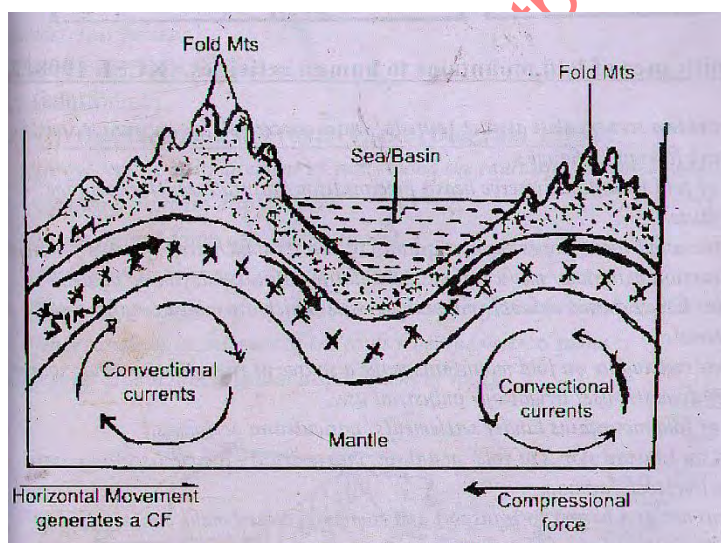
$$V.E = \frac{\text{Vertical scale}}{\text{Horizontal scale}}$$

$$\frac{1}{200m} \div \frac{1}{500}$$

$$\frac{1}{200m} \times \frac{500}{1} = 2.5 \text{ times}$$

- 7.
- a) i) Define the term folding(2mk)
- Folding is the bending or distortion of crustal rocks which make them bend upwards and downwards due to compressional forces.
- ii) State three factors that influence folding.(3mks)
- Rock type/flexibility or elasticity of a rock
 - Strength or intensity of the compressional forces
 - Temperature within rocks
 - The age of sedimentary rocks

- b) i) Briefly describe the continental drift theory. (5mks)
- It states the earth was initially a large land mass called Pangae. It was surrounded by a great sea called panthalasa
 - Later pangea broke up into two blocks namely Laurasia and Gondwanaland. The blocks were separated by a narrow sea called Tethys – Eventually laurasia broke and formed the Northern continents e.g Europe and America while Gondwanaland formed southern like Africa
- ii) State 3 evidences supporting the above theory of continental drift.(3mks)
- The jig – saw fit of continental margins
 - Geological /structure
 - Sea floor spreading
 - Climatology
 - Distribution of ancient glacial deposits
 - The mid atlantic ridge
 - Paleontological evidences
 - Palaeomagnetic studies
- i) Using a well labelled diagram, explain how conventional currents theory may lead to formation of fold mountains. (6mks)
- The hot molten mantle rocks has convectional currents that move in a circular motion from the bottom towards the crust.
 - The currents exert a frictional drag on the sima rocks
 - This make the crustal rock to move horizontally which generates the compressional forces .
 - The compressional forces squeeze sedimentary rocks materials which bend to form fold mountains.

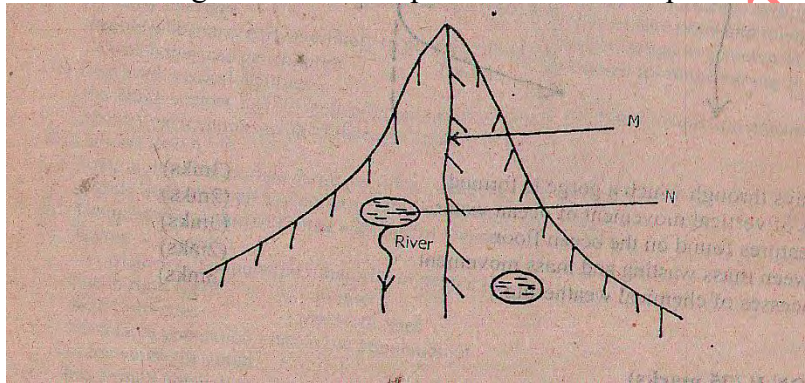


D-2mks

T-4mks

- ii) Highlight the significance of Fold Mountains to human activities. (4mks)
- Fold mountains provide beautiful scenery that attract tourist hence bring foreign exchange
 - Wind ward slopes of fold mountain receive heavy precipitation rainfall which encourage settlement/agriculture
 - Some fold mountains have exposed valuable mineral deposits which are mined for income/industrial raw materials
 - Some fold mountains act as a barrier to transport and communication lines difficult and expensive.
 - Rugged nature of Folds Mountains hinder settlement/agricultural activities.

- iii) Give two theories that explain the formation of Fold Mountains apart from convectional currents theory.(2mks)
- Contraction theory
 - Plate tectonics theory
8. a) Define the following terms
- i) Glaciation(1mk)
- Process through which moving ice erodes, transport and deposits material on the earth's surface to form glacial features
- ii) Ice-berg(1mk)
- A large block of ice broken from ice sheets and floating in seas/oceans
- b) Give two reasons why there are no ice sheets in Kenya(2mks)
- Kenya experiences high temperatures under which ice cannot form
 - Most parts of Kenya have low altitude/lowlands.
 - Kenya is found at low latitude regions/equatorial areas
- c) The diagram below shows a glaciated landscape use it to answer questions that follow.



- i) Identify the feature labelled M and N (2mks)
- M- Arete
 - N- Tarn/corrie lakes/ cirque lake
- ii) Name two process through which N is formed.(2mks)
- Plucking process
 - Abrasion process
- iii) Describe how feature marked N is formed.(5mks)
- Snow accumulates in a pre-existing hollow on a mountain side
 - Snow gets compacted into ice to form cirque glacier
 - Through abrasion the floor and the sides are eroded deepening the hollow
 - Plucking process erodes the back walls steepening them
 - A series of these processes results to formation of deep arm-shaped depression called corrie
 - The depression filled melt water to form a lake called a tarn
- d) i) Name two types of moraines.(3mks)
- Lateral moraine
 - Media moraine
 - Terminal moraine
 - Ground/sub-glacial moraine
 - Recessional moraine
 - Glacial moraine
- ii) Explain two factors that determine the speed of ice movement.(4mks)
- Temperature changes
 - Width of the glacier channel
 - Thickness and height of the glacier

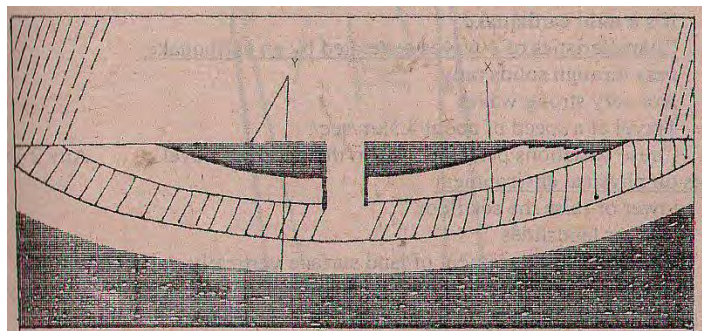
- Gradient of the slope
- Nature of the rock surface/friction

- e) Students from a school near Mt. Kenya were planning to carry out a field study of the glaciated features on top of the mountain.
- i) State two reasons why they needed a route map.(2mks)
- To identify direction to take
 - To estimate distance they would cover
 - To estimate time they are likely to take
 - To plan a schedule of activities/working programme
- ii) Give three challenges they would likely face during their field study. (3mks)
- Ice – accumulation may hinder transportation
 - Steep landscape making roads impassible
 - Attack by wild animals eg. snakes.
 - Accidents may occur eg. falling due to the steep slopes

9.

- a) i) Define the term underground water.(1mk)
- It is water that is found beneath the earth surface
 - Is water found in the pores of a permeable rock underground and above an impermeable rock layer.
- ii) Give three sources of underground water.(3mks)
- Rain water
 - lakes /seas/rivers
 - Melt water/melting ice
 - Magmatic water/plutonic water
- iii) Explain 3 factors that influence the occurrence of underground water. (6mks)
- ✓ Evaporation rate- high evaporation leads to less infiltration
Low evaporation leads to more infiltration
 - ✓ Level of ground saturation – dry soil absorb more water to make underground water while saturated & wet soils have little infiltration.
 - ✓ Vegetation cover- presence of vegetation cover reduce run-off//hold water on the ground & water has enough time to infiltrate, while bare grounds has more run-off hence little infiltration.
Amount of precipitation/rainfall.
 - ✓ Slope/gradient- flat ground has more infiltration as water remains in place and has enough time to sink steep slopes have run-off and little water infiltration.

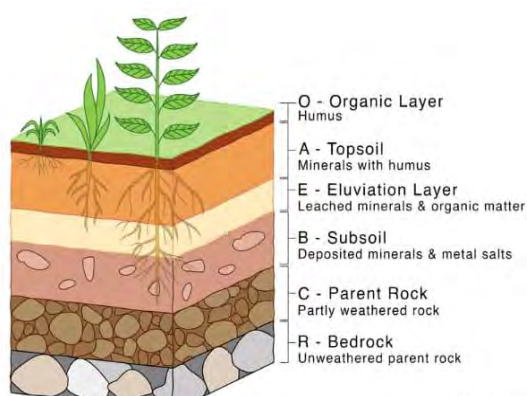
- b) The diagram below shows an artesian well.



- i) Name the parts marked X and Y.(2mks)
- x – Aquifer/permeable rock
- y – Impermeable rock

- ii) State four conditions necessary for the formation of artesian wells.(4mks)
- The mouth of the well must be lower than the water intake area for water to flow out naturally.
 - The artesian well be sunk to reach below water table in the permeable rock for it to have water permanently.
 - Permeable rock/aquifer must be sandwiched between two impermeable rocks to hold water.
 - The permeable rock/aquifer must outcrop in a region of adequate water supply/high rainfall/ a lake bed in order to absorb water of underground water.
- iii) Explain two significance of underground water to human activities. (4mks)
- Form springs which are a source of rivers that provide water for domestic/industrial/irrigation uses.
 - Underground water forms oasis/wells that provide water for domestic/industrial uses.
 - Underground water sustains growth of crops/plant animal life.
 - Spring /oasis/wells attract settlement/development of towns
 - Hot springs/geysers formed by underground water during vulcanicity are used to generate geothermal power
- c) You intend to carry out a field study in a Karst landscape.
- i) Give two reasons why it is necessary to carry out a pre-visit before the study. (2mks)
- To familiarizes the students with the area
 - To determine the suitability of the area of study
 - To estimate the cost of study and plan accordingly.
 - To identify any problem is likely to encounter during the study
 - It is useful in designing a working schedule
- ii) Give three follow –up activities that you were engaged in after the actual study.(3mks)
- Discussing the findings
 - Drawing sketches
 - Analyzing the data
 - Interpreting the data
 - Writing reports
- 10.
- a) (i) Name three factors that influence the formation of soil. (3mks)
- Parent material
 - Time
 - Climate
 - Living organisms
 - Gradient/relief
- (ii) Name three processes of soil formation.
- Lateralization
 - Humification
 - Salinization
 - podzolisation
- b) Apart from texture, name other properties of soil. (3mks)
- Thickness
 - Water
 - Porosity
 - Colour
 - Temperature
 - Lime content
- c) i) What is soil degeneration? (2mks)
- It is the loss of soil fertility or soil deterioration/decline in usefulness of soil due to physical chemical and biological factors.

- ii) Explain three ways in which farming practices may lead to loss of soil fertility.(6mks)
- Overgrazing leads to removal of vegetation exposing soil to agent of erosion.
 - Frequent ploughing –weaken soil structure & make it easy for agents of soil erosion.
 - Burning crop remains and bushes destroy, organic matter.
 - Over use of agro – chemicals – change soil P.H and make it poor.
 - Plough up and down the slope create channels for run-off which takes away soil nutrients.
- iii) State how soil acidity is reduced. (2mks)
- Adding lime content i.e calcium hydroxide to the soil
 - Draining of swampy/stagnant environment to improve soil aeration
 - Planting of water tolerant/sapping plants in swampy zones to improve the drainage condition.
- d) i) Draw a simple – labelled diagram of profile of a mature soil. (4mks)



- ii) Distinguish between soil profile and soil catena. (2mks)
- Soil profile is the vertical/arrangement of different layers of soil from the surface to the bed rock while soil catena is the sequence of different soils layers down a slope.

MURANG'A EXTRA COUNTY JOINT EXAMINATION MARKING SCHEMES GEO PP2

Answer all the questions in this section

- 1 a). Give the relationship between Geography and Agriculture. (2x1mks)
- Agriculture uses geography to determine suitable climatic areas for crop growing and livestock keeping while Geography studies farming systems, their distribution and the factors affecting farming activities.
- b). State three significance of learning Geography. (3x1mks)
- Geography helps learners to develop skills which are used to study the environment.
 - It teaches methods of collecting and representing geographical information
 - It enables learners to understand and appreciate different environmental influences of societies
 - Encourages international awareness and cooperation
 - Geography teaches how to manage time properly through field work
 - Geography is a tool of better citizenship
 - Geography is a career subject eg. geography teacher
 - Geography helps us to acquire positive attitudes and values in society.
2. (a) What is horticulture? (2mks)
- Is the cultivation of vegetables, fruits and flowers for commercial purposes
- (b) State three advantages of using green house in horticulture farming (Any 3x1=3mks)
- Climatic hazards such as hailstones/stong winds/excessive rainfall can be controlled
 - It is easy to control weeds plants are grown throughout the year

- Pests/diseases is easily controlled .it is easier to control the amount of moisture that the flowers require
3. (a) Name two minerals mined in South Africa (Any 2x1=2mks)
- Gold
 - Diamond
 - Coal
 - Silver
 - Iron ore
 - Uranium
 - copper
- (b) Give three problems facing mining industry in South Africa (Any 3x1=3mks)
- some mines are very deep thus expensive/ difficult to mine
 - competition for skilled labour from other sectors of the economy
 - inadequate water supply for processing minerals
 - some mines are closed due to exhaustion of minerals
 - collapse of mines causes heavy losses of lives
4. (a) State three factors necessary for a land to be reclaimed (Any 3x1=3mks)
- The land should be large/extensive
 - The land should be accessible for easy transportation
 - Availability of gentle sloping land for mechanization
 - Availability of capitals to initiate the project
 - The climate should be suitable for the intended agricultural activities.
 - skilled man power should be available to make reclamation viable
- (b) Give three uses of polder land in Netherlands (Any 3x1=3mks)
- Its used for cultivation of crops
 - It is for settlement
 - Its used for establishment of transport network
 - Its use for setting up industries
 - Its used for pasture land for dairy animals
5. Give four ways in which Kenya will benefit as a result of oil discovery in Turkana county(Any 4x1mks)
- It will open the area as a result of constructing roads
 - Exports of oil will earn Kenya more foreign exchange
 - Development of social amenities will improve the living standard of the people
 - Employment in oil field industries will improve living standard of the people
 - It will lead to rise and expansion of towns

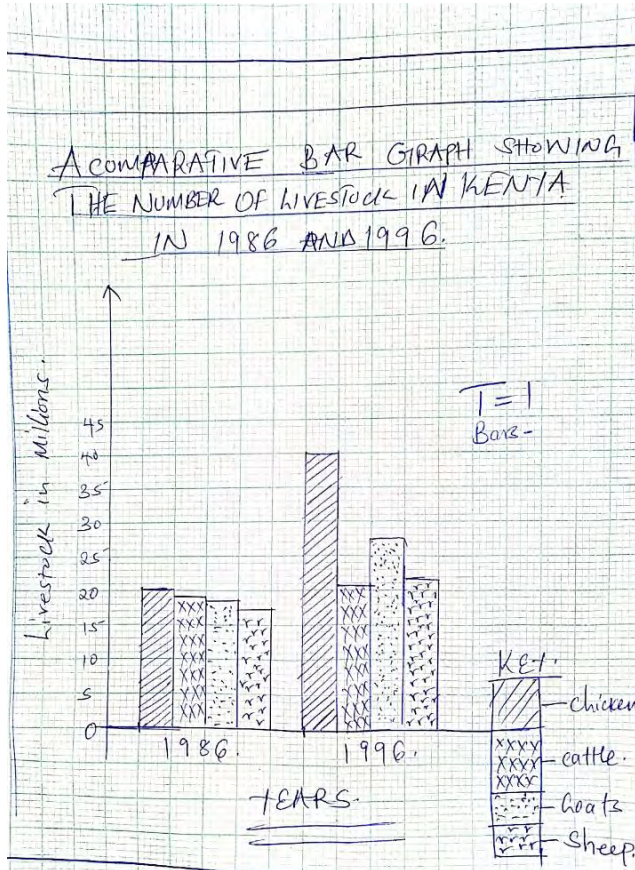
SECTION B

Answer question 6 and any other two questions from this section

6. The table below shows total number of livestock in Kenya in 1986 and 1996

Type of livestock	Number in millions	
	1986	1996
Cattle	19.0	20.7
Sheep	17.0	26.7
Goats	18.5	27.3
Chicken	20.0	40

- (a) (i) Using a scale 1cm representing 5 million livestock, draw a comparative bar graph to represent the above given data. (8mks)



T-1MK

Y AXIS-1MK

X AXIS-1MK

KEY-1MK

BARS-EACH GROUP 2MKS

(ii) State three advantages of comparative bar graph (Any 3x1=3mks)

- Easy to construct/draw
- Easy to interpret/read
- It gives good visual impression.

(b) (i) Explain three factors that favour beef farming in Argentina (3x2mks)

- Replacement of coarse grasses with alfalfa/corn has improved the quality of pastures for the beef cattle
- Cross breeding of the traditional cattle with higher quality breeds/Hereford/Aberdeen Angus improved the quality of the yield
- The warm and wet/maritime climate of the area makes grazing of cattle possible throughout the year
- Availability of water supplied using wind pumps ensures constant supply of water for cattle
- Availability of vast land/pampas which was suitable for cattle grazing encourages beef ranching
- Availability of market both local external encourages the farmers to expand the beef industry
- Availability of refrigeration facilities enables beef to reach far off market while still fresh
- Well developed railway network which help in transporting beef cattle to factories

(Any 2x3=6mrks)

(ii) Name two exotic breeds of cattle reared in commercial ranches in Kenya. (Any 2x1mrks)

- Aberdeen Angus
- Hereford
- Galloway
- Charolais
- Shorthorn
- Sahiwal

(c) Explain three ways which the government of Kenya assists nomadic pastoralists to improve the quality of their livestock (Any 6x1=6mks)

- The government has set up demonstration ranches to educate the pastoralists on better ways of keeping livestock
- Cattle dips have been constructed to control pests/employ veterinary hence improving the quality of cattle
- Boreholes/dams have been constructed to provide water for the livestock
- Roads have constructed to enable the pastoralists to transport their animals to the market/make services accessible to farmers
- It strengthens community education to teach pastoralists better livestock management
- The government encourages group ranching to enable the pastoralists to view livestock keeping as a commercial undertaking
- It has revived Kenya meat commission that buys animals from farmers to slaughter

7.

(a) (i) Name three tree species found in the softwood forest of Canada. (Any 3x1=3mks)

- Western hemlock
- Birch
- Pine
- Cedar
- Spruce
- Douglas fir
- cypress

(ii) State three physical factors that favor the growth of softwood forest in Canada

(Any 3x1=3mks)

- high rainfall throughout the year has promoted the growth of forest
- the ruggedness of the landscape is unsuitable for agriculture leaving forestry as the best alternative
- thin soil is suitable for growth of softwood forest
- high altitude is suitable for growth of forest

(b) state four the characteristics of softwood forest in Canada (4mks)

- the trees are conical in shape
- the tree species occur in pure stands
- the tree grow tall and have straight trunks
- the trees have narrow needle like leaves
- the trees bear cones
- the trees have wide shallow roots
- the forest are evergreen
- the forest have no undergrowth
- the trees are flexible to resist strong winter wind

(c) Give three reasons why it is necessary to carry out afforestation programs in Kenya forest

(Any 3x1=3mks)

- to protect water catchment areas which are sources of rivers that provide water for irrigation/HEP generation
- trees roots soil particles together thus protect it from erosion by wind/water
- to create scenic beauty which attract tourists thus earn foreign exchange used to develop other sectors of economy
- to expand the habitat for wildlife thus conserving its future generation
- to provide continuous supply of wood fuel
- to provide foreign exchange by reducing importation of forest products
- to provide continuous supply of raw material for paper making

(d) State the differences between softwood forest in Canada and Kenya under the following subheadings

(i) The tree species (2mks)

Canada has exotic tree species while Kenya has both exotic and indigenous

(ii) Mode of transport of logs

In Canada logs are transported using roads, railways and waterways while in Kenya majorly by roads and railways.

(iii) Harvesting

In Canada harvesting is done through clear cutting while Kenya there is selective harvesting of trees

(e) Explain three significances of forests in Kenya to human activities. (6mks)

- Trees provide timber products which can be used in building and construction.
- Some trees are extracted to make herbal medicine.
- Some trees are sources of food e.g. fruits
- Forests act as a habitat of wild animals which attract tourists bringing foreign exchange.

8. (a) State three physical conditions that favour sugar cane growing in the lake Victoria basin in Kenya. (3x1mks)

- High temperatures (21°C-27°C)
- High and well distributed rainfall (1200-1500mm annually).
- Dry and sunny weather during harvesting to increase sugar accumulation in the cane.
- Deep well drained soils.
- Undulating/gently sloping land for machinery to be used and for easier transportation of cane to factories.

(b) Describe the cultivation of sugarcane in Kenya. (6x1mks)

- Shallow furrows are made across the field at intervals of 1.2m-1.8m apart.
- Pieces of sugarcane cuttings are laid horizontally in the furrows.
- They are covered lightly with the soil which they grow a cluster of shoots called stool.
- Nitrogenous fertilizer is applied when plants are growing at a high rate.
- Weeding is done when the crop is fairly short.
- After about 14 months the cane is ready for harvesting.
- After harvesting two ratoons the stools are dug out, land tilled and new sets are planted.

(c) Explain five problems facing sugarcane farming in Kenya. (5x2mks)

- Pests e.g. termites which attack stalks lowering the farmers' yield.
- Diseases e.g. sugarcane mosaic which causes the crop to become stunted with leaves becoming yellow.
- Mismanagement of some sugar factories resulting in their closure and subsequent loss of income and jobs.
- Inability of some factories to cope with supply of cane from out-growers due to low production capacity and outdated technology.
- Local sugar industry faces competition from cheap imported sugar from COMESA countries.
- Strikes by cane farmers and transporters due to inadequate pay resulting in drop in output.
- Frequent fires which destroy many hectares of cane annually.

Your class visited a sugar factory for a field study on sugar processing.

i) Outline four stages of sugar processing that the class may have observed. (4x1mks)

- Washing
- Cutting into small pieces
- Crushing and squeezing the juice
- Suspension and precipitation of non-sugars
- Boiling of the juice
- Crystallization

ii) Name two by-products of sugar that the class may have identified during the study.

(Any 2x1=2mks)

- Molasses is used as a sweetener for livestock feeds.
- Bagasse or fibre left after squeezing the juice is used as fuel for boilers, for preparing pulp for making paper used for making cement and fertilizer bags and as fodder or manure.
- Filter cake resulting from filtration process is used as manure for cane

9.

(a) (i) What is wildlife? (Any 2x1=2mks)

Are the animals ((fauna) and plants (flora) existing in their natural habitat

(ii) Give three factors that favor the establishment of national park at Tsavo (Any 3x1=3mks)

- Availability of large tracts of land sparsely populated land
- Availability of wide variety of vegetation which provides food for wild animals
- The harsh climatic conditions that discourage farming/settlement thus wildlife conservation is the best alternative land use
- The vegetation found in Tsavo are provides habitat for wild animals
- Mzima springs river Tsavo and voi provides drinking water for animals

iii) sandy beaches

the great riftvalley

the flamingos

(b) Explain four factors that hinder the development of domestic tourism in Kenya (Any 4x2=8mks)

- The roads leading to the tourist site are poorly maintained. This discourages people from visiting such sites
- There is low public awareness of tourist sites due to inadequate publicity
- Tourists attractions are familiar to local people hence they fail to appreciate their beauty and value
- Negative attitude towards local tourism limits the number of people who engage in tourism
- Insecurity from gangsters in the national parks/game reserves scare people away from visiting them
- The high accommodation in the game lodges discourages local tourism 2marks each

(c) State four problems associated with tourism industry in Kenya (Any 4x1=4mks)

- Tourism have led to increase in drug abuse
- A number of youths especially at the coast dropped out of school to become tour guides/beach boys/curio sellers
- Tourism has led to the spread of diseases such STIs
- Tourism has led to pollution of environment/national parks/game reserves
- Other emphasis on tourism has led to the neglect of other sectors of the economy
- It has to increase in crime/insecurity
- It has encouraged poaching/illegal collection of marine resources
- It has led to international terrorism/piracy
- Erosion of social value/culture

(d) Explain four benefits of tourism in the economy of Kenya (Any 4x2=8mks)

- It provides employment opportunities in hotels, transport sectors thus reducing unemployment/raising the standard of living
- Kenya earn foreign exchange which is used to develop other economic sectors
- The need for food in tourist hotels and lodges has stimulated the growth of agricultural sector
- Tourists provide a ready market for trade items such as handicrafts and curio thus earn Kenyans a direct income
- Construction of roads to tourist sites also benefits the local people in transport their products to the market /general development of the country
- Establishment of National parks has enabled Kenyan to protect preserve its rich cultural heritage
- Tourism encourages cultural exchange which provides international co-operation

10.

(a) (i) Name TWO types of fishing. (2mks)

- Pelagic
- Demersal
- Fresh water
- Inshore

(ii) State THREE reasons why marine fisheries are under developed in Kenya. (3 mks)

- The continental shelf is narrow
- The coastline is fairly straight and lies few indentations
- The waters are relatively warm for the growth of plantations
- The fishermen have inadequate capital to purchase modern fishing equipment
- Fishermen have inadequate skills.
- There is low demand for marine fish locally
- There is limited market due to competitors from the developed countries.

(iii) Identify FOUR solutions to the problems facing the fishing industry in Kenya. (4 mks)

- The government should encourage the development of cooperatives to enable the fishermen to market their fish
- Roads leading to the freshwater lake should be developed to enable fish to reach the market fast.
- The government and local financial institutions should make funds available for fishermen through offering loans to assist them purchase fishing equipment
- Legislation against dumping should be enforced so that pollution of fisheries can be reduced/treatment of industrial effluents before releasing them into the rivers and lakes
- Licensing of fishermen by the government can assist in monitoring the number of fishermen hence reducing overfishing.

(b) (i) Give TWO modern methods of fish preservation. (2 mks)

- Canning
- Refrigeration

(ii) Describe the basket method of fishing. (5 mks)

- The basket is funnel shaped to allow entry for fish
- The basket is lowered in water with the mouth facing downstream in a river/in a lake the basket is placed facing any direction
- At the mouth of the basket there is a valve which restricts the outward movement or escape of fish once inside the basket
- The basket is held in place by rope/stones/sticks to prevent it from being swept downstream
- It is left in the water for some time after which the fish are removed.
- At the mouth of the basket there is a valve which restricts the outward movement or escape of fish once inside the basket
- The basket is held in place by rope/stones/sticks to prevent it from being swept downstream
- It is left in the water for some time after which the fish are removed.

(c) (i) Name THREE counties in the North West Atlantic fishing ground. (3 mks)

- Mexico
- USA
- Canada

(ii) Compare fishing in Kenya and Japan under the following subheadings:**Continental shelf (2 mks)**

Kenya has a deep narrow continental shelf discouraging the growth of planktons while Japan has broad shallow and extensive continental shelf favoring the growth of planktons

Coastline (2 mks)

Kenya has an almost straight/regular coastline discouraging the breeding of fish while Japan has an irregular/indented coastline encouraging the breeding of fish.

Ocean currents (2 mks)

Kenya experiences warm waters because of the warm Mozambique current thereby discouraging the survival of fish while Japan experiences cool waters caused by the meeting of cold Oya Siwo and warm Kuro Siwo currents that is ideal for the survival of fish.

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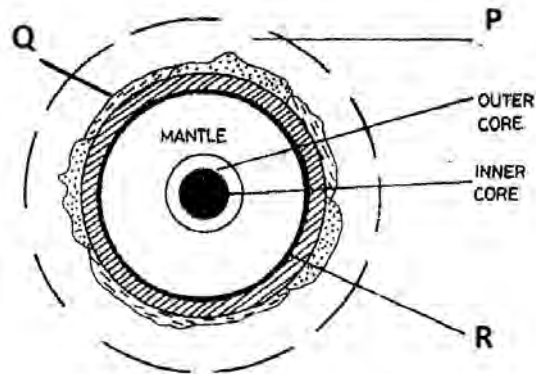
CEKENAS END OF TERM TWO EXAM-2023

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GEOGRAPHY PAPER 1

SECTION A

1. (a) What is geography (2marks)
- (b) Give **two** types of environment (2marks)
2. The diagram below represents the structure of the earth. Use it to answer the questions.

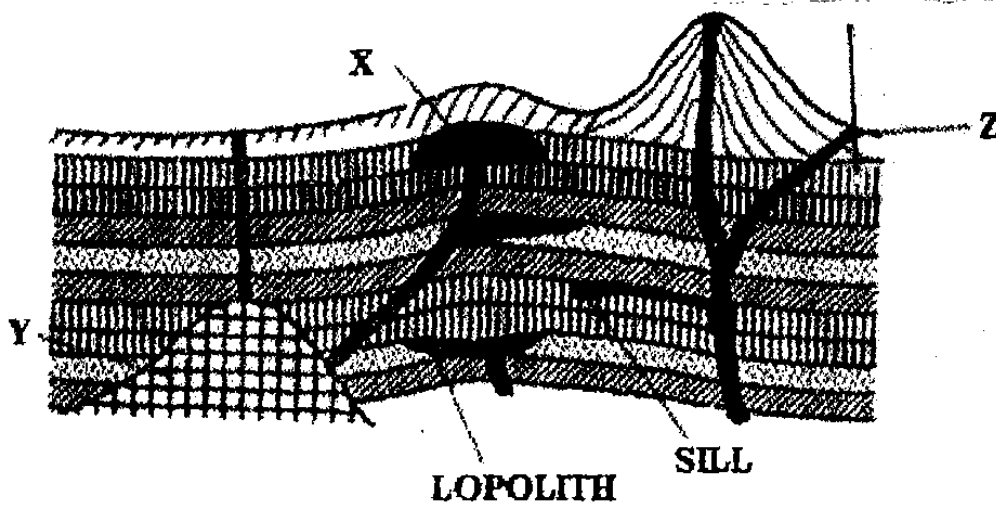


- (a) Name:
 - (i) the part marked P and R (2marks)
 - (ii) **three** features that makes up part marked Q (3marks)
3. (a) Differentiate between folding and faulting (2marks)
- (b) Name **three** relief features formed as a result of folding (3marks)
4. (a) Apart from physical weathering, give **two** other types of weathering (2marks)
- (b) List **four** physical weathering processes that takes place in Arid areas (4marks)
5. (a) What is drainage pattern (2marks)
- (b) Give **three** types of drainage system (3marks)

SECTION B**Answer question 6 and any other TWO questions from this section**

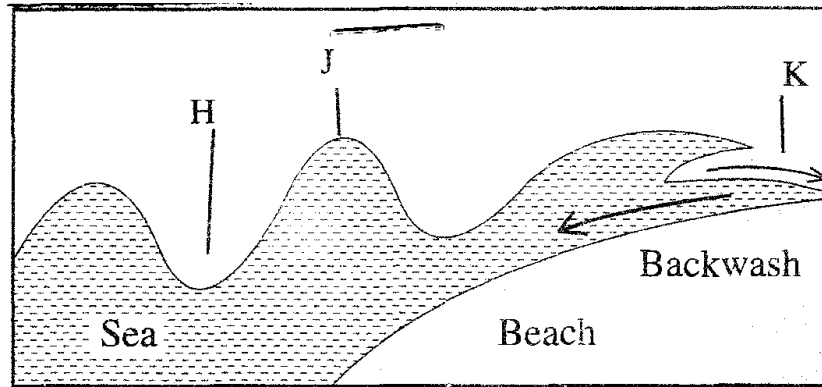
6. Study the map of Kisumu East 1:50,000 (sheet 116/2) provided and answer the questions
 - (a) (i) What type of map is Kisumu East map extract? (1mark)
 - (ii) Give the latitudinal and longitudinal position of the North West corner of the map (2marks)
 - (iii) what is the general direction of the flow of the river Ombeyi (1marks)
 - (iv) Apart from rivers identify **two** any other drainage features in the area covered by the map (2marks)
 - (b) Give the six figure grid reference of the trigonometrical station SKP 14 in the North Eastern part of the area covered by the map (2marks)
 - (c) (i) Using a vertical scale of 1cm to represent 100 meters, draw a cross section from grid reference 960980 to grid reference 030980 (4marks)
 - (ii) On the cross-section, mark and name the following
 - Rivers (1mark)
 - Dry weather road (1mark)
 - Steep slope (1mark)
 - (iii) Calculate the vertical exaggeration (VE) of the section (2marks)
 - (d) (i) Citing evidence from the map, identify **two** social services offered in Kisumu municipality (4marks)
 - (ii) Citing evidence from the map explains **two** factors that favour the establishment of plantation in the area covered by the map (4marks)

- 7 (a) (i) Give **two** examples of non-metallic minerals (2marks)
 (ii) Describe the following characteristics of minerals
 Colour (2marks)
 Hardness (2marks)
 Lustre (2marks)
- (b) (i) Give **two** forms of metamorphism (2marks)
 (ii) List **three** examples of metamorphism (3marks)
- (c) (i) Describe the formation of plutonic rocks (3marks)
 (ii) State **two** conditions necessary for the growth of coral polyps (2marks)
- (d) You are planning to carry out a field study on rocks within the local environment
 (i) Formulate **three** objectives of your study (3marks)
 (ii) For your field study, you have prepared a work schedule. State **two** items you would include in the schedule (2marks)
 (iii) Give **two** methods of data collection you will use while in field (2marks)
- 8 (a) what is lava (2marks)
 (b) The diagram below shows some intrusive volcanic features



- (i) Name the features marked X, Y and Z (3marks)
 (ii) Describe how the following features are formed
 Sill (4marks)
 Lopolith (4marks)
- (c) Describe the composition of composite volcano (4marks)
 (d) Explain **four** ways in which volcanic features influence human activity (8marks)
- 9 (a) (i) Define an ocean (2marks)
 (ii) State **three** types of seas (3marks)
- (b) (i) Give **three** characteristics of the continental shelf (3marks)
 (ii) Describe the following processes of wave erosion along the coast
 Abrasion (2marks)
 Hydraulic action (2marks)
 Solution (2marks)

(c) The diagram below shows a breaking sea wave; use it to answer the questions below



- (i) Name the features marked H, J, K (3marks)
- (ii) With the aid of well labeled diagrams describe the process through which a stack is formed (8marks)

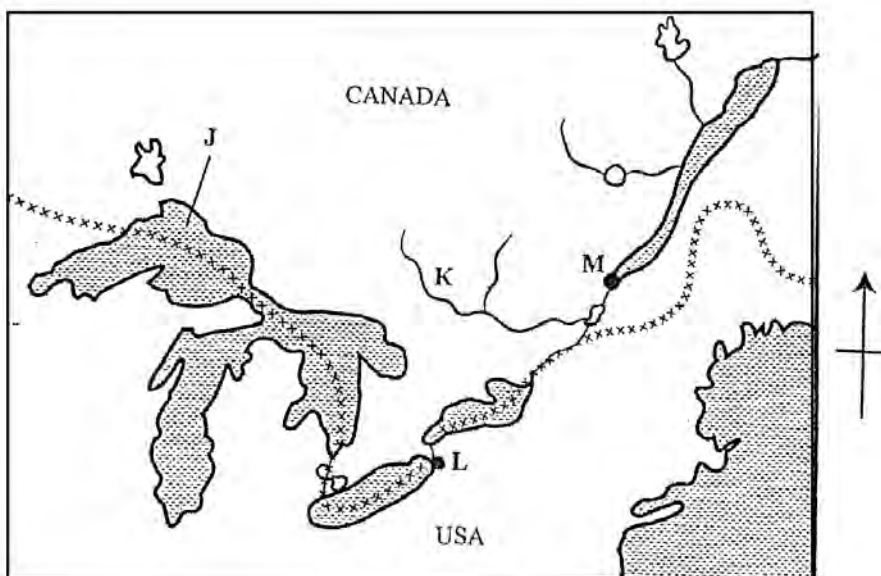
- 10 (a) what is soil (2marks)
- (b) (i) List **three** components of soil (3marks)
 - (ii) Explain how the following factors influence soil formation
 - Parent rock (4marks)
 - Topography (4marks)
 - (c) Draw a well labeled diagram of mature soil profile (4marks)
 - (d) Explain **four** ways in which human activities may lead to soil erosion (8marks)

CEKENAS END OF TERM TWO EXAM-2023
312/2
GEOGRAPHY PAPER 2

SECTION A (25mks)

Answer all questions in this section

- 1 (a). Differentiate between forestry and agro forestry (2mks)
- (b) State three significance of forest products to Kenya (3mks)
- 2 (a). Give two ways in which fertility influence population (2mks)
- (b) State three consequences of high population growth rate (3mks)
- 3 The sketch map below shows the Great Lakes and ST. Lawrence Seaway. Use it to answer question a



- (a) Name;
- (i) The lake marked J (1mk)
- (ii) The river marked K (1mk)
- (iii) the port marked L and M (2mks)
- (b) Give two reasons why it is difficult to transport goods from Mombasa to Lagos by road (2mks)
- 4 (a). What is geothermal power? (2mks)
- (b) Name two areas in Kenya which is potential for producing geothermal power (2mks)
- 5 (a) Give two causes of floods (2mks)
- (b) State three measures which can be undertaken to reduce the destruction caused by floods (3mks)

SECTION B

Answer question 6 and any other two questions in this section

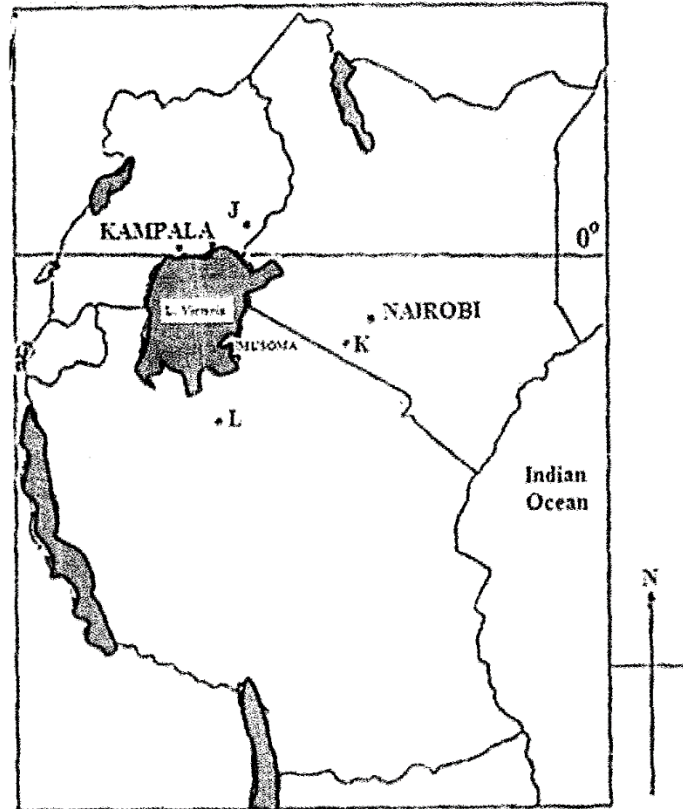
6. The table below shows the value in terms of billions US Dollars of Kenya's Import and Export between the year 2003 and 2008. Use it to answer the questions below

Years	Value in Billion US Dollars	
	Imports	Exports
2003	3.00	2.10
2004	3.70	2.50
2005	4.10	2.58
2006	5.10	3.17
2007	6.60	3.60
2008	8.54	4.10
TOTAL	31.04	18.05

Value of Kenya's Import and Export

- (a) (i) Calculate the balance of payment in the year 2008 (2mks)
- (ii) Using a scale of 1cm to represent 0.5 billion, draw a simple comparative bar graph on the data above from the year 2005 to 2008 (8mks)
- (iii) A part from comparative bar graph, name two other methods that can be used to represent the above data (2mks)
- (iv) State two reasons why Kenya's export is generally low (2mks)
- (b) (i) List three major imports to Kenya from Japan (3mks)
- (ii) Explain four measures the Kenyan government is taking to reduce the unfavorable balance of trade (8mks)
7. (a) (i) State four characteristics of nomadic pastoralism (4mks)
- (ii) Name three beef cattle breeds kept in Kenya (3mks)
- (b) Compare beef farming in Kenya and Argentina (8mks)
- (c) Explain three problems facing beef farming in Kenya (6mks)
- (d) State four measures that the government of Kenya has taken to improve beef farming (4mks)
- 8 (a) Distinguish between an urban settlement and rural settlement (2mks)
- (b) State two factors which influence the development of each the following patterns of settlement (2mks)
- (i) Dispersed settlement pattern (2mks)
- (ii) Linear settlement pattern (2mks)
- (c) Explain four factors that influenced the location of Mombasa town (8mks)
- (d) (i) Outline four ways in which the port of Mombasa and Rotterdam differ (8mks)
- (ii) State three benefits of urbanization (3mks)

- 9 (a) (i) What is domestic tourism (2mks)
 (ii) Explain four factors which are hindering domestic tourism in Kenya (8mks)
 (b) State five reasons why domestic tourism should be encouraged in Kenya (5mks)
 (c) Explain three factors which have made Switzerland a major tourist destination in Europe (6mks)
 (d) State four problems associated with tourism in Kenya (4mks)
10. The map below shows some location of some minerals in East Africa



- (a) Name the minerals mined in the area marked J, K and L. (3mks)
 (b) (i) Identify two provinces where gold is mined in South Africa (2mks)
 (ii) Describe the processing of gold from the time the ore is lifted to the surface (5mks)
 (c) Explain four contribution of gold to South Africa (8mks)
 (d) State three problems of diamond mining in South Africa (3mks)
 (e) Explain two effects of mining on the environment (4mks)

**CEKENAS END OF TERM TWO EXAM-2023
 GEOGRAPHY PAPER 1**

MARKING SCHEME

1. (a) **What is geography**
 It's the descriptive study of the distribution and inter-relationship of natural and human features /phenomena on the earth surface/the study of the earth as home of mankind. (1×2=2marks)
- (b) **Give two types of environment**
 – physical environment
 – human/man made environment (2×1=2marks)

EASTERN CLUSTER EXAMINATION – 2023

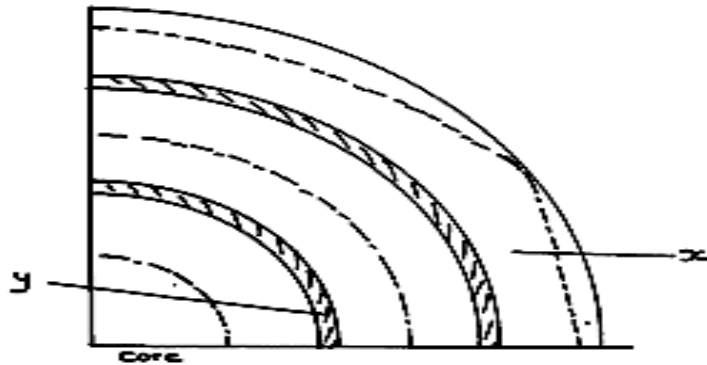
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GEOGRAPHY PAPER 1

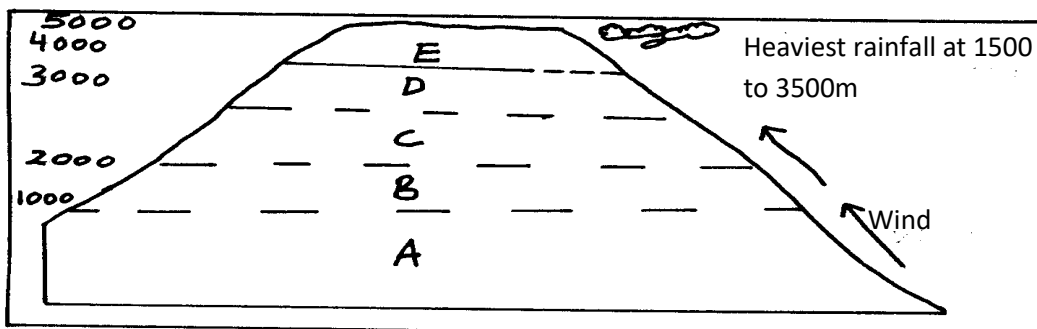
JULY/AUGUST 2023

SECTION A: Answer all questions in this section

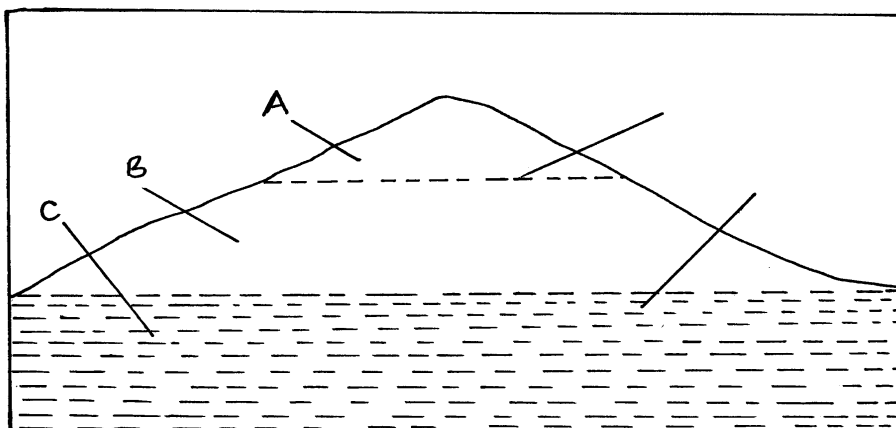
1. (a) The diagram below shows the internal structure of the earth.
Use it to answer the question below.



- Name the parts marked X and Y. 2 marks)
 b) State **two** characteristics of the troposphere. (2 marks)
 2. (a) Identify **two** scales used to measure the intensity of an earthquake. (2 marks)
 (b) Give **three** major earthquake zones of the world. (3 marks)
 3.. The diagram below shows different vegetation zones in tropical lands



- a.) i.) Name the type of vegetation marked B, C and D (3marks)
 ii.) Account for the poor vegetation coverage at part E. (2 marks)
 4. a) Differentiate between river rejuvenation and river capture. (2 marks)
 b) Highlight any three conditions necessary for river capture to occur. (3 marks)
 5. The diagram below shows the water zones in the earth's surface

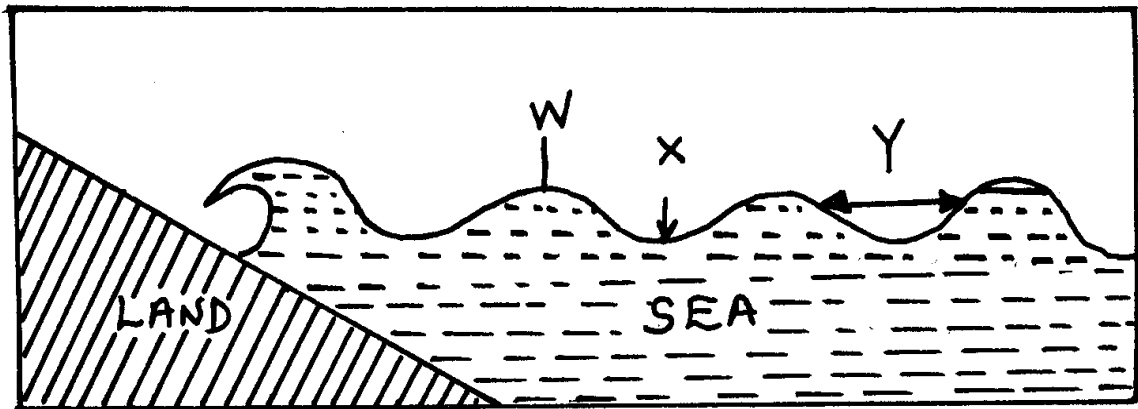


- (i) Name the water zones labeled A, B and C. (3 marks)
 (ii) Outline any **three** factors that influence the existence of underground water. (3 marks)

SECTION B: Answer question six (6) and any other two questions from this section.

6. Study the map of Kisumu East 1:50000 (sheet 116/2) provided and answer the questions that follow.
- (a) (i) Identify **two** scales that have been used in the map. (2 marks)
 (ii) Calculate the bearing of the trigonometrical Station SKP 21 in grid square 0383 from Air Photo Principal Point 73 in grid square 0286. (2marks)
 (iii) Give the six figure grid reference of Bonjoge school in Nyando escarpment. (2marks)
- (b) Describe the drainage of the area covered by the map (6 marks)
- (c) (i) Using a vertical scale of 1cm represents 20 metres draw a cross section along northing 98 from easting 95 to easting 01. (4marks)
 (i) On it mark and name the following:
 - Regional boundary (1mark)
 - River (1mark)
 - Road (1mark)
 (ii) Calculate the vertical exaggeration(V.E) of the section (2marks)
- (d) Citing evidence from the map give four social functions of Kisumu Town (4marks)
7. (a) (i) Differentiate between rocks and minerals. (2 marks)
 (ii) Give **three** ways in which rocks can be classified. (3 marks)
- (b) (i) Name **one** example at each of the following types of sedimentary rocks.
 - Chlorides. (1 mark)
 - Arenaceous. (1 mark)
 - Carbonaceous. (1 mark)
 (ii) Describe how sedimentary rocks are formed through physical processes. (4 marks)
- (c) (i) State **three** changes that occur in rocks during metamorphism. (3 marks)
 (ii) Give **two** reasons why sedimentary rocks are dominant along the Kenyan Coasts. (2 marks)
- (d) Students from Ngariama secondary School carried a field study on rocks in their county.
 (i) State **three** reasons why it would be necessary for them to conduct a reconnaissance to the study area. (3 marks)
 (ii) Give **two** methods they used to record data. (2 marks)
 (iii) State **three** importance of rocks they identified. (3 marks)
8. (a) (i) Differentiate between faulting and folding. (2 marks)
 (ii) Name **two** types of folds. (2 marks)
- (b) (i) List **three** theories that explain the formation of Fold Mountains. (3 marks)
 (ii) With the aid of labelled diagrams describe the formation of an overthrust fold.(6 marks)
- (c) Students from Kirinyaga School intends to conduct a field study on land forms around their school.
 (i) State **two** objectives of their study. (2 marks)
 (ii) List any **two** methods they would use to present their data. (2 marks)
 (iii) Give two follow up activities they would be engaged in. (2mks)
- (d) Explain **three** significance of Fold Mountains to man. (6 marks)
9. (a) (i) Give two causes of horizontal movement of ocean waters. (2mks)

(ii) The diagram below shows parts of a wave.



Name the parts marked W, X and Y (3 marks)

b) (i) Name **three** types of submergent coasts. (3 marks)

(ii) Explain the three processes involved in marine erosion (6 marks)

c) Using well labeled diagrams, explain how the following coastal features are formed.

• Stacks (4 marks)

• Beaches (4 marks)

d) State **three** ways which Kenya benefits from her coastal features. (3 marks)

10. a) (i) State **four** constituents of soil (4 marks)

(ii) Distinguish between illuviation and eluviation (1 mark)

(iii) Identify the **three** soil orders (3 marks)

b) (i) Draw a well labelled diagram of a mature soil profile (5 marks)

(ii) Explain how the following factors influence soil formation

• Nature of the parent rock (4 marks)

• Time (3 marks)

c) You intend to carry out a field study on soils around the school.

(i) Identify two natural causes of soil degeneration you observed (2 marks)

(ii) Formulate **three** objectives of your study. (3 marks)

EASTERN CLUSTER EXAMINATION – 2023

312/2

GEOGRAPHY

JULY/AUGUST 2023

SECTION A: (QUESTION 1-5)

1. (a) Give **two** by-products obtained from sugarcane. (2mks)
(b) State **three** problems facing sugarcane farming in Kenya. (3mks)
2. (a) What is land rehabilitation? (2mks)
(b) Give **three** physical factors that favours irrigation farming in Mwea irrigation scheme. (3mks)
3. (a) Differentiate between Transport and Communication. (2mks)
(b) State the causes of the decline in the use of letter writing as a means of communication in Kenya. (3mks)
4. (a) Outline **three** functional zones of an ideal urban centre. (3mks)
(b) What **two** benefits would there be if more commuters in urban centres in Kenya used public transport. (2mks)
5. (a) Name **two** areas in Kenya along the Rift valley that are prone to lightning. (2mks)
(b) Give **three** problems caused by lightning. (3mks)

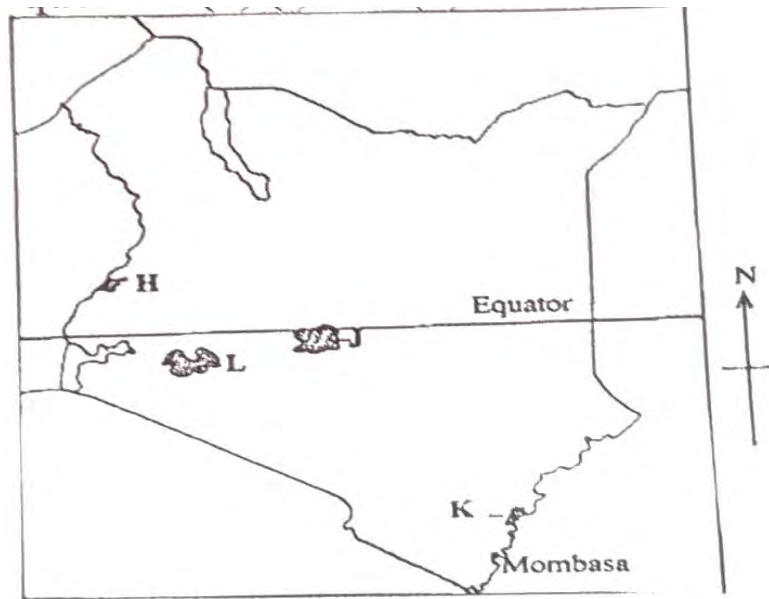
SECTION B.**(Answer question 6 and any other TWO questions from this section)**

6. The table below shows the number of visitors in '000' to selected national parks in Kenya for the years 2011-2013. Use it to answer the questions that follow.

National parks	2011	2012	2013
Nairobi	150	155	158
Amboseli	202	210	212
Tsavo	354	372	375
L.Nakuru	320	325	328
Masai mara	250	255	260
Sibiloi	120	133	135
TOTALS			

- (a) (i) What is the difference in the number of visitors who visited the parks in 2012 and 2013. (2mks)
(ii) Calculate the percentage increase in the number of visitors between the year 2011 and 2012. (6mks)
 - (b) (i) Draw a divided rectangle 15 cm long to represent the number of visitors in selected national Parks in Kenya in 2011. Show your calculations. (10mks)
(ii) State **three** advantages of using divided rectangle to represent geographical data. (3mks)
 - (c) Give **four** reasons why there is an increase in the number of visitors visiting various national parks in Kenya from year 2011 to 2013. (4mks)
7. (a) Identify **three** factors that influence the occurrence of minerals. (3mks)
 - (b) (i) Apart from open cast, name **two** other mining methods. (2mks)
(ii) Explain **three** ways in which open cast mining method affects the environment. (6mks)
 - (c) (i) Name **three** oil exporting countries in the Middle East. (3mks)
(ii) Give **three** factors that may have influence the extraction of petroleum in Kenya. (3mks)

- (d) Explain **four** ways in which petroleum mining in Kenya will promote the economy of the Country. (8mks)
8. (a) (i) Differentiate between forest and forestry. (2mks)
 (ii) Give **four** reasons why agro-forestry is being encouraged in Kenya. (4mks)
- (b) Use the map of Kenya below to answer the following questions.



- (b) Name the forest reserves marked H, J and K. (3mks)
- (c) Give **four** differences between softwood forests in Kenya and Canada. (8mks)
- (d) Explain **four** measures being taken by the government of Kenya to control human encroachment on forested areas. (8mks)
9. (a) (i) Name **two** indigenous species of cattle reared by Nomadic pastoralists in Kenya. (2mks)
 (ii) Give **four** challenges facing nomadic pastoralism in Kenya. (4mks)
- (b) State **five** features of Nomadic pastoralism in Kenya. (5mks)
- (c) Outline **three** similarities of commercial beef cattle farming in Kenya and Argentina. (3mks)
- (d) Explain **four** measures taken by the government of Kenya to improve beef cattle farming. (8mks)
10. (a) Identify **two** types of internal trade. (2mks)
- (b) Give **three** factors that limit trade among the member states of the Common Market for Eastern and Southern Africa (COMESA). (3mks)
- (c) Explain **four** measures which Kenya may Take to reduce the unfavourable balance of trade. (8mks)
- (d) Some students carried out a field study on trade in the nearby town.
- (i) State **two** methods they will use to collect data. (2mks)
- (ii) Outline **three** factors they will consider as they prepare working schedule. (3mks)
- (iii) Give **three** activities they will undertake while in the field. (3mks)

GATUNDU SOUTH SUB - COUNTY FORM FOUR JOINT EVALUATION TEST 2023

312/1

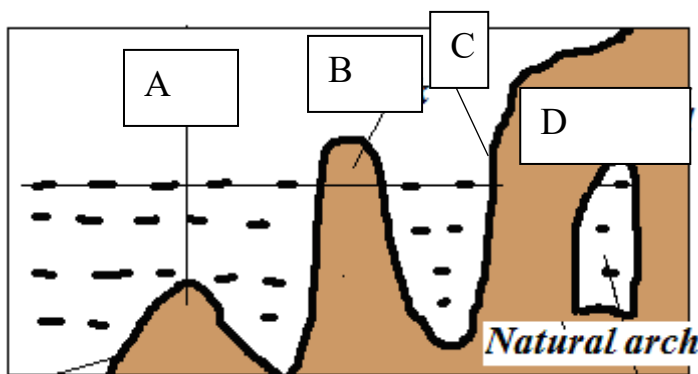
GEOGRAPHY PAPER 1

SECTION A**Answer all the questions in this section.**

1. (a) Identify **two** areas studied under practical Geography. (2 marks)
(b) State **three** significance of learning Geography (3 marks)
2. (a) State **three** characteristics of the Tropical Desert vegetation that helps them adapt to the desert climate. (3 marks)
(b) Explain **two** ways in which vegetation influences climate of an area. (2marks)
3. (a) Name **two** types of lakes formed due to volcanicity. (2marks)
(b) State **three** characteristics of Lake Magadi (3marks)
4. (a) Apart from tourist attraction give one significance of each of the glaciation features below.
(i) Fiord (1 mark)
(ii) Outwash plain (1 mark)
(b) State **three** factors that lead to glacial deposition. (3 marks)
5. (a) Identify **two** deserts on the rain shadow of Drakensberg mountains. (2 marks)
(b) Apart from relief barriers state **three** natural causes of aridity. (3 marks)

SECTION B**Answer question 6 and any other two questions in this section.**

6. Study the map of Kisumu East 1: 50000 (sheet 116/2) provided and use it to answer the following questions.
 - (a) (i) Identify any **two** relief features in the map provided and give their location. (2 marks)
(ii) Calculate the area of the section enclosed by regional or provincial boundary at Nyangori. (2 marks)
(iii) Identify any **three** missing marginal information in the map provided. (3 marks)
 - (b) Describe the drainage of the area covered by the map. (5 marks)
(c) Explain any **three** factors influencing agriculture in the area covered by the map. (6 marks)
 - (d) Citing evidence from the map, identify **two** social services offered at Nyagbongo (4 marks)
 - (e) Give **three** uses of Kisumu East map. (3 marks)
7. (a) (i) The diagram below shows features of wave erosion. Identify the features marked: A,B,C and D (4 marks)



- (ii) Explain any **three** processes of wave erosion: (6 marks)

- (b) Using a well labeled diagram, describe how a spit is formed. (6 marks)
- (c) Students of a school in Gatundu Sub County intend to carry out a field study on the features along the coast Kenya.
- (i) Name any **three** main wave depositional features that they are likely to identify. (3marks)
- (ii) State **three** reasons why they would carry out a reconnaissance study. (3marks)
- (iii) Give **three** disadvantages of using observation to collect data. (3marks)
8. a) (i) Differentiate between orogenic and epeirogenic earth movements (2marks)
- (ii) Describe the origin of continents according to the theory of plate tectonics. (4marks)
- b) (i) Apart from an over thrust fold, name **three** other types of folds. (3marks)
- (ii) Explain **three** theories on the formation of fold mountains. (10marks)
- c Explain **three** negative effects of folding to human activities. (6marks)
9. a) (i) Distinguish between minerals and rocks (2marks)
- (ii) Describe the following characteristics of minerals
- colour. (2marks)
 - tenacity (2marks)
 - hardness (2marks)
- b) (i) What are sedimentary rocks? (2marks)
- (ii) State **three** characteristics of sedimentary rocks. (3marks)
- (iii) Explain **two** reasons why sedimentary rocks are widespread in the coastal plain of Kenya (4marks)
- c.) Describe how the following sedimentary rocks were formed
- i) mechanically formed (4marks)
- ii) organically formed (4marks)
10. a) (i) Name any **two** sources of underground water. (2marks)
- (ii) Give **four** conditions necessary for the formation of a karst landscape (4marks)
- (iii) Describe the formation of a stalagmite. (5marks)
- b) (i) Name **two** water erosional features on a desert landscape (2marks)
- (ii) Describe the formation of zeugens. (4marks)
- (iii) Explain **four** significance of desert landforms to human activities. (8marks).

GATUNDU SOUTH EVALUATION EXAM
GEOGRAPHY 312/2
PAPER 2
JULY/AUGUST 2023

1. (a) What is forestry? (2mks)
- (b) List three factors that determines the distribution of forests in Kenya (3mks)
2. (a) Name three types of sedimentary rocks in terms of formation. (3mks)
- (b) Give two uses of diamond (2mks)
3. (a) Apart from rivers identify other two types of inland waterways used for transport in Africa (3mks)
- (b) State three reasons why there is limited use of river transport in Africa. (3mks)
4. (a) Define the term fisheries (2mks)
- (b) State three ways in which marine fisheries in Kenya can be conserved (3mks)
5. (a) What is energy crisis? (2mks)
- (b) State three disadvantages of solar energy (3mks)

SECTION B: ANSWER QUESTION 6 AND ANY OTHER TWO QUESTIONS FROM THIS SECTION

6. The table below shows three main crops produced in Kenya between 1998 and 2000. Use it to answer question (a) and (b)

CROP	AMOUNT IN METRIC TONS		
	1998	1999	2000
Wheat	70,000	130,000	140,000
Maize	200,000	300,000	350,000
coffee	240,000	250,000	280,000

- (a) (i) Using a scale of 1cm to represent 50,000 metric tons, draw a simple comparative bar graph to represent the above information (8mks)
(ii) State two advantages of using comparative bar graphs (2mks)
- (b) Calculate the percentage increase in coffee production between the year 1998 and 2000. (2mks)
- (c) (i) State four human requirements for successful production of maize in Kenya (4mks)
(ii) Name three pests that attack the maize crop in Kenya (3mks)
- (d) Explain three reasons why Kenya imports maize and wheat yet it is a producer of the same commodities (6mks)
7. (a) (i) Name three types of minerals (3mks)
(ii) State three ways in which minerals occurs (3mks)
- (b) (i) Describe the shaft mining method (5mks)
(ii) Outline three challenges faced in shaft mining method. (3mks)
- (c) (i) Explain four problems facing the mining industry in Kenya. (8mks)
(ii) Highlight three ways in which mining derelicts can be reclaimed (3mks)
8. (a) (i) Apart from draining of swamps give four other methods through which Land has been reclaimed in Kenya. (4mks)
(ii) Explain four physical factors that influenced the location of Perkerra Irrigation scheme. (8mks)
- (b) (i) Name the three crops grown in the polders in the Netherlands (3mks)
(ii) Describe the stages of reclamation of land from the sea in the Netherlands. (6mks)
- (c) State four benefits of land reclamation in the Netherlands (4mks)
9. (a) (i) Name two counties in Kenya where tea is grown in large Scale (2mks)
(ii) Describe the stages involved in processing of tea. (5mks)
- (b) Explain four physical conditions necessary for the growth of tea. (8mks)
- (c) State four problems facing tea farming in Kenya (4mks)
- (d) You plan to carry out a field study in a tea farm.
i) Give four reasons why you need a route map for the study. (4mks)
ii) Identify two methods you would use to collect data (2mks)
10. (a) (i) Define the term environment (2mks)
(ii) Explain three measures undertaken by the Government of Kenya to manage and conserve the environment (6mks)
- (b) (i) Apart from floods and drought, name three other environmental hazards experienced in Kenya. (3mks)
(ii) Give three causes of droughts in Kenya. (3mks)
(iii) Explain two measures taken to combat floods in Kenya (4mks)
- (c) You are planning to carry out a field study on pollution in your nearby town.
(i) Formulate three hypothesis for your study (3mks)
(ii) Give two reasons why it would be necessary to carry out a reconnaissance. (2mks)
(iii) Give two follow up activities that you would have after the field study (2mks)

BOKAKE JOINT EVALUATION EXAM

312/1

GEOGRAPHY**SECTION A***Answer all the questions in this section*

- 1 a) Give the forces which have contributed to the geoid shape of the Earth (3 marks)
- b) Name the minerals that make up the core of the Earth (2 marks)
- 2 a) Give **three** causes of earthquakes (3 marks)
- b) Name **two** major earthquakes zones of the world (2 marks)
- 3 a) Apart from aspect, list **three** other factors that influence the distribution of natural vegetation (3 marks)
- b) State **two** ways through which aspect influences the distribution of natural vegetation (2 marks)
- 4 a) State **three** conditions necessary for the development of Karst scenery (3 marks)
- b) Give **two** reasons why there are few settlements in Karst landscapes (2 marks)
- 5 a) Give **two** causes of river rejuvenation (2 marks)
- b) Identify **three** features that result from river rejuvenation (3 marks)

SECTION B*Answer question 6 and any other two questions from this section.*

- 6 Study the map of Kisumu East (1:50000) provided and answer the following questions.
 - a) i) What is the bearing of the trigonometrical station at Grid reference 081980 from the rock out crop at grid reference 071992. (2 marks)
 - ii) Measure the length of the all – weather road (bound surface) B 2/1 from the junction at grid reference 974911 to the edge of the Map, grid reference 947967.(Give your answer in kilometers). (2 marks)
 - iii) Draw a rectangle 10cm by 15cm to represent the area covered by the map. On a rectangle, mark and name: (1 mark)
 - A lake (1 mark)
 - A plantation (1 mark)
 - River Luando (1 mark)
 - b) i) Describe the relief of the area covered by the map. (4 marks)
 - ii) Explain how relief has influenced settlement in the area covered by the map. (4 marks)
 - c) Citing evidence from the map, give **three** economic activities carried out in the area covered by the map. (3 marks)
 - d) Students from the school at Masogo (grid square 0681) carried out a field study of the course of River Ombeyi.
 - i) State **three** findings they are likely to have come up with. (3 marks)
 - ii) Give **three** advantages of studying rivers through field work. (3 marks)
- 7 a) i) What is a rock? (2 marks)
- ii) Give **two** examples of plutonic igneous rocks. (2 marks)
- b) Describe the processes of formation of each of the following types of sedimentary rocks:
 - i) Mechanically formed. (4 marks)
 - ii) Organically formed (4 marks)
- c) State five characteristics of rocks (5 marks)
- d) You are planning to carry out a field study on rocks within the local environment.
 - i) List **three** methods you would use to collect data (3 marks)
 - ii) State **three** problems you are likely to encounter during the study. (3 marks)
 - iii) Give **two** economic uses of rocks. (2 marks)
8. a) i) Apart from an over thrust fold, name **three** other types of folds. (3 marks)
- ii) Describe the formation of an over thrust fold. (6 marks)

- b) i) Name the young fold mountains found in the following continents (1 mark)
- Africa (1 mark)
 - Europe. (1 mark)
 - Asia (1 mark)
 - North America. (1 mark)
- ii) Apart from Fold Mountains, name four other features resulting from folding. (4 marks)
- c) Explain **four** effects of folding on physical environment (8 marks)
- 9 a) i) Define an ocean. (2 marks)
- ii) Explain the **three** causes of variation in the amount of salt in ocean water. (6 marks)
- b) i) Identify **three** processes involved with wave erosion. (3 marks)
- ii) With the aid of well labelled diagrams, describe the process through which a wave cut platform is formed. (8 marks)
- c) You intend to carry out a field study on types of features resulting from wave deposition along the coast
- i) Identify **three** methods you would use to record data (3 marks)
- ii) Give **three** depositional features you are likely to observe during field study (3 marks)
- 10 a) i) What is soil structure (2 marks)
- ii) Explain how the following factors influence soil formation. (2 marks)
- Time (2 marks)
 - Parent rock (2 marks)
- b) Describe the following properties of soil. (2 marks)
- Soil texture. (2 marks)
 - Soil porosity (2 marks)
 - Soil colour. (2 marks)
- c) State **four** negative effects of soil erosion (4 marks)
- d) You are planning to carry out field study on soil around your school. (4 marks)
- i) State **four** preparations that you will make for the study (4 marks)
- ii) Give **three** reasons why it is important to study soils through the field study (3 marks)

BOKAKE JOINT EVALUATION EXAM

312/2

GEOGRAPHY PAPER 2

1. State **four** characteristics of shifting cultivation (4mks)
2. Give the difference between softwood forests in Kenya and Canada under the following sub-headings.
 - (a) Distribution of softwood forests: (2mks)
 - (b) Transportation of the logs: (2mks)
3. (a) Differentiate between land reclamation and land rehabilitation (2mks)
- (b) State **two** ways in which each of the following problems experienced at the Mwea Irrigation Scheme can be solved.
 - i) Low prices of rice. (2mks)
 - ii) Fluctuating water levels in the irrigation canals (2mks)
4. Give **five** reasons why it is necessary to conserve wildlife in Kenya (5mks)
5. i) Name **three** main hydroelectric power stations along the river Tana (3mks)
- ii) Apart from providing electric power, state **three** other benefits of the dams along the River Tana (3mks)

6. The table below shows the total number of dairy cattle reared in the Kenya Highlands in the years 2021 and 2022. Use it to answer to question (a)

Types of dairy cattle	2021	2022
Friesian	942000	965000
Ayrshire	120000	154000
Jersey	97000	128000
Guernsey	94000	103000
Fleckvieh/Simmental	19000	24000
Sahiwal	29000	41000

- (a) (i) State the type of the dairy cattle with highest increase between 2021 and 2022 (1mk)
- ii) Calculate the percentage increase of Friesian dairy cattle between 2021 and 2022 (2mks)
- iii) Draw a divided rectangle 15 cm long to represent the data above for the year 2021 and show your calculations (10mks)
- iv) State **two** advantages of using divided rectangle to represent geographic data (2mks)
- (b) Explain **two** human factors that favor dairy farming in the Kenya Highlands (4mks)
- (c) Explain **three** ways in which dairy farming in Kenya is different from dairy farming in Denmark (6mks)
7. (a) State **three** physical conditions that favor coffee growing in the Central Highlands of Kenya (3mks)
- (b) Describe the stages involved in coffee production from picking to marketing. (8mks)
- (c) Explain **four** problems facing coffee farming in Brazil (8mks)
- (d) Your geography class carried out a field study on a coffee farm
- (i) State **four** methods the class may have used to collect data (4mks)
- (ii) During the field study the class collected data on quantities of coffee produced in the farm in the last five years. State two methods the class may have used to present the data. (2mks)
8. (a) (i) What is visible trade? (2mks)
- (ii) List **three** major imports to Kenya from Japan. (3mks)
- (b) Explain **four** factors that influence internal trade in Kenya. (8mks)
- (c) State **four** ways in which trade is of significance to Kenya. (4mks)
- (d) Explain **four** benefits which the member states of ECOWAS have derived from the creation of the trading bloc (8mks)
9. (a) State **three** factors that led to development of nucleated settlements patterns (3mks)
- (b) Identify **three** differences in the functions of Nairobi and New York (6mks)
- (c) Explain **four** economic factors that influence settlement (8mks)
- (d) Describe **four** negative effects of urbanization (8mks)
10. (a) (i) Give two documents from where information on population data is obtained (2mks)
- (ii) Describe the characteristics of the population structure in Kenya (3mks)
- (b) (i) In 1989, Kenya's population was 21.4 million while in 1999 it was 28.7 million. Calculate the population growth rate over the 10-year period (2MKS)
- (ii) Explain **two** factors which may have led to the large population increase (4MKS)
- (c) Explain **three** consequences of high population growth rate (6mks)
- (d) Explain **four** physical factors that influence population distribution in East Africa. (8mks)

LUGARI CONSTITUENCY JOINT EVALUATION TEST (JET) JUNE 2023

312/1

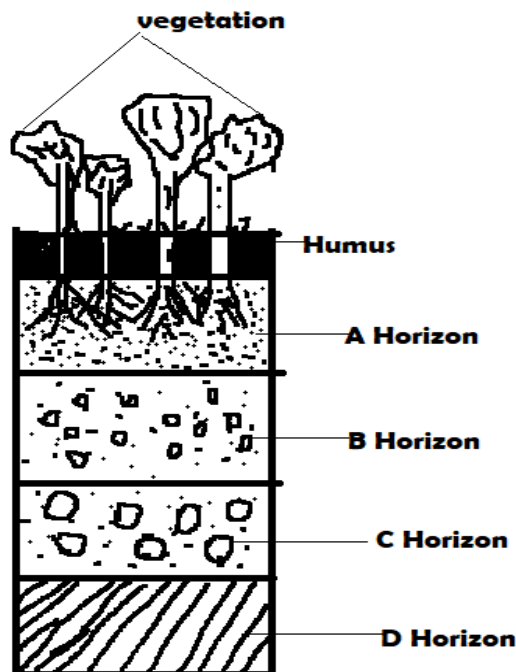
GEOGRAPHY PAPER 1

1. a) What is atmosphere (2marks)
- b) Name the three transition layers of the atmosphere (3marks)
2. a) Explain two ways in which vegetation in the Nyika region of Kenya find adapted to the climatic condition experienced at the areas. (4marks)
- b) Describe two ways in which biological weathering takes place (2mks)
3. a) What is the effect of international dateline on time? (2marks)
- b) Give the details of each of the following seasons;
 - i) Equinox (1mark)
 - ii) Summer solstice (1mrks)
 - iii) Winter solstice (1marks)
4. a) Explain how the presence of cold ocean current influences the climate of the adjacent coastlands. (4marks)
5. a) What is folding? (2marks)
- b) Name one fold mountain in;
 - i) North America (1mark)
 - ii) Africa (1mark)
 - iii) South America (1 mark)

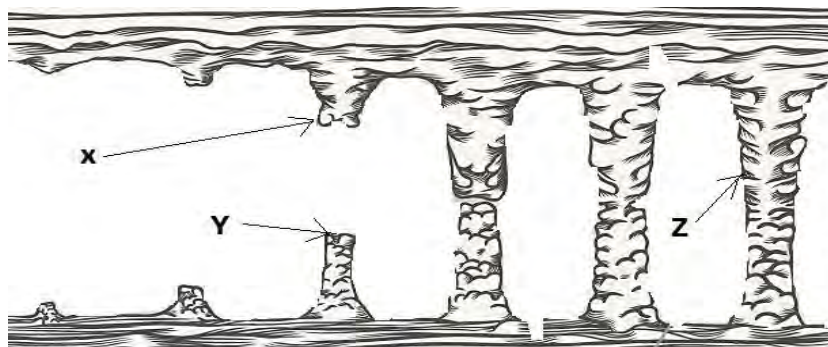
SECTION B (75 MARKS)

6. You have been provided with a map extract of Kisumu east sheet 116/2 1:5000, study the map and answer the following questions.
 - a) Apart from the map provided, name the other two types of maps. (2marks)
 - b) Calculate the area of Kisumu municipality. Give your answer in kilometers. (3marks)
 - c) Describe the drainage of the area covered by the map. (4marks)
 - d) What is the longitudinal extend of the area covered by the map. (2marks)
 - e) Give the six figure grid reference of the trigonometric station near Muhoroni-Kisumu road. (2marks)
 - f) Explain how relief has influenced settlement in the area covered by the map. (6 marks)
 - g) (i) Draw a cross section between grid reference 070940 and 070000. Use the scale 1cm to represents 250m. (Marks)
 - (ii) On the cross section mark and name the all-weather roads (bound surface), Nyando escarpment and a hill. (6marks)
7. a) Describe the following characteristic of minerals.
 - i) Colour (2marks)
 - ii) Clearage (2marks)
 - iii) Hardness (2marks)
- b) i) Give two types of igneous rocks (2marks)
- ii) Explain three conditions necessary for the growth of coral polyps (6marks)
- c) State four uses of rocks (4marks)
- d) You are planning to carry out a field study on the rocks within your school environment.
 - i) Give two secondary sources of information you could use to prepare the field study. (2marks)
 - ii) State why you would need the following items during the field study;
 - A fork jembe (1 mark)
 - Carrier bag (1mark)
 - iii) Suppose during the field study you collect marble, sandstone and granite, classify each of this samples according to its mode of formation. (3marks)
8. a) Give three processes that lead to formation of lakes. (2marks)
- b) i) Describe how Lake Victoria was formed. (4marks)
- ii) Explain how Lake Victoria influences climate of the surrounding areas. (6marks)

- c) i) a part from Lake Magadi, name two other lakes within the rift valley in lakes that have high level of salinity. (2marks)
 ii) Explain three causes of salinity in Lake Magadi. (6marks)
- d) Give four economic uses of lakes other than mining. (4marks)
9. a) State three characteristics of desert soil. (3marks)
 b) Identify two factors that contribute to soil leaching. (2marks)
 c) Explain how each of the following factors influences the formation of soil;
 i) Nature of the parent rocks (2marks)
 ii) Time (2marks)
 iii) Topography (2marks)
 d) (i) Define soil profile. (2marks)
 (ii) The diagram below represent a well developed soil profile. State the characteristics of horizon A



- e) Explain four ways in which human activities contribute to loss soil fertility. (4 marks).
10. (a) (i) Define underground water. (2 marks)
 (ii) Explain how the following factors influence availability of Underground water.
 • Slope of the land (2mks)
 • Vegetation cover (2mks)
- (b) (i) State **three** conditions that are necessary for the formation of an Artesian well. (3 mrks)
 (ii) State **three** problems that are associated with an artesian well. (3 marks)
- (c) (i) Differentiate between a Karst scenery and Karst region. (2 marks)
 (ii) The diagram below shows the underground features in limestone areas.



Identify the features marked X, Y and Z.

(3 marks)

- (d) Form four students of a school are planning to carry out a field study on a Karst landscape around

their school.

- (i) Name **two** surface features are likely to identify. (2 marks)
 (ii) Give **three** reasons why they needed a working schedule. (3 marks)
 (iii) Why was it necessary for them to divide into **groups** during their study? (3 marks)

LUGARI CONSTITUENCY EVALUATION 2023

312/2

GEOGRAPHY PAPER 2

SECTION A

Answer all the questions in this section.

- 1 a) Why is Geography a unique subject ? (2 marks)
 b) Give **three** branches of human Geography, (3 marks)
- 2 a) Differentiate between a forest and forestry. (2 marks)
 b) State **three** factors that have hindered exploitation of equatorial rainforest in Africa. (3 marks)
3. a) Define mining (2 marks)
 b) Name three exotic breed of dairy cattle reared in Kenya (3 marks)
4. a) Name **two** major imports from Europe to Kenya. (2 marks)
 b) State **three** problems facing developing countries in international trade. (3 marks)
5. a) State TWO factors which have led to the growth of Mombasa as a major sea port (2 mks)
 b) Name a town in Kenya where each of the following industries is located. (3 marks)
- Oil refinery-
 - Paper manufacturing-
 - Motor vehicle assembly-

SECTION B

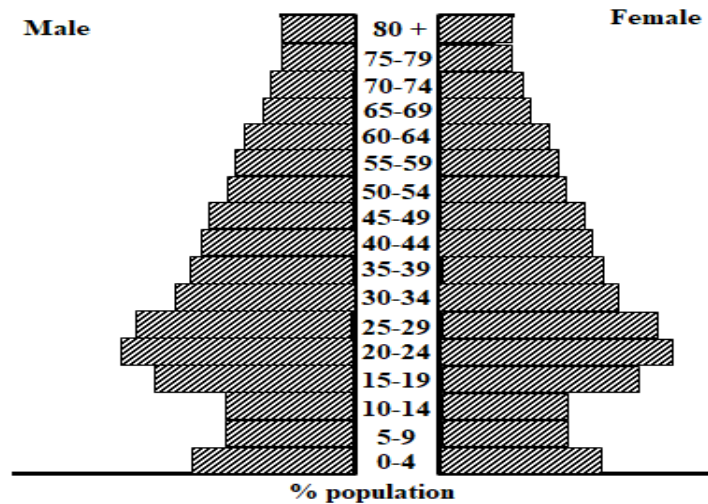
Answer question 6 and any other two questions from this section.

6. (a) The table below shows the area under the horticultural crops in Kenya between 2000 and 2002. Use it to answer the questions below:

crop	2000	2001	2002
cabbages	320	340	380
tomatoes	360	360	330
onions	340	320	360
oranges	380	380	400

- i) Name the crop that has the highest production within the period (1mk)
 ii) Explain THREE reasons why horticultural farming is increasingly becoming important to Kenyan farmers. (6mks)
 iii) Using 1cm to represent 10000 tonnes, draw a compound bar graph to present the data above. (6mks)
 iv) Give FOUR features of horticultural farming. (4mks)
- (b)
- i) Describe any THREE physical factors favoring maize cultivation in Kenya. (6mks)
 ii) A part from Trans-Nzoia county, name any other two counties where maize is grown on large scale, in Kenya (2mks)
7. a) i) Define the term population density. (2 marks)
 ii) Identify any **three** reasons for carrying out population census in Kenya recently. (3 marks)

- b) The pyramid shown below shows population structure for a country. Use it to answer question (a).



- (i) Identify any **two** countries that have population structures similar to one shown. (2 marks)
- (ii) Identify any **four** characteristics associated with the population of the country. (4 marks)
- b) Explain **three** problems that are likely to face a country experiencing a high population growth rate. (6 marks)
- c) Describe **four** ways in which the population of Kenya differs from that of Sweden. (8 marks)
8. a) (i) Differentiate between land reclamation and land rehabilitation (2 marks)
- (ii) Identify **three** methods of land reclamation in Kenya (3 marks)
- b) (i) State **four** physical factors that influenced the location of Mwea Tebere irrigation scheme (4marks)
- (ii) Explain **four** problems facing Mwea Tebere irrigation scheme (8 marks)
- c) (i) Name **two** major land reclamation projects that were undertaken in Netherlands (2 marks)
- (ii) Give **three** differences between land reclamation in Kenya and the Netherlands. (6 marks)
- 9 (a) i. what is flooding (2mks)
- ii. Name **THREE** rivers that cause large scale flooding, (3mks)
- iii. State **FOUR** ways in which people are affected by floods. (4mks)
- (b) i. What is pollution. ? (2mks)
- ii. Explain three ways in which farming activities contribute to water pollution. (6mks)
- (c) i. Explain **THREE** measures taken by the government to manage and conserve the environment. (6mks)
- (ii) Name two Non –Governmental organization (NGOs) concern with environmental conservation. (2mks)

10 (a) Using the map below, name the following National parks and game reserves. A,B,C and D .

4mks



- (b) (i) List four problems facing wildlife conservation in Kenya. 4mks
 (ii) Give three reasons why there has been an increase in the tourist visiting Kenya (2003-2006) 3mks
- (c) (i) State two characteristics of eco-tourism 2mks
 (ii) Explain the measures the Kenya government is undertaking to improve domestic tourism 6mks
- (d) Explain three physical factors favouring tourism in Switzerland 6mks

LUGARI SUB-COUNTY
GEOGRAPHY PAPER 1
MARKING SCHEME-

1. a) What is atmosphere (2marks)
 • an envelope of gases held on the earth's surface by force of gravity
- b) Name the three transition layers of the atmosphere (3marks)
 • Tropopause • Stratopause • Mesopause
- 2 (a) Explain two ways in which vegetation in the Nyika region of Kenya find adapted to the climatic condition experienced at the areas. (4marks)
- Trees have long tap roots to tap water beneath
 - Trees are umbrella shaped to provide shade that reduces the rate of evaporation around the stem
 - Some plants have waxy needle like leaves to reduce loss of water through evaporation
 - Some plants produce some seeds that are dormant for a long time and germinate when the rain falls.
 - Some shed their leaves during dry season to reduce transpiration
- (b) Name **two** ways in which biological weathering takes place. (2 marks)
- Through the action of plants
 - Through the action of animals
 - Through the action of people.

NTIMARU SUB-COUNTY CLUSTER EXAMS

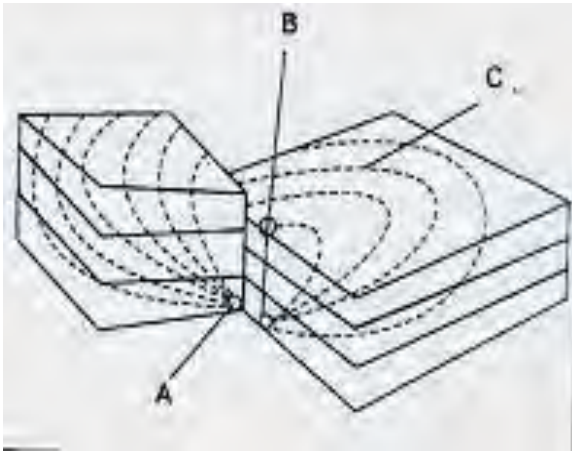
312/1

GEOGRAPHY PAPER 1

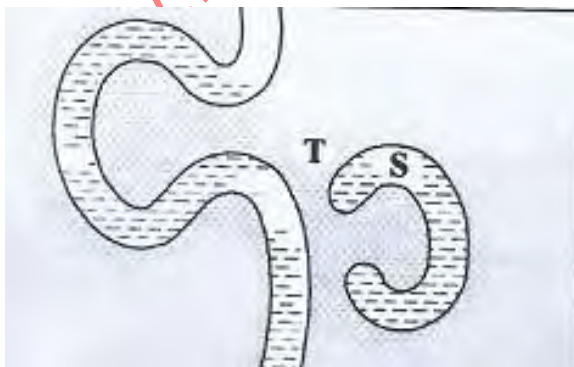
JULY/AUGUST 2023 - 2¾ HOURS

SECTION AAnswer all the questions in this section

1. a) State the effects of the following on the shape of the earth
 - i) Centripetal force 1mk
 - ii) Centrifugal force 1mk
 - iii) Force of gravity 1mk
- b) Give **two** proofs that the interior of the earth is hot. 2mks
2. a) What is temperature inversion? 2mks
- b) Name three layers of the atmosphere 3mks
3. a) The following is a diagram showing an earthquake hit area at a tectonic boundary. Use it to answer the questions that follows



- Identify the parts labeled A,B,C 3mks
- b) Identify **two** types of earthquake waves 2mks
4. The diagram below shows a section of a river. Use it to answer the questions that follow



- a) Name the features marked S and T 2mks
- b) State **three** conditions that are necessary for the formation of the feature marked S 3mks
5. a) What is a lake? 2mks
- b) Identify three reasons why most lakes in the rift valley are salty 3mks

SECTION B

Answer question 6 and two other questions from this section

Use the map of NYERI (1:50,000) provided to answer the questions that follow

6. a) i) Calculate the latitudinal extent of the area covered by the map 2mks
 ii) Give the magnetic declination when the map was taken. 1mk
 iii) Calculate the area of Nyeri forest to the East of easting 69 and North of northing 56. Give your answer in km² 2mks
- b) i) Identify two human features in grid square 7353. 2mks
 ii) Name three vegetation in the area covered by the map 3mks
- c) i) Citing evidence from the map, explain **three** economic activities in the area covered by the map. 6mks
 ii) What is the direction of Tusha welfare centre from Nyeri Hill forest 1mk
 iii) Identify two hydrographic features in the area covered by the map 2mks
- d) i) Describe the relief of the area covered by the map 4mks
 ii) Identify two scales used on the map 2mks
7. a) i) What is a desert? 2mks
 ii) Name two types of desert landscapes 2mks
- b) Describe how wind transports materials on the desert surface using the following processes
 i) Surface creep 2mks
 ii) Saltation 2mks
- c) Using well labelled diagrams, explain how Barchan is formed 8mks
- d) You intend to carry out a field study in an arid area near your school.
 i) State **two** reasons for carrying out a pre visit 2mks
 ii) Apart from Barchan, state **three** depositional features they are likely to have identified 3mks
 iii) State four positive effects of desert features to man they are likely to identify 4mks
8. a) Define the term folding 2mks
 b) Name three types of folds 3mks
 c) Explain **four** ways in which fold mountains influence climate 8mks
 d) i) Name **two** folds mountains in Africa 2mks
 ii) Apart from Fold Mountains name two features resulting from folding. 2mks
 e) Explain **four** ways in which fold mountains influence human activities 8mks
9. a) Apart from savannah vegetation, name three vegetations regions found in Kenya 3mks
 b) Describe **four** characteristics of savanna vegetation 4mks
 c) Name the temperate grassland found in the following countries. 3mks
 i) Canada
 ii) Russia
 iii) Australia
- d) Explain the causes of the decline of the areas under forests in Kenya 8mks
- e) i) You intend to carry out a study on vegetation around your school. Give three reasons why you may need a working schedule. 3mks
 ii) Give **four** uses of vegetation you are likely to identify during the study. 4mks
10. a) Differentiate between an ocean and sea 2mks
 b) Name **three** types of islands in the ocean 3mks
 c) i) State **three** factors influencing deposition by ocean waves 3mks
 ii) List **four** features resulting from wave erosion 4mks
 d) With the aid of well labeled diagram, describe the formation of a fringing reef 5mks
 e) Explain **four** importance of oceans to human activities 8mks

NTIMARU SUB-COUNTY CLUSTER EXAMS

312/2

GEOGRAPHY Paper 2

JULY/AUGUST 2023 - 2¾ Hours

SECTION A – 25 MARKS**Answer all questions in this section**

1. (a) Define mining (2mks)
(b) State **three** roles of soda ash to the economy of Kenya (3mks)
2. (a) Name **two** forest reserves in Kenya (2mks)
(b) State **three** characteristics of equatorial rainforest (3mks)
3. (a) Name any **two** exotic breeds of beef cattle reared in Kenya (2mks)
(b) Give **three** physical conditions that favour beef farming in Argentina (3mks)
4. (a) List **two** types of non-renewable sources of energy (2mks)
(b) State **three** causes of energy crisis in the world (3mks)
5. (a) Name **three** types of industries based on the level of production (2mks)
(b) State **two** problems of industrialization (3mks)

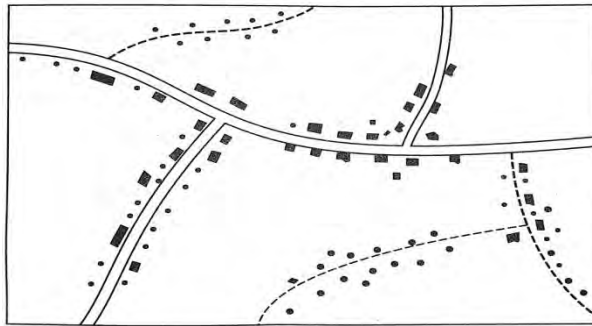
SECTION B – 75 MARKS**Answer question 6 and any other two questions from this section.**

6. The table below shows the number of tourists who visited Kenya from European countries for a period of four years.

No. of tourists	2011	2012	2013	2014
Germany	600	820	700	850
France	430	620	410	730
Italy	330	440	350	600
Spain	180	200	230	420

- (a) (i) Using a vertical scale of 1cm represent 200 tourists, present the above data using a compound bar graph. (9mks)
(ii) State **three** advantages of using compound bar graph as a method of data presentation. (3mks)
- (b) Explain how the following factors influence tourism in Kenya
(i) Climate (2mks)
(ii) Transport (2mks)
- (c) Identify **two** major national parks in Kenya (2mks)
- (d) Explain the significance of tourism industry in Switzerland (8mks)
7. (a) (i) Distinguish between land reclamation and land rehabilitation (2mks)
(ii) Name any **three** methods used to rehabilitate land in Kenya (3mks)
(b) Explain **three** physical factors which influenced the location of Mwea Irrigation Scheme (6mks)
(c) Name **two** projects that were used to reclaim land in the Netherlands (2mks)
(d) Describe how land was reclaimed from the sea in the Netherlands (8mks)
(e) State **four** the differences between land reclamation in Kenya and the Netherlands (4mks)
8. (a) (i) Name **two** counties in Kenya where sugarcane is grown in large scale. (2mks)
(ii) State **four** physical requirements that favour sugarcane growing. (4mks)
(b) Describe how sugarcane is processed. (8mks)
(c) State **four** uses of sugar. (4mks)

- (d) Students of Manyatta High School are planning to conduct a field study of Sony Sugar factory at Awendo.
- State any **two** objectives of their study. (2mks)
 - Give **three** reasons why the reconnaissance is necessary. (3mks)
 - Identify any **two** possible problems they are likely to encounter during the study. (2mks)
9. (a) (i) Define trade (1mk)
(ii) Name **three** types of monetary trade. (3mks)
- (b) (i) What do you understand by adverse balance of trade. (2mks)
(ii) Identify **three** visible exports from Kenya (3mks)
- (c) Name any two regional trade blocs in Africa. (2mks)
- (d) Explain **four** roles played by trade in Kenya (8mks)
- (e) Explain **three** challenges facing trade in Kenya. (6mks)
10. (a) Distinguish between settlement and urbanization. (2mks)
- (b) State **four** factors that influence settlement. (4mks)
- (c) Study the diagram below and use it to answer the questions that follow.



- Identify the type of settlement pattern shown above. (1mk)
 - State **four** factors that can lead to the development of the above settlement pattern (4mks)
- (d) Explain **four** factors that contributed to the growth of Kisumu as a lake port. (8mks)
- (e) Explain **three** effects of urbanization. (6mks)

NTIMARU SUB COUNTY EXAMINATION-2023

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GEOGRAPHY MARKING SCHEME

SECTION A

- State the effects of the following on the shape of the earth
 - Centripetal force (1mk)
The force pulls the north pole and south pole towards each other thus causing the flattening of the poles
 - Centrifugal force
Causes bulging of the earth at equator due to variation in rotation towards the equator
 - Force of gravity (1mk)
Pulls materials to the Centre of the earth thus causing the rounding effect to the shape of the earth
- Give two proofs that the interior of the earth is hot. (2mks)
 - Materials from volcanic eruption are very hot

MUMIAS SUB-COUNTY MOCK EXAMINATION 2023

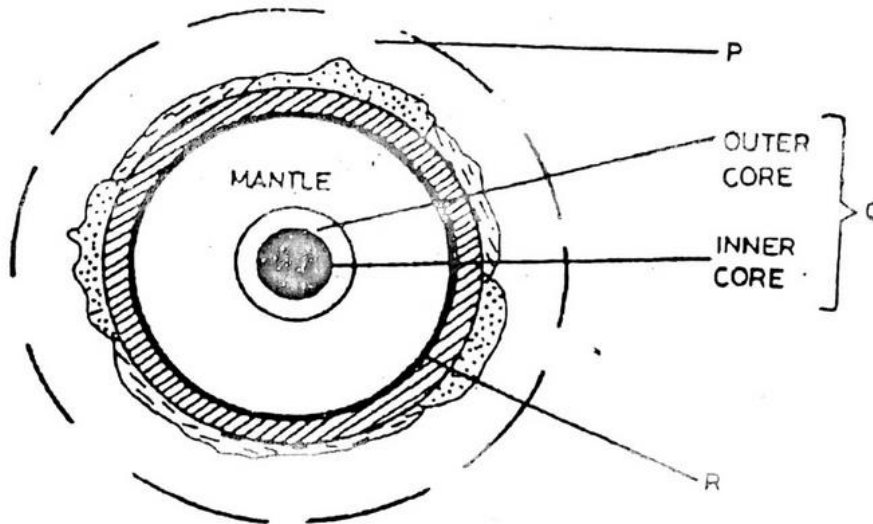
312/1

GEOGRAPHY PAPER 1

SECTION A:

Answer *all* the questions in this section

1. The diagram below shows the internal structure of the earth.



- (a) Name the parts labelled **P**, **Q** and **R**. (3marks)
- (b) State three characteristics of the inner core. (3marks)
2. (a) Give **two** local winds that are found in Kenya. (3 marks)
- (b) State **three** conditions that are necessary for formation of dew. (3 marks)
3. Explain how the following factors influence climate. (2marks)
- Oceans currents (2marks)
 - Forests (2marks)
4. (a) Define a lake (2marks)
- (b) State **two** reasons why some rift valley lakes are fresh water. (2marks)
5. (a) Apart from desertification, name two other environmental hazards experienced in Kenya. (3 marks)
- (b) State two causes of desertification. (2 marks)

SECTION B

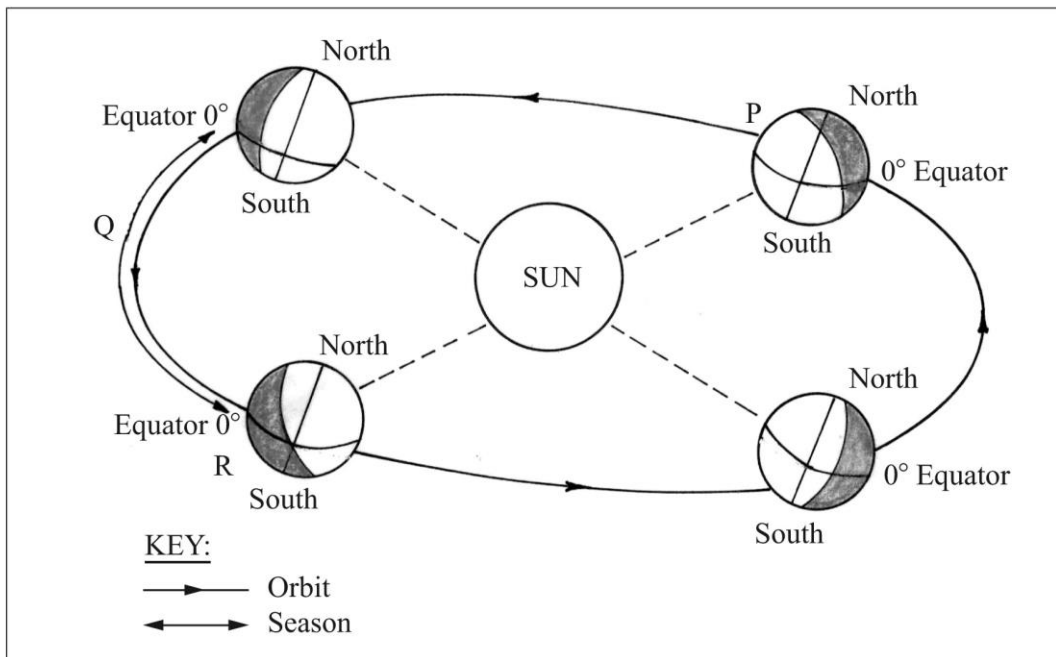
Answer **question 6** and **any other two questions** in this section

6. Study the map of Kisumu East (1:50000) provided and answer the following questions.
- i) What is the bearing of the trigonometrical station at Grid reference 081980 from the rock out crop at grid reference 071992. (1 mark)
 - ii) Measure the length of the all – weather road (bound surface) B25 /3 from the junction at grid reference 968884 all the way to the edge of the area covered by the map in the east at GR 100816. (Give your answer in kilometers). (2 marks)
 - iii) Using a vertical scale of 1cm to represent 100metres, draw a Cross-section between GR:040940 and 040990. (4 marks)

On it mark and name;

 - the escarpment. (1 mark)
 - Power transmission line. (1 mark)
 - Plantation. (1 mark)
- b) i) Describe the relief of the area covered by the map. (4 marks)
- ii) Explain how relief has influenced settlement in the area covered by the map. (2 marks)

- c) Citing evidence from the map, give three economic activities carried out in the area covered by the map other than crop growing. (3 marks)
- d) Students from the school at Mosongo (Grid square 0681) carried out a field study of the course of the river Ombeyi.
- State three findings they are likely to have come up with. (3 marks)
 - Give three advantages of studying rivers through fieldwork. (3 marks)
7. (a) i) Define the solar system. (2 marks)
- ii) The local time at Manual 60°W 1130 Hours. What is the time in Nairobi, 37°E? (3 marks)
- (b) (i) State five characteristics of the mantle in the interior of the earth. (5 marks)
- (ii) Outline the evidence which supports the theory of continental drift (4 marks)
- (c) The diagram below represents the revolution of the earth.

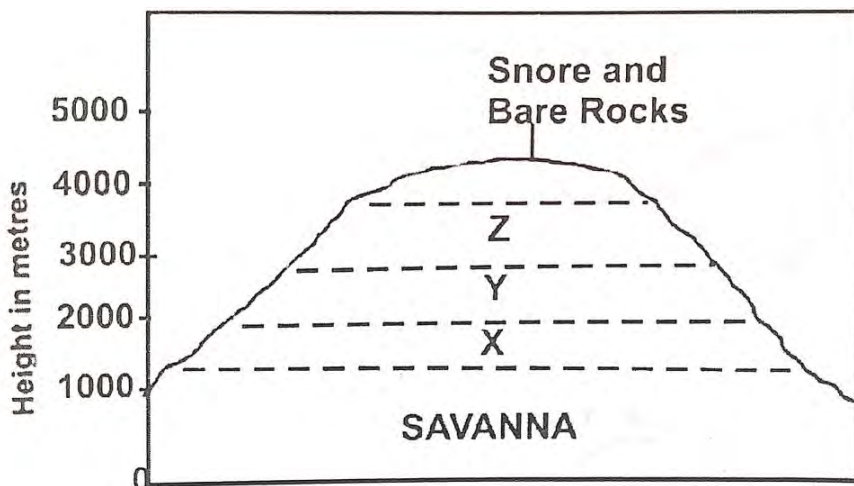


- Name the solstice marked P. (1 mark)
 - Identify the season represented in the region marked Q. (1 mark)
 - Describe the climatic conditions in Europe when the Earth is in position R. (3 marks)
- (d) With the aid of a well labelled diagram, describe the occurrence of the solar eclipse. (6 marks)
8. (a) (i) Distinguish between minerals and rocks. (2 marks)
- (ii) Describe the following characteristics of minerals:
- Colour. (2 marks)
 - Tenacity. (2 marks)
 - Hardness. (2 marks)
- (b) i) What are sedimentary rocks? (2 marks)
- ii) State three characteristics of sedimentary rocks. (3 marks)
- iii) Explain two reasons why sedimentary rocks are widespread in the coastal plain of Kenya. (4 marks)
- (c) Describe how the following sedimentary rocks are formed.
- Mechanically formed. (4 marks)

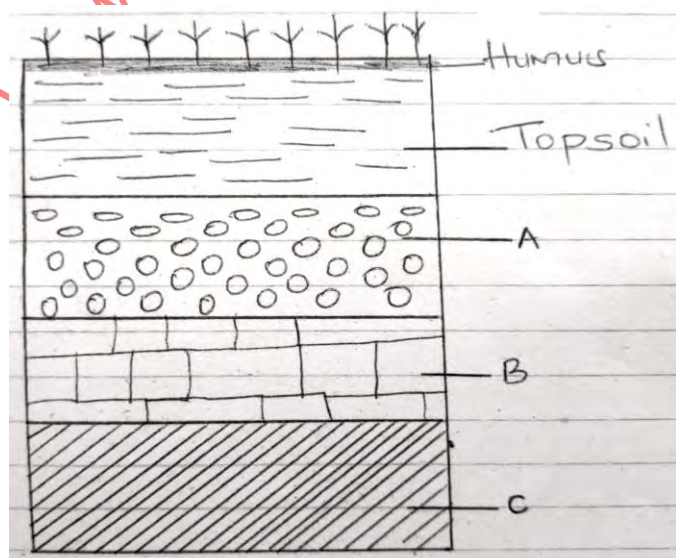
- Organically formed.

(4 marks)

9. The diagram below represents zones of natural vegetation on a mountain use it to answer questions (a)



- (a) (i) In your answer booklet, name the zones marked X, Y and Z (3 marks)
 (ii) Describe the characteristics of a tropical Savannah vegetation (6 marks)
 (iii) State two reasons why the mountaintop has no vegetation (2 marks)
- (b) Explain three factors that have led to a decline of the natural grassland in Kenya. (6 marks)
- (c) Suppose you were to carry out a field study on the relationship between vegetation and altitude
- (i) State three objectives you would formulate for your study (3 marks)
 (ii) State three methods you would use to record the information collected during the field study (3 marks)
 (iii) Name two types of maps you would draw to present your findings (2 marks)
10. (a) i) Define soils. (2 marks)
 ii) Give **two** main components of soils. (2marks)
- (b) Explain how the following factors influence soil formation;
 (i) Parent material. (4 marks)
 (ii) Human activities. (2 marks)
- (c) The diagram below shows a soil profile. Use it to answer question (i) and (ii).



- (i) Name the parts marked **B** and **C**. (2 marks)
(ii) Describe the characteristics of the top soil (4 marks)
(d) (i) Explain *three* causes of physical soil degeneration. (6 marks)
(ii) State *five* ways of conserving soils (3 marks)

MUMIAS SUB-COUNTY MOCK EXAMINATION 2023

312/2

GEOGRAPHY Paper 2

SECTION A (25MKS)

1. (a) What is human geography? (2mks)
(b) List three areas covered in practical geography (3mks)
2. (a) State three physical conditions that favour large scale sugarcane growing in Kenya (3mks)
(b) Name two areas where sugarcane is grown in large scale in Kenya. (2mks)
3. (a) What do you understand by:
i) Fisheries (1mk)
ii) Fish farming (1mk)
b) State three human factors influencing fishing (3mks)
4 a) Name two international airports in Kenya. (2mks)
b) Give three reasons why there is limited use of river transport in Africa (3mks)
5 a) Define the term urbanization. (2mks)
b) Suggest three problems experienced by rapidly growing urban centres. (3mks)

SECTION B

Answer question 6 and any other two questions from this section.

6. The photograph below shows an activity in Kenya. Use it to answer question (a) and (b)



- (a) (i) Identify the type of photograph shown above (1mk)
(ii) State any two evidence in the photograph supporting a(i) above (2mks)
(iii) Draw a rectangle measuring 15cm by 10cm to represent the area covered by the photograph. On it sketch and label four main features shown on the photograph (6mks)

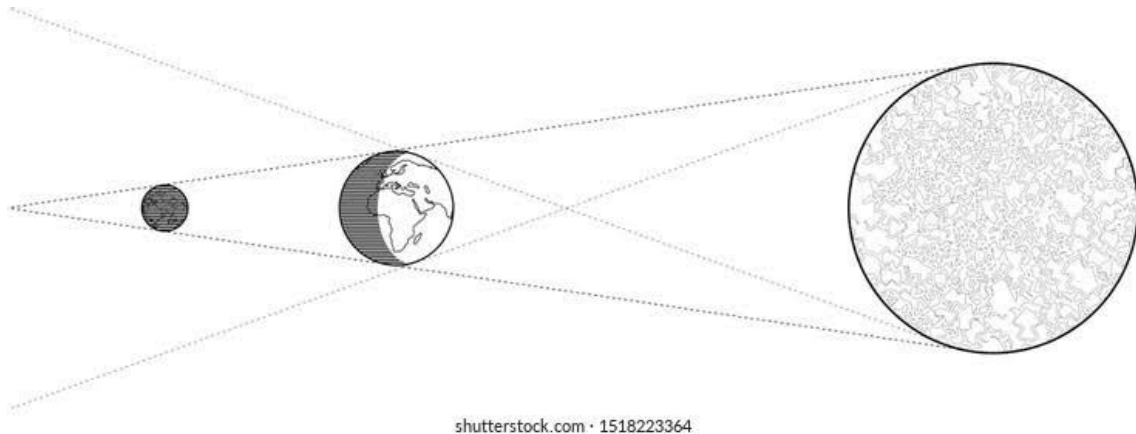
- (b) (i) Identify two features from the photograph that shows the area is dry (2mks)
(ii) Name two counties in Kenya where the photograph might have been taken (2mks)
- (c) (i) Explain four problems facing pastoralism in Kenya (8mks)
- (d) You intend to carry out a field study in the area shown by the photograph
(i) State two problems you are likely to encounter (2mks)
(ii) List any two follow-up activities you would carry out after the field study (2mks)
7. a) i) A part from shaft mining list two other types of underground mining (2mks)
ii) Give three by-products obtained when crude oil is refined (3mks)
- b) i) Explain four ways in which the mining of soda ash contributes to the economy of Kenya (8mks)
ii) Explain three negative effects of mining on the environment. (6mks)
- c) Explain how the following factors influence the occurrence of minerals
i) Evaporation (2mks)
ii) Vulcanicity. (2mks)
iii) Metamorphism (2mks)
8. (a) (i) Define re-afforestation (2 marks)
(ii) State four reasons why afforestation should be encouraged in Kenya (4 marks)
(iii) Name three provinces in Canada where forestry is practiced on large scale. (3 marks)
- (b) Explain three problems that hinder the Kenya government efforts to manage and conserve forest. (6 marks)
- (c) Explain three factors that favour the growth of natural forest on the slopes of Mount Kenya (6 marks)
- (d) Identify four factors that favour exploitation of forest in Canada. (4 marks)
9. (a) (i) What is a polder? (1mk)
(ii) Name two methods used in land rehabilitation in Kenya. (2mks)
(iii) State three measures used to control tsetse flies in Lambwe Valley (3mks)
- (b) (i) Name two Rivers which are sources of water to Mwea Irrigation Scheme. (2mks)
(ii) Name two subsistence crops grown in Mwea Irrigation scheme. (2mks)
(iii) Explain three human factors, which influenced the location of Mwea Irrigation Settlement. (6mks)
- (c) (i) State three benefits of the Delta Plan Project. (3mks)
(ii) Outline three similarities of land reclamation in Kenya and the Netherlands. (6mks)
10. (a) (i) Define eco-tourism (1mk)
(ii) Name two Game Reserves found in the Rift valley of Kenya (2mks)
(iii) Give the differences between National Parks and Game Reserves (4mks)
- (b) (i) State three factors that hinder domestic tourism in Kenya (3mks)
(ii) Give two negative effects of tourism in Kenya (2mks)
- (c) (i) Give two differences between tourist attractions in Kenya and those of Switzerland (2mks)
(ii) Give two reasons why domestic tourism is encouraged in Kenya (2mks)
(iii) Explain three physical factors favouring tourism in Switzerland (6mks)

KASSU JET JOINT EXAMINATION
312/1
GEOGRAPHY PAPER 1
JUNE 2023

SECTION A

Answer **all** the questions in this section.

1. (a) What is the relationship between Geography and Mathematics? (2 marks)
- (b) Identify **three** branches of Geography. (3 marks)
2. (a) Use the diagram below to answer the questions that follow:

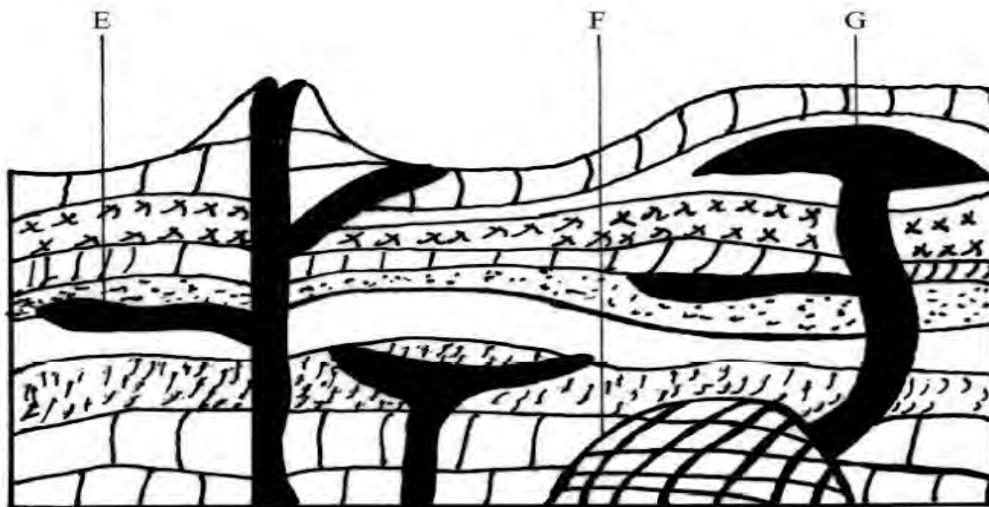


- (i) What type of Eclipse is represented by the diagram? (1 mark)
- (ii) Explain how the eclipse above occurs. (2 marks)
- (b) What is the time at Hola on 40°E when the time at Tema on 0° longitude is 12:00 noon? (2 marks)
3. (a) Apart from Fold Mountains, name three other features resulting from folding. (3 marks)
- (b) State **two** factors that determine the folding of crustal rocks. (2 marks)
4. (a) Give **three** reasons why some Lakes of Kenya have saline water. (3 marks)
- (b) Outline **two** economic uses of lakes. (2 marks)
5. (a) What is natural vegetation? (2 marks)
- (b) State three characteristics of the Mediterranean type of vegetation. (3 marks)

SECTION B

6. Study the map of Kisumu East 1:50,000 (Sheet 116/2) provided and answer the following questions.
 - (a) (i) What is the vertical interval of the map extract? (1 mark)
 - (ii) Using the marginal information, give the magnetic variation of the area when the map extracts was drawn. (1 mark)
 - (iii) Measure the length of the regional boundary from the map edge at grid square 9999 to Northing 97. Give your answer in kilometres. (2 marks)
 - (iv) What is the approximate height of the seasonal swamp in the Kano plains? (2 marks)
 - (b) (i) Using a vertical scale of 1 centimetre to represent 50 metres draw a cross section from grid reference 080920 to grid reference 080980. (4 marks)
 - On it, mark and label the following:
 - I. Sugarcane plantation (1 mark)
 - II. Steep slope (1 mark)
 - III. All weather road bound surface C543/1. (1 mark)
 - (ii) Calculate the vertical exaggeration of the cross section. (2 marks)
 - (c) Describe the characteristics of the big profile of river Luando (6 marks)
 - (d) Citing evidence from the map, explain two factors that favour trade in the area covered by the map. (4 marks)

7. (a) (i) What is a rock? (2 marks)
 (ii) Describe the following characteristics of mineral:
 • Tenacity (2 marks)
 • Lusture (2 marks)
 • Cleavage (2 marks)
- (b) (i) Name **two** examples of intrusive igneous rocks. (2 marks)
 (ii) Describe the formation of Plutonic rocks. (4 marks)
- (c) Explain **three** significance of rocks to the economy of Kenya. (6 marks)
- (d) Your class is planning to carry out a fieldwork on rocks around your school.
 (i) Outline **three** activities you would engage in before the study. (3 marks)
 (ii) State **two** challenges you are likely to face during the field study. (2 marks)
8. (a) Outline **two** ways in which river water flows within the channel. (2 marks)
 (b) (i) State three factors that influence river erosion. (3 marks)
 (ii) Describe how the river erodes through the following processes;
 – Hydraulic action (4 marks)
 – Solution (2 marks)
- (c) Using a well labeled diagram, describe how the following feature are formed:
 – Interlocking spurs (4 marks)
 – Natural levees (4 marks)
- (d) Explain three negative effects of rivers. (6 marks)
9. (a) (i) Differentiate between Vulcanicity and volcanicity. (2 marks)
 (ii) Describe how lava plateau is formed. (4 marks)
 (iii) The diagram below shows some intrusive features formed by vulcanicity. Use it to answer questions below.



- I. Name the features marked E, F and G. (3 marks)
 II. Explain how feature marked E is formed. (4 marks)
- (b) Students carried out a field study on volcanic rocks.
 (i) Give **four** reasons why it is necessary to collect rock samples during such a field study. (4 marks)
 (ii) State **two** problems they are likely to have experienced during the field study. (2 marks)
 (iii) Outline **two** follow-up activities. (2 marks)
- (c) (i) Give **three** causes of Earthquakes. (3 marks)
 (ii) Name **three** natural major earthquake zones of the world. (3 marks)
10. (a) (i) What is soil contena? (2 marks)
 (ii) Give three factors that determine the colour of soil. (3 marks)
 (iii) State three ways in which mulching helps in soil conservation. (3 marks)

- (b) Explain how the following farming practices cause soil erosion.
- (i) Burning (4 marks)
- (ii) Over cultivation (4 marks)
- (iii) Give two economic uses of soil. (2 marks)
- (c) You are supposed to carry out a field study of an eroded area:
- (i) State three methods you would use to control soil erosion. (3 marks)
- (ii) What would be disadvantages of using secondary methods of collecting data in this kind of study? (2 marks)
- (iii) Identify the methods you would use to record the observations. (2 marks)

KASSU-JET JOINT EXAMINATION

312/2

GEOGRAPHY Paper 2

JUNE 2023

SECTION A*Answer all the questions in this section.*

- 1 (a) What is Practical Geography? (2 marks)
- (b) State **three** skills learned in Practical Geography. (3 marks)
2. (a) Name **two** underground methods of mining. (2 marks)
- (b) Give **three** ways in which derelict land can be rehabilitated. (3 marks)
3. (a) Name **two** cereal crops grown in Mwea Tebere. (2 marks)
- (b) State **three** ways in which salinity of the polders is reduced in the Netherlands. (3 marks)
4. (a) Give **two** deep sea methods of fishing. (2 marks)
- (b) State **three** problems experienced in the marketing of fish in Kenya. (3 marks)
5. (a) Name **two** towns in Kenya where motor vehicle assembling plants are located. (2 marks)
- (b) Give **three** characteristics of the cottage industry in India. (3 marks)

SECTION B*Answer question 6 and any other TWO questions from this section.*

6. The table below shows four principal crops produced in Kenya in 2000 and 2001. Use it to answer question a and b.

Crop	Amount in metric tons	
	2000	2001
Wheat	70,000	130,000
Maize	200,000	370,000
Coffee	98,000	55,000
Tea	240,000	295,000
TOTAL	608,000	850,000

- (a) (i) Which crop had the highest change in production between 2000 and 2001? (2 marks)
- (ii) Calculate the percentage increase in crop production in Kenya between 2000 and 2001. (2 marks)
- (b) Using a scale of 1cm to represent 100,000 metric tonnes, draw a compound bar graph to represent the data on the table above. (7 marks)
- (c) (i) What is dairy farming? (2 marks)
- (ii) Name **two** exotic dairy breeds of cattle reared in Kenya. (2 marks)

- (iii) Explain the problems facing dairy cattle farming in Kenya. (4 marks)
- (d) (i) Explain why dairy farming is highly developed in Denmark than Kenya. (4 marks)
- (ii) Give **two** significance of dairy farming in Kenya and Denmark. (2 marks)
7. (a) (i) What is forestry? (2 marks)
- (ii) State **three** significance of agro-forestry. (3 marks)
- (b) (i) Name **three** indigenous hard wood tree species found in Kenyan forests. (3 marks)
- (ii) Explain **four** problems facing natural forests in Kenya today. (8 marks)
- (c) (i) Name **two** areas under large scale softwood forests in Canada. (2 marks)
- (ii) Compare forestry in Kenya and Canada under the following sub-headings.
- Period of tree harvesting. (2 marks)
 - Tree harvesting (2 marks)
 - Transportation of logs. (2 marks)
8. (a) (i) What is visible trade? (2 marks)
- (ii) Suppose you were an international business man, list **three** industrial goods you would import from Japan. (3 marks)
- (b) Explain **four** factors that influence internal trade in Kenya. (8 marks)
- (c) Why do you think trade is important in Kenya? (4 marks)
- (d) Explain **two** benefits which member states of ECOWAS derive from the formation of the trading bloc. (4 marks)
- (e) Your class intends to carry out a field study on the Nairobi International Trade Fair.
- (i) State **two** methods you would use to collect data. (2 marks)
- (ii) State **two** reasons why a pre-visit will be necessary. (2 marks)
9. (a) Distinguish between population distribution and population density. (2 marks)
- (b) The table below shows the population of a country in Western Europe in 1000. Use it to answer part (i) – (iii).

Age group	Male	Female
0 – 4	450	455
5 – 9	447	449
10 – 14	448	450
15 – 19	454	458
20 – 24	480	472
25 – 29	630	632
30 – 34	635	639
35 – 39	642	671
40 – 44	670	638
45 – 49	636	568
50 – 54	562	641
54 - 59	633	639
60 – 64	631	634
65 – 69	451	452
70 – 74	470	468
75 – 79	460	459
80+	451	453

- (i) Using a scale of 1cm to 100,000 people, draw a population pyramid from the above data. (7 marks)
- (ii) State **five** characteristics of the above population structure as shown by the pyramid. (5 marks)
- (iii) Explain **four** problems likely to be experienced due to the population trend in the above

- country. (4 marks)
- (c) (i) What is mortality rate? (2 marks)
- (ii) State **five** measures that have been taken in Kenya to reduce infant mortality. (5 marks)
10. (a) Differentiate between environmental conservation and environmental management. (2 marks)
- (i) State **five** ways in which the government of Kenya promotes environmental conservation. (5 marks)
- (ii) Give **four** reasons why it is necessary to conserve the environment. (4 marks)
- (b) (i) Apart from floods, name **three** other environmental climatic hazards. (3 marks)
- (ii) Name **three** areas prone to flooding in Kenya. (3 marks)
- (iii) Explain **four** measures that can be used to control floods in Kenya today. (8 marks)

KASSU JET JOINT EXAMINATION
312/1
GEOGRAPHY PAPER 1
MARKING SCHEME

SECTION A

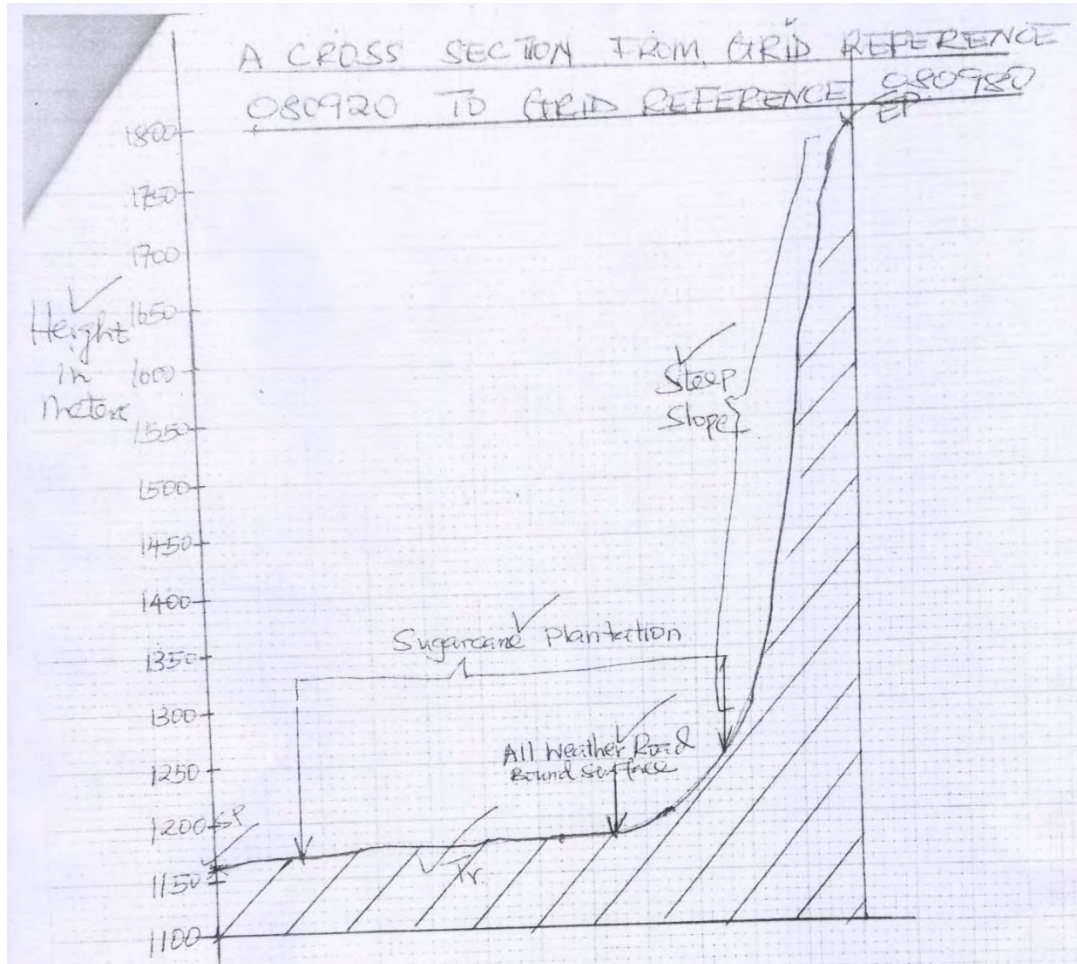
Answer all the questions in this section.

- 1.
- (a) What is the relationship between Geography and Mathematics? (2 marks)
- Geographical concepts are applied in calculating direction / bearing in mathematics. While in mathematical formulae and principles are used in Geography to calculate area, distance, eman, bearing, percentage, density, etc.
- (b) Identify three branches of Geography. (3 marks)
- Human and economic geography
 - Physical geography
2. (a) Use the diagram below to answer the questions that follow:
- (i) What type of Eclipse is represented by the diagram? (1 mark)
- Solar eclipse**
- (ii) Explain how the eclipse above occurs. (2 marks)
- (b) What is the time at Hola on 40⁰E when the time at Tema on 0⁰ longitude is 12:00 noon? (2 marks)
- Difference in degrees = 40⁰
 1⁰ = 4 min
 40⁰ x 4 = 160 minutes
 $\frac{160}{60} = 2 \text{ hr } 40 \text{ min}$
 12:00 + 2:40 mins = 14:40 hrs or 2:40 pm
3. (a) Apart from Fold Mountains, name three other features resulting from folding. (3 marks)
- Rolling plans
 - Ridge and valley landscape
 - Inter-montane plateaus
 - Inter-montane basins
 - Synclinal valleys / depressions
- (b) State two factors that determine the folding of crustal rocks. (2 marks)
- Strength of intensity of the compressional force
 - Temperature within rocks
 - The age of sedimentary rocks

4. (a) Give three reasons why some Lakes of Kenya have saline water. (3 marks)
- High temperature in the locality of the lakes which leads to high evaporation rates resulting in the accumulation of salts in the lakes
 - Some lakes are fed by underground streams or underground water containing large amount of dissolved salts.
 - Some lakes have salty bed rocks which get dissolved water in the lakes
 - Some rivers and run-off water draining into the lakes bring in large amounts of dissolved salts.
- (b) Outline two economic uses of lakes. (2 marks)
- Fresh water lakes provide fresh water for domestic and industrial use
 - Fresh water lakes provide irrigation water thus promoting agriculture
 - Man-made lakes are used to generate HEP for domestic and industrial uses
 - Some lakes provide a cheap means of transport thus promoting trade
 - Some lakes have valuable minerals that are exploited for income and as industrial raw-materials
 - Some lakes are sources of fish which promotes the fishing industry
 - some lakes are sources of fish which promotes the fishing industry
 - many lakes attract tourists for recreation thus bringing in foreign exchange
5. (a) What is natural vegetation? (2 marks)
- Natural vegetation is the plant cover growing in an area without interference by man or animals.
- (b) State three characteristics of the Mediterranean type of vegetation. (3 marks)
- Waterlogged areas support swamp vegetation
 - Most forests have thick forests
 - Some plants are evergreen
 - Most trees are of moderate height with few branches
 - Dry areas have woody and scrub vegetation
 - Some areas have shrubs, thickets and thorn bush

SECTION B

6. Study the map of Kisumu East 1:50,000 (Sheet 116/2) provided and answer the following questions.
- (a) (i) What is the vertical interval of the map extract? (1 mark)
- 20 meters**
- (ii) Using the marginal information, give the magnetic variation of the area when the map extracts was drawn. (1 mark)
- 2°32'**
- (iii) Measure the length of the regional boundary from the map edge at grid square 9999 to Northing 97. Give your answer in kilometres. (2 marks)
- km ± 0.1**
(6.0 – 6.2) km
- (iv) What is the approximate height of the seasonal swamp in the Kano plains? (2 marks)
- Above 1140m and below 1160 metres above the seasonal**
- (b) (i) Using a vertical scale of 1 centimetre to represent 50 metres draw a cross section from grid reference 080920 to grid reference 080980. (4 marks)
- On it, mark and label the following:
- I. Sugarcane plantation (1 mark)
 - II. Steep slope (1 mark)
 - III. All weather road bound surface C543/1. (1 mark)



(ii) Calculate the vertical exaggeration of the cross section. (2 marks)

$$\begin{aligned}
 \text{V.E.} &= \frac{\text{V.S.}}{\text{H.S.}} \\
 &= \frac{1 \text{ cm rep } 5 \text{ cm.}}{1/50000} \\
 &= \frac{1:5000}{1/50000} \\
 &= \frac{1}{5000} \div \frac{1}{50000} \\
 &= \frac{1}{5000} \times \frac{50000}{1} \\
 &= 10 \text{ meters}
 \end{aligned}$$

(2 x 1 = 2 marks)

(c) Describe the characteristics of the big profile of river Luando (6 marks)

- The river has many meanders
- The river has many tributaries that form a dendritic pattern
- The river is permanent
- The river has distributaries / delta
- Some parts of the long profile have several swamps
- River Luando flows from the North Eastern direction
- The river flows on a wide valley. (6 x 1 = 6 marks)

(d) Citing evidence from the map, explain two factors that favour trade in the area covered by the map. (4 marks)

- There is presence of many roads which enable easy movement of goods and services in the area.
- Presence of many market centres / town which provide opportunities for trade to take place.
- Availability of track commodities due to presence of cotton ginnery / flour mill / sugarcane plantation which are necessary for trade. (2 x 2 = 4 marks)

7.

- (a) (i) What is a rock? (2 marks)
 – It is a combination of mineral particles cemented together to make the solid part of the earth's crust.
- (ii) Describe the following characteristics of mineral:
- Tenacity (2 marks)
 Tenacity is the ability of a mineral to withstand the tearing, crushing or breaking.
 - Lusture (2 marks)
 Lustre is the ability of a mineral to reflect light.
 - Cleavage (2 marks)
 Cleavage is the tendency of a mineral to break into some given patterns.
- (b) (i) Name two examples of intrusive igneous rocks. (2 marks)
- Granite
 - Perioditite
 - Diorite
 - Syenite
 - Gabbro
- (ii) Describe the formation of Plutonic rocks. (4 marks)
- Earth movements form cracks in the earth's crust.
 - Due to intense heat and pressure, magma in the earth's interior is forced to intrude the earth's crust.
 - The intruding magma may get trapped in the earth's crust.
 - The magma cools and solidify to form coarse grained rocks due to slow cooling.
- (c) Explain three significance of rocks to the economy of Kenya. (6 marks)
- Some rocks weather to form deep soils which are used for agriculture thus generates income for many people.
 - Some rocks weather to form unique features that create a beautiful sceneries that attract tourists thus generates income for the country when tourists visit to see them.
 - Some rocks provide building and construction materials thus promoting the building industry.
 - Soap stones are curved into artifacts which are sold to generate income.
 - Rock salts are sources of food for people and animals which improves their diet.
 - Some rocks are source of gemstones for ornamental value which are sold for income.
 - Some rocks are used to make fertilizers which are important for agriculture.
 - Some rocks reserve underground water which is exploited for domestic, agricultural and industrial use.
 - Some sedimentary rocks reserve fossil fuels which are exploited to produce energy for domestic and industrial use.
 - Some rocks have valuable mineral which are exploited and sold to generate income for the country.
- (d) Your class is planning to carry out a fieldwork on rocks around your school.
- (i) Outline two activities you would engage in before the study. (2 marks)
- Seeking permission from the relevant authorities.
 - Setting the objectives and hypotheses.
 - Reading more about the topic of study.
 - Holding discussions on the topic of study.
 - Carrying out a pre-visit / reconnaissance.
 - Preparing questions and questionnaire to be used during fieldwork for data collection.
 - Deciding on means of travelling to the area of study.
 - Obtaining a route map.
 - Gathering the relevant materials and tools for the fieldwork.
 - Conduction sampling in case the area is too large.
 - Dividing the class into groups and appointing the group leaders.
 - Preparing working schedule.

- (ii) State two challenges you are likely to face during the field study. (2 marks)
- Language barrier causing miscommunication between the researcher and the respondents leading to inaccurate data.
 - Occurrence of heavy rainfall which interrupts the data collection process.
 - Hostility from some of the respondents leading to unavailability of data.
 - Dishonest respondents leading to obtaining of wrong information.
 - Occurrence of accidents in the field thus inconveniencing the data collection process.
 - Attack by some wild animals leading to inconveniencing of data collection process.
 - Inaccessibility of some areas due to steep slopes thus making data collection process impossible.
 - Fatigue
 - Sudden illness among the students.

8.

- (a) Outline two ways in which river water flows within the channel. (2 marks)

- Lamina flow
- Turbulent flow
- Helicoidal / corkscrew flow
- Plunge flow

- (b) (i) State three factors that influence river erosion. (3 marks)

- River volume / stream volume / volume of water in the stream
- Gradient and velocity of the river
- Nature and the amount of load
- Nature of bed rock in the river channel

- (ii) Describe how the river erodes through the following processes;

- Hydraulic action (4 marks)
- This is the quarrying effect of moving water.
- As the river flows water is forced ion the river banks with cracks and joints.
- Air in the cracks is compressed.
- The compressed air creates pressure on the cracks so the cracks widens.
- As the water retreats, pressure on the cracks so the cracks widens.
- As the water retreats, pressure in the cracks is released suddenly.
- Repeated compression and widening of the cracks causes the rocks to break / shatter.
- The retreating water carries away loose rock particles.
- The force of moving water and eddying currents sweep away the loose materials in the channels.

- (iii) Solution (2 marks)

- This is the corrosive effect of river water on the rocks over which the river flows.
- Soluble minerals in the river channel are dissolved by river water or presence of organic acids.
- The dissolved load is then carried downstream in solution form.

- (c) Using a well labeled diagram, describe how the following feature are formed:

- Interlocking spurs (4 marks)
- Highlight projections into the river valley which appear as they fit each other.

Formation

- A river flows swiftly in its youthful stage.
- When it meets a resistant rock, the river flows swiftly around it instead of cutting through, so it forms a winding course.
- The river erodes the outer banks of the winding channel than the inner banks because of strong water currents.

- This causes the bends to be more pronounced hence the formation of interlocking spurs.
- The outer bank are undercut becomes river cliff / bluff while materials are deposited the inner bank forming gentle sloping banks called slip off slope.
- Natural levees (4 marks)
- Raised river banks / embankments which are made of alluvial materials.

Formation

- During heavy rains, river floods and spills over its banks.
- Due to this, the speed of the water suddenly reduces.
- Coarser materials are deposited immediately near the river banks and fine materials are carried further on to the flood plain.
- Coarse materials also accumulate on the river bed.
- After the flood, the volume of water subsides and the river returns to the river channel, so deposited occur on the river bed.
- With time repeated deposition causes the river bed and the river banks to be raised.
- The raised river banks are then referred to as natural levees.

(d) Explain three negative effects of rivers. (6 marks)

- Rivers flood causing loss of life, displacement of people and destruction of property.
- River water can be a medium of spreading waterborne diseases such as bilharzia and malaria.
- Some rivers are wide and deep acting as barriers to transport and communication and also make it difficult an expensive.
- Some rivers harbor dangerous wild animals which can kill human being e.g. crocodiles, hippos and snakes.

9. (a)

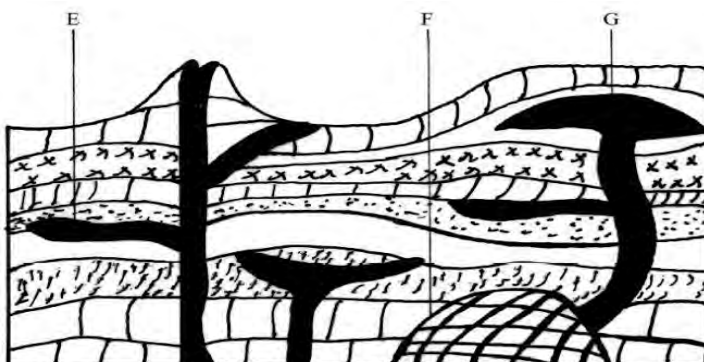
(i) Differentiate between Vulcanicity and volcanicity. (2 marks)

- Vulcanicity is the process through which liquid gaseous and solid materials are forced out of the earth's interior into the rocks of the crust or ejected to the surface. While volcanicity is the process where molten rock from the earth's interior called magma reaches from earth's surface to form extrusive volcanic features.

(ii) Describe how lava plateau is formed. (4 marks)

- Earth movements form many fissures or vents in the rocks or he crust. Ultra-basic magma reaches the ground surface through the fissures or vents in a quiet eruption.
- The highly fluid hot lava flows and spreads out on the earth's surface to cover long distance and wide areas.
- The lava fills and cover valleys and depressions on the earth's surface.
- The lava cools and solidifies to cover an extensive fairly flat lowland area called a lava plain.
- Successive eruptions leads to accumulation of thick layers of lava forming a solid layers of lava of extensive and fairly flat upland are called a lava plateau.

(iii) The diagram below shows some intrusive features formed by vulcanicity. Use it to answer questions below.



- I. Name the features marked E, F and G. (3 marks)
 E – Dyke
 F – Batholith
 G – Laccolith
- II. Explain how feature marked E is formed. (4 marks)
 Earth movements form a vertical or an inclined vent across the crustal rock layers. Magma is forced upwards through the vents magma cools and solidifies slowly inside the vent forming a wall-like mass of intrusive igneous rocks called a dyke.
- (b) Students carried out a field study on volcanic rocks.
- (i) Give **four** reasons why it is necessary to collect rock samples during such a field study.(4 marks)
- There is no field laboratory where the rock samples can be analyzed
 - There is no adequate time in the field
 - To enable them build a collection of rock samples
 - It would expose more students to their findings through display of their findings
 - To create interest
- (ii) State two problems they are likely to have experienced during the field study. (2 marks)
- Some students may be injured by the rocks
 - Inability to collect the right samples
 - Inaccessibility of some sample sites
 - The heavy weight of the rock samples hence difficult to carry
- (iii) Outline two follow-up activities. (2 marks)
- Discussing the findings in class in groups
 - Writing reports in essay form
 - Calculation of percentages, means, medians
 - Laboratory testing of samples
 - Presentation of data using methods such as graphs
- (c) (i) Give three causes of Earthquakes. (3 marks)
- Movement of tectonic plates
 - Gravitative pressure
 - Movement of magma within the rocks
 - Folding and faulting of rocks of the crust
 - Isostatic adjustment
 - Energy release from the mantle
- (ii) Name three natural major earthquake zones of the world. (3 marks)
- Circum – Pacific belt
 - Mediterranean – East Indies belt
 - Mid-Atlantic ocean belt
 - Great Rift valley belt
10. (a) (i) What is soil catena? (2 marks)
 – Soil catena is the sequence of different soils from the same parent rock on a slope.
- (ii) Give three factors that determine the colour of soil. (3 marks)
- The type of parent rock
 - The amount of organic matter / humus
 - The chemical composition / minerals
 - The amount of water in the soil
- (iii) State three ways in which mulching helps in soil conservation. (3 marks)
- Plant materials used decompose increasing soil humus
 - It protects the soil against wind erosion
 - It protects the helps to increase infiltration rate of water in the soil.
 - It helps reduce water loss from the soil / retain soil moisture.

(b) Explain how the following farming practices cause soil erosion.

(i) Burning (4 marks)

- Burning destroys micro-organisms which are essential for the formation of humus which binds soil particles together
- Burning destroys vegetable matter that protects the soil against erosion
- Burning destroys the nitrogen fixing bacteria making the soil less fertile and therefore few plants and less protection of the soil.
- Burning loosens the soil making it susceptible to erosion.

(ii) Over cultivation (4 marks)

- Over cultivation leads to exhaustion of certain minerals from the soil making it infertile and bare leading to its erosion.
- Over cultivation leads to loosening of soil particles thereby encouraging soil erosion.

(iii) Give two economic uses of soil. (2 marks)

- It is used as raw material in industry / pottery / glass making / brick making
- Soils support agriculture
- Some soils contain valuable minerals
- Some soils have medicinal value / food
- It is used in building and construction

(c) You are supposed to carry out a field study of an eroded area:

(i) State three methods you would use to control soil erosion. (3 marks)

- Construction of gabions
- Afforestation / reforestation
- Construction of drainage trenches
- Construction of check dams
- Filling in the gullies

(ii) What would be disadvantages of using secondary methods of collecting data in this kind of study? (2 marks)

- Recorded data could be out of date
- Conditions under which such data was collected may be changed
- Obtaining records on the particular soil area may be difficult.

(iii) Identify the methods you would use to record the observations. (2 marks)

- Photographing
- Map making
- Video recording
- Field sketching

KASSU-JET JOINT EXAMINATION
312/2
GEOGRAPHY PAPER 2 MARKING SCHEME
JUNE 2023

SECTION A

Answer all the questions in this section.

- 1 (a) What is practical geography? (2 marks)
 – Practical geography is the study of practical skills which enhances interpretation and understanding of geographical phenomena.
- (b) State **three** practical skills learned in practical Geography. (3 marks)
 – Map reading
 – Photograph interpretation
 – Data analysis
 – Methods of data connection
 – Methods of data recording
 – Methods of data presentation.
 – Time management
2. (a) Name **two** methods of underground mining. (2 marks)
 – Shaft method
 – Drilling method
 – Solution method
 – Adit method
- (b) Give **three** ways in which derelict land can be reclaimed. (3 marks)
 – Planting trees
 – Creating a park to attract tourist
 – Introducing agriculture
 – Landscaping for settlement/farming
 – Refilling the holes
3. (a) Name **two** cereals grown in Mwea Tebere. (2 marks)
 – Rice
 – Maize/popcorns
 – Green grams
 – Beans
- (b) State **three** ways in which salinity of the polders is reduced in the Netherlands.(3 marks)
 – Chemicals are applied to lower salts in the soils.
 – Fresh water is flushed to the soils to remove excess salts.
 – Reeds are planted to use up the excess salt.
 – Continuous pumping of water from the polders.
4. (a) Give **two** methods used in deep sea fishing. (2 marks)
 – Trawling
 – Drifting
 – Line fishing
- (b) State **three** problems experienced in the marketing of fish in Kenya. (3 marks)
 – Some fishing areas are far from the markets and roads are in poor condition thus fish goes bad enroute.
 – Fishermen lack appropriate storage and preservation facilities.
 – There are limited local markets due to cultural beliefs.
 – The external markets are limited by tight restrictions/competition from other producers.
 – The limited number of fish species limits the market.
5. (a) Name **two** towns in Kenya where motor vehicle assembling plants are located. (2 marks)

- Nairobi
 - Mombasa
 - Thika
- (b) Give **three** characteristics of the cottage industry in India. (3 marks)
- They rely on simple machines
 - They are labor intensive
 - They are owned by families
 - They use locally available materials.
 - They produce for local markets
 - They are widespread in the country.

SECTION B

Answer question 6 and any other **TWO** questions from this section.

6. The table below shows four principal crops produced in Kenya in 2000 and 2001. Use it to answer question a and b.

Crop	Amount in metric tons	
	2000	2001
Wheat	70,000	130,000
Maize	200,000	370,000
Coffee	98,000	55,000
Tea	240,000	295,000
TOTAL	608,000	850,000

- (a) (i) Which crop had the highest change in production between 2000 and 2001? (2 marks)
- (ii) Calculate the percentage increase in crop production in Kenya between 2000 and 2001. (2 marks)
- (b) Using a scale of 1cm to represent 100,000 metric tons, draw compound bar graphs to represent data on the table above. (7 marks)
- (c) (i) What is dairy farming? (2 marks)
- This is the practice of keeping cattle for milk/the rearing of cattle for the purpose of milk production.
- (ii) Name **two** exotic dairy breeds of cattle reared in Kenya. (2 marks)
- Friesian/Holstein
 - Ayshire
 - Guernsey
 - Jersey
 - Alderney
 - Swiss brown
- (iii) Explain the problems facing dairy cattle farming in Kenya. (4 marks)
- Stiff competition from imported milk and milk products makes the industry unstable.
 - Poor management of dairy co-operatives result to misappropriation for funds hence delayed payment to farmers.
 - Inadequate capital to buy the necessary farm inputs hence minimizing mechanization of the farming/makes it difficult to plan ahead.
 - Prolonged drought/unreliable rainfall leads to shortage of pasture leading to poor quality breeds.
 - Outbreak of diseases weaken and even kill the cattle which is a loss to farmers.
 - Expensive farm inputs leads to reduced quality hence reducing profit margin.
 - Inadequate feeds/water during the dry seasons leads to undernourishment of cattle and thus low yields.

- Stiff competition from alternative land uses e.g. horticulture, tea and coffee lowers the quantity of milk products.
 - Low prices make farmers unable to plan ahead.
 - Poor storage facilities/cooling centres cause the milk to go bad leading to heavy losses to farmers.
 - Exploitation by middlemen leads to low prices.
 - Poor feeder roads in the production areas makes the milk perish before reaching the markets creating loss to farmers.
- (d) (i) Explain why dairy farming is highly developed in Denmark than Kenya. (4 marks)
- Denmark's dairy farming is highly mechanized since capital is available that leads to high production while in Kenya, there is limited mechanization due to inadequate capital
 - Dairy farming in Denmark is highly specialized while in Kenya most farmers practice mixed farming.
 - Dairy farming in Denmark is least affected by climatic variations.
 - In Denmark artificial Insemination (AI) or extension services are widely used unlike in Kenya artificial insemination or extension services are limited to few farms.
 - Research is widely/extensive while research in Kenya is limited.
 - In Denmark co-operative movement is highly developed while in Kenya dairy co-operative movement is less developed.
- (ii) Give **two** significance of dairy farming in Kenya and Denmark. (4 marks)
- Export of some milk and milk products earns the country foreign exchange.
 - Milk is a raw material for milk processing industries hence promote industrialization.
 - Many people are employed in dairy farms in many parts of the country.
 - Commercial dairy farming is a source of income to the farmers.
 - Dairy farming has contributed to the development of roads in areas where it is practiced.
 - Milk and milk products are a source of nutritious food especially in vitamins and proteins.
 - The government collects revenue through taxation on sale of dairy products.
- 7.
- (a) (i) What is forestry? (2 marks)
- It is the science of planting and managing and exploitation of forest resources.
- (ii) State **three** significance of agro-forestry. (3 marks)
- It maximizes land use as both crops and trees are a source of income.
 - It provides raw materials for the industries
 - It promotes high water retention on the land
 - The trees supply wood fuel needs.
 - The leaf litter decomposes thus adding humus to the soil.
 - Livestock waste is used as manure.
 - Some trees provide fodder for the animals.
 - Some trees have medicinal value.
 - Trees provide aesthetic beauty.
 - It helps to conserve soil by minimizing soil erosion.
 - Trees act as wind breakers to the young crops.
 - Trees creates a micro-climate
- (b) (i) Name **three** indigenous hard wood tree species in Kenyan forests. (3 marks)
- Meru oak
 - Camphor
 - Elgon teak
 - Mangrove
 - Mvuli
 - East Africa Olive

- (ii) Explain **four** problems facing natural forests in Kenya today. (8 marks)
- Increased human population leading to illegal encroachment for settlement and agriculture thus destroying large forested areas.
 - Increased population of wildlife animals that debark or uproot trees thus destroying large forested areas. Eg. Elephants.
 - Forest fires destroy large areas of forests which take long time to recover.
 - Prolonged drought that dry and degenerate forest trees which take long time to recover.
 - Plant diseases and pests which attack trees e.g. the white aphid which attack and destroy some valuable planted trees species reducing land under forest.
 - Over exploitation of some tree species which take long to mature.
 - Government policy of de-gazetting some forests has led to clearing of many forested areas.
 - Illegal logging thereby reducing the indigenous tree species.
- (c) (i) Name **two** areas under large scale softwood forests in Canada. (2 marks)
- New found land
 - Nova scotia
 - British Columbia
 - New Brunswick
 - Prince Edward Island
- (ii) Compare forestry in Kenya and Canada under the following sub-headings.
- Period of tree harvesting. (2 marks)
 - In Canada logging is done in winter and early spring while in Kenya cutting is done throughout the year
 - Tree harvesting (2 marks)
 - In Canada, it is done through clear cutting while in Kenya it is done through selective cutting
 - Transportation of logs. (2 marks)
 - In Canada logs are transported using melt water in rivers while in Kenya transportation is by roads.
- In Kenya transportation is expensive while in Canada it is cheaper.
- 8.
- (a) (i) What is visible trade? (2 marks)
- Visible trade involves exchange of goods between countries/
 - Visible trade involves import and export of goods
- (ii) Suppose you were an international business man, list **three** industrial goods you would import from Japan. (3 marks)
- Automobiles/Motor vehicles parts
 - Textiles
 - Machinery/electronic appliances/radios/TVs
 - Watches/precision instruments
- (b) Explain **four** factors that influence internal trade in Kenya. (8 marks)
- The demand for a variety of domestically produced goods, leads to expansion of trade.
 - The cultural differences lead to distinctive specialization in production of goods for exchange.
 - The production of similar goods/products by different regions limits the market potential./Different goods enhance trade among different regions.
 - The low purchasing power by a majority of Kenyans limits the market for goods produced.
 - The level of development of transport network/limit/enhances trade as certain commodities may not/may be carried over long distances/the market potential is restricted/expanded.
 - Security encourages expansion of trade.
- NB:**/Explanation alone cannot score but factor alone can score.
- (c) Why do you think trade is important in Kenya? (4 marks)
- Trade generates revenue through taxation of the goods and services.
 - Trade creates employment opportunities in the industries that are established/creates self employment.

- The demand for goods stimulates industrial growth/agric growth.
 - The exports of goods enable the country to earn foreign exchange.
 - The need to reach far off markets leads to expansion of transport facilities.
 - Trade stimulates specialization in the production of goods.
 - Trade enhances cooperation between Kenya and the trading partners.
- (d) Explain **two** benefits which member states of ECOWAS derive from the formation of the trading bloc. (4 marks)
- The volume of trade has been boosted as a result of an expanded market in the region.
 - More transport facilities have been constructed to link the member states of the Cooperation.
 - The removal of trade barriers has extended the market for the finished products/secured the market for the member states.
 - The transfer of technology/capital within the trading area has been enhanced.
 - Cooperation in other fields such as education/health and communication has been enhanced.
 - The reduction in hostilities between member countries has enhances peace resulting in rapid economic development.
- (e) Your class intends to carry out a field study on the Nairobi International Trade Fair.
- (i) State **two** methods you would use to collect data. (2 marks)
- Administering questionnaires
 - Interviewing respondents
 - Sampling
- (ii) State **two** reasons why a pre-visit will be necessary. (2 marks)
- To seek permission from relevant authorities/to get relevant documents from officials.
 - To determine the appropriate route to be used.
 - To identify the appropriate methods of data collection.
 - To estimate the cost the study
- 9.
- (c) (i) What is mortality rate? (2 marks)
Mortality rate is the total number of deaths in a population of a given sex and or age.
- (ii) State **five** measures that have been taken in Kenya to reduce infant mortality. (5 marks)
- Free drugs for infants
 - Adequate pre-natal and emotional support
 - Improvement in use of skilled care to the new born
 - Medical covers that cater for safe child delivery
10. (a) Differentiate between environmental conservation and environmental management.(2 marks)
- Environmental Management refers to the effective planning and controls used for sustainable exploitation and improvement of the environment while Environmental Conservation refers to the preservation and protection of natural environment from destruction by careful use and improvement of the environment.
- (i) State **five** ways in which the government of Kenya promotes environmental conservation. (5 marks)
- Creating public awareness and education on the importance of a clean environment.
 - The government has passed legislations to enforce proper use of the environment
 - Recycling factories and centres have been set-up to recycle garbage and waste.
 - Government is a signatory to Kyoto protocol on global warming and it is in the forefront in criticizing those countries that are less supportive to the process of combating global warming.
 - Non-governmental organizations such as greenbelt have been given the mandate to protect the environment by planting trees.
 - The government have formed the national environmental management authority (NEMA) which is a body charged with the responsibility of ensuring that the environment is properly conserved and managed.

- (ii) Give **four** reasons why it is necessary to conserve the environment. (4 marks)
- It helps to maintain soil fertility for sustainable food production.
 - It helps to preserve genetic resources for future generation.
 - It helps to preserve aesthetic value and provide recreational facilities which promotes tourism.
 - It helps to sustain raw materials for some manufacturing industries that produce goods for trade.
 - It helps reduce the pollution that cause diseases to animals and plants to ensure good health.
 - It helps to maintain natural habitats for both plants and wild animals.
 - It helps in protecting the water catchment areas and sustain the hydrological cycle.
 - It helps to prevent desertification which destroys environmental resources.
 - It helps to ensure proper utilization of available natural resources without destruction.
 - It helps to sustain human life with required resources and by preventing pollution.
- (b) (i) Apart from floods, name **three** other environmental climatic hazards. (3 marks)
- Floods
 - Desertification
 - Landslides
 - Hailstorms
 - Heat waves
 - Lightning and thunderstorms
 - Dust storms and windstorms
- (ii) Name **three** areas prone to flooding in Kenya. (3 marks)
- River Nyando
 - River Nzoia
 - River Yala
 - River Tana
 - River Nyamasaria
 - River Ewasonyiro
- (iii) Explain **four** measures that can be used to control floods in Kenya today. (8 marks)
- Construction of check dams across the rivers to hold the excess water in order to reduce river volume.
 - Construction of artificial levees/dykes long the river banks to increase their height and prevent water from overflowing into the flood plain.
 - Construction of drainage channels to make them hold excess water from the land.
 - Dredging and widening the river channels to make them hold excess water.
 - Planting trees in the catchment areas to increase water infiltration and reduce surface run off.
 - Redirecting some river tributaries to other rivers to reduce the water volume of the main river.

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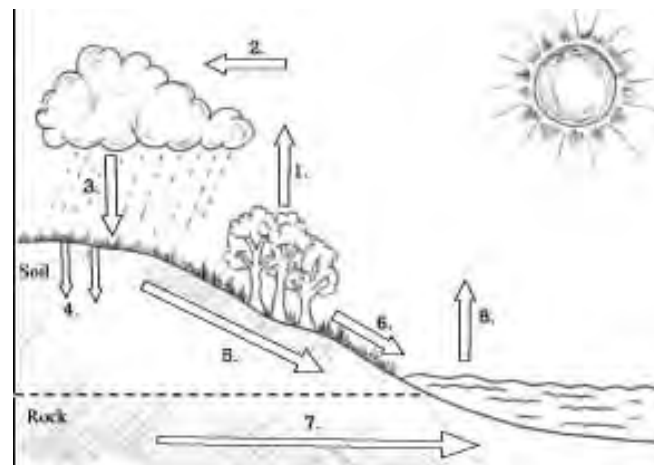
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GEOGRAPHY PAPER 1

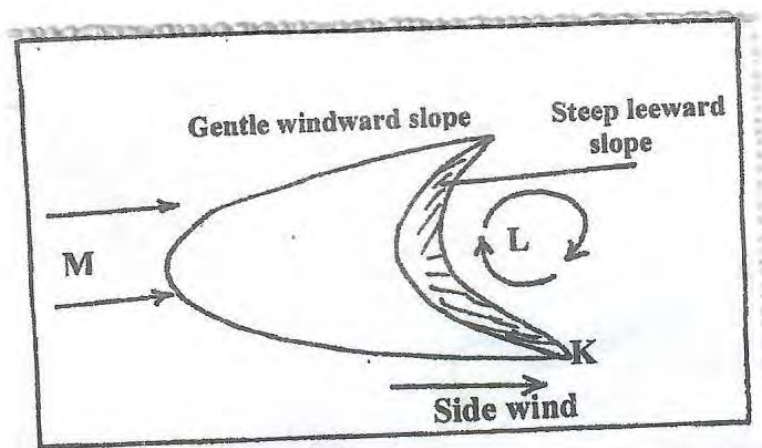
JULY/AUGUST 2023

SECTION A: ANSWER ALL QUESTIONS. 25 MARKS

- 1 a) Give **two** types of environments. [2marks]
 b) State **three** major branches of practical geography. [3marks]
2. a) Differentiate between weather and climate. [2marks]
 b) Give **three** benefits of humidity in the atmosphere. [3marks]
3. Study the diagram below and answer questions that follow.



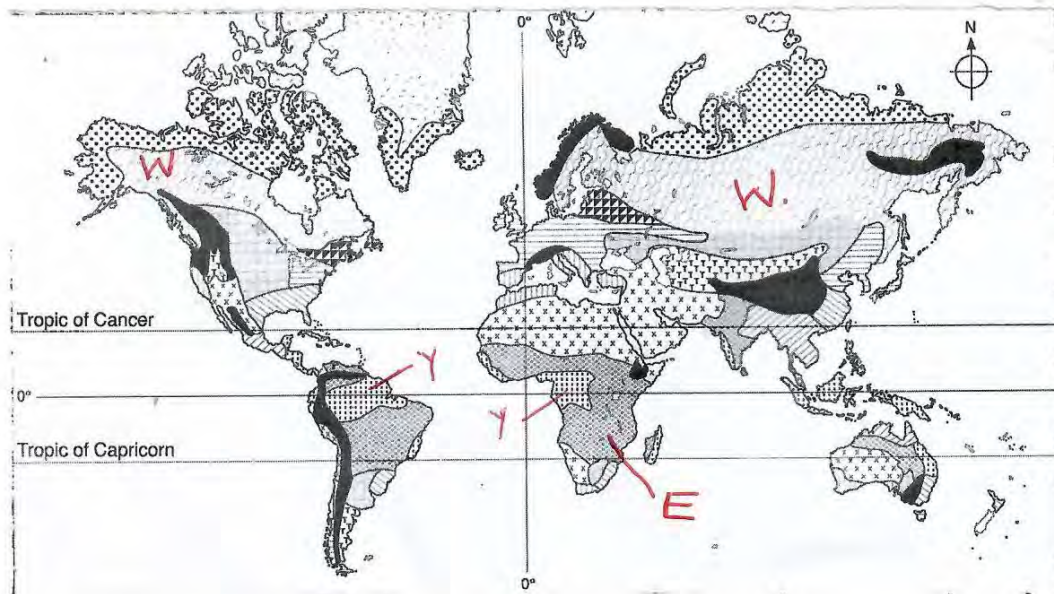
- i) Identify the process labeled 3 and 6. [2marks]
- ii) State the force that is responsible for process 5. [1mark]
- iii) Highlight **two** factors that influence process 4. [2marks]
4. a) Give **two** causes of river rejuvenation. [2marks]
 b) Identify **three** features that result from river rejuvenation. [3marks]
5. The diagram below shows some features of wind deposition. Study it to answer questions that follows [3marks]
 a) Identify part marked **K, L** and **M**



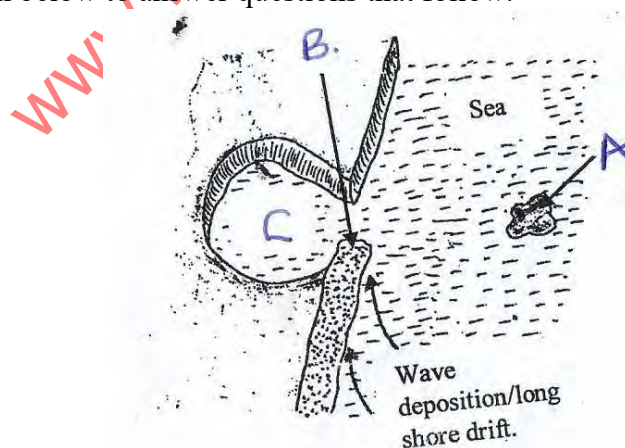
- b) State **two** factors that influence deposition of materials by wind in deserts. [2marks]

SECTION B**Answer question 6 and any other two questions from this section.**

6. Study the map of KISUMU EAST 1: 50000 [SHEET 116/2] provided to answer the following questions.
- [a] I] Apart from the type of map you are using state any other **two** types of maps. [2marks]
 II] Identify **two** vegetation in the area covered by the map [2marks]
 III] Name **two** methods used to represent relief in the area covered by the map. [2marks]
- [b] I] In what hemisphere does Kisumu East lie? [1mark]
 II] Measure the distance of the section of railway line west of Easting 00 to Kisumu station, give your answer in kilometers. [2marks]
 III] Identify **two** forms of land transport in Kisumu east. [2marks]
- [c] I] Describe **relief** of the area covered by the map. [3marks]
 II] Describe the distribution of settlement in the area covered by the map [4marks]
- d] Using a vertical scale of **1cm represent 20m** draw a cross section along northing **98 from Easting 96 to Easting 02**. [4marks]
 On it mark and label the following. [3marks]
 River Nyangori
 Dry weather road
 Steep slope.
- 7 a) Define the karst scenery. [2mark]
 I] Explain **three** factors that influence the formation of features in limestone area. [6marks]
 II] Give **three** reasons why there are few settlements in the karst landscape. [3marks]
- b] Describe how the following features are formed.
 I] **Grikes and Clints**. [4marks]
 II] **Swallow holes**. [4marks]
- c] You are supposed to carry out a field study of an area eroded by underground water.
 I] Give **three** reasons why you would need a working schedule. [3marks]
 II] Name **two** erosional features you are likely to identify during the study. [2marks]
 III] State **three** recommendations that you could make from your study to assist the local community to rehabilitate the eroded area. [3marks]
- 8 a) I] Define the term earthquakes. [1mark]
 II] State **three** types of earthquakes depending on the depth of focus. [3marks]
 III] Differentiate between the **intensity** and **magnitude** of an earthquake. [2marks]
- b] I] Highlight **three** causes of vulcanicity. [3marks]
 II] State **two** types of magma. [2marks]
 III] State **three** factors that influence the shape and type of volcanic features formed. [3marks]
- c] Describe how **hot springs** are formed. [5marks]
- d] Explain **three** ways in which volcanic features positively influence human activities. [6marks]
9. a] Different between **derived** and **cultivated** vegetation. [2marks]
 b] Explain how the following factors influence vegetation distribution in Kenya.
 I] **Living organism**. [2marks]
 ii] **Precipitation**. [2marks]
 c] The map below shows the globe distribution of vegetation. Study and use it to answer the questions that follow.



- [I] Identify the vegetation labelled, **W and Y** [2marks]
- [II] Describe the adaptive characteristics of the vegetation labelled **E** on the map. [6marks]
- d] Your class is planning to undertake a field study on vegetation in Mt. Kenya Forest',
 - [I] State **four** preparations you would carry out. [4marks]
 - [II] Give **three** sampling techniques you would use. [3marks]
 - [III] Identify **four** problems you are likely to encounter during the actual field study. [4marks]
- 10. A [I] what is continental shelf? [2marks]
- [ii] State **two** characteristics of the continental shelf. [2marks]
- B [I] State **two** types of islands. [2marks]
- ii] Give **three** sources of ocean salts. [3marks]
- iii] Give **two** reasons why water salinity is lower in areas around the equator seas than further away in the tropics. [2marks]
- C i] Give **two** types of tides. [2marks]
- ii] Using a well labelled diagram, describe how a wave break. [4marks]
- D. Use the diagram below to answer questions that follow.



- [I] identify the parts labeled. **A, B and C.** [3marks]
- E] Your class carried out a field study on the coastal landforms
 - [I] State **two** features of lowland submerged coasts that you identified. [2marks]
 - [II] Give **three** reasons why you needed a route map. [3marks]

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312/2

GEOGRAPHY PAPER 2

JULY/AUGUST 2023

SECTION A: Answer all questions in this section.25MKS

1. a) State **two** formations in which mineral ores occurs. (2mks)
- b) Give **three** reasons why coal resource in the Mui basin Kitui County has not been commercially exploited. (3mks)
2. a) What is mixed farming? (2mks)
- b) Give **three** advantages of mixed farming. (3mks)
3. a) What is energy crisis. (2marks)
- b) Identify **three** causes of energy crisis. (3marks)
4. a) Name **two** forest reserves in Kenya. (2marks)
- b) State **three** characteristics of Equatorial rainforests. (3marks)
5. a) State **three** human factors favoring tourism in Switzerland. (3marks)
- b) **Define** eco-tourism. (2marks)

SECTION B (75MARKS)**Answer question SIX and any other TWO questions**

6. The table below shows the various modes of transport used by tourists visiting Kenya between the years 2006 and 2009. Use it to answer the following questions.

Mode of transport	No. of tourists.			
	2006	2007	2008	2009
Road	100,000	50,000	150,000	200,000
Air	600,000	650,000	700,000	800,000
Water	200,000	150,000	100,000	50,000

- a) i) state **two** reasons why tourists preferred air transport over the other modes of transport over the period. (2marks)
- ii) Calculate the percentage increase in the number of tourists between the year 2008 and 2009. (3marks)
- iii) Using a scale of **1cm to represent 100 000** tourists, draw a compound bar graph to represent the number of tourists who visited Kenya using the different mode of transport. (9marks)
- b) i) Explain **three** roles played by transport in the economy of Kenya. (6marks)
- ii) Name **one** high way created in Africa to ease transport across the continent. (1mark)
- c) Form **four** students from Kibutha high school visited Kisumu airport for a field study.
 - i) Identify **two** methods they used to record their data. (2marks)
 - ii) Give **two follow up** activities they engaged in. (2marks)
7. a) i) What is land reclamation. (1mark)
- ii) State **five** benefits which Kenya derives from irrigation farming? (5marks)
- b) Explain three factors that led to the successful establishment of Perkerra irrigation scheme. (6marks)
- c) Give **four** problems facing the perkerra irrigation scheme. (4marks)
- d) Name **three** crops grown under irrigation in perkerra. (3marks)
- e) Explain **three** reasons why horticulture is more developed in the Netherlands than Kenya. (6marks)
8. (a) i) What is industrialization? (2 marks)
- ii) State **three** reasons why some industries consider regular supply of water as the main reason

- for their location. (3 marks)
- (b) Outline **four** similarities between Jua Kali industry in Kenya and cottage industry in India. (4mks)
- (c) Explain **three** factors that have influenced the location of iron and steel industry in the Ruhr region of Germany in the 19th century. (6 marks)
- (d) You intend to carry out a field study of a heavy manufacturing industry;
- State **three** effects of the industry on the environment you are likely to observe (3 marks)
 - Design a working schedule you would use during the day of study (4 marks)
 - State **three** reasons why it is important to prepare a working schedule for the study. (3 marks)
9. a) i) What is unfavorable balance of trade. (2marks)
- ii) Outline **five** measures a country can adopt to reduce unfavorable balance of trade. (5marks)
- b). Explain **five** benefits that Kenya derives from participating in international trade. (10marks)
- c) i) State **three** non-agricultural exports from Kenya. (3marks)
- ii) State **five** problems facing developing countries in international trade. (5marks)
10. a) i) What is an environmental hazard? (1mark)
- ii) Apart from floods list **three** other environmental hazard. (3marks)
- b) Explain four ways in which air pollution affects the environment. (8marks)
- c) Explain **four** incidents that may lead to noise pollution in urban areas. (8marks)
- d) Students from Kangema carried out a field study on floods at Kano plains.
- State **two** objectives for their study. (2marks)
 - State **three** ways in which residents of Kano plains are affected by floods that students observed. (3marks)

M.E.C.S CLUSTER EXAMINATION
GEOGRAPHY PAPER 1
JULY/AUGUST 2023
MARKING SCHEME 312/1, 2023.

SECTION A: ANSWER ALL QUESTIONS. 25 MARKS

1. a] Give two types of environment. . [2marks]
- Physical environment.
 - Human environment.
- b] State three major branches of practical geography. [3marks]
- Statistical methods
 - Maps and map work
 - Field work
 - Photography interpretation
2. a] Differentiate between weather and climate [2marks]
- Weather is the state of the atmosphere of a given place over a short period of time WHILE climate is average weather conditions of a place recorded over a long period of time.
- b] Give three benefits of humidity in the atmosphere [3marks]
- Regulation of temperature in the atmosphere
 - helps in the development of storms in the atmosphere.
 - It indicates the potential of the atmosphere to hold moisture and the formation of precipitation.
 - Helps in regulation of human body temperature

IGAMBANG'OMBE JOINT EVALUATION TEST 2023**312/1****GEOGRAPHY PAPER 1**

1. a) What is the shape of the earth? (1 mark)
- b) Give three factors that contribute to the shape of the earth (3 marks)
2. a) Apart from comets, name two other components of the solar system. (2 marks)
- b) Give three characteristics of comets. (3 marks)
3. a) What is an earthquake? (2 marks)
- b) Name three major earthquake zones of the world (3 marks)
4. a) Identify three resultant features of emerged highland coasts. (3 marks)
- b) Give three characteristics of ocean water (3 marks)
5. a) The table below shows the rainfall and temperature data for town Y. Use it to answer question a

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temp (°c)	21	21	20	18	15	14	13	13	15	16	18	20
Rainfall (mm)	24	25	30	74	17	143	131	131	70	55	31	27

- a) i) What is the mean annual range of temperature? (1 mark)
- ii) Calculate the rainfall totals for station Y. (1 mark)
- b) State three climatic conditions experienced in hot deserts. (3 marks)

SECTION B: (75 MARKS)

6. Study the map of Kisumu East 1:50,000 (sheet 116/2) provided and answer the following questions
 - a) i) Convert the scale of the map into a statement scale. (1 mark)
 - ii) Give two methods used to show relief in the area. (2 marks)
 - iii) Give the direction of the air photo principal point in square 0294 from Chiga market at grid square 0589 (1 mark)
 - b) i) Name two physical features shown on grid square 0497. (2 marks)
 - ii) Identify the characteristics of river Ombeyi (4 marks)
 - c) i) Using a vertical scale of 1cm to represent 50m, draw a cross section along Northing 98 from grid reference 950980 to grid reference 010980. (5 marks)
 - on it mark and label the following
 - a) Boundary (1 mark)
 - b) Slope (1 mark)
 - c) River (1 mark)
 - d) Dry weather road (1 mark)
 - ii) Calculate the vertical exaggeration of the cross section (2 marks)
 - d) Give four social functions of Kisumu Municipality (4 marks)
7. a) i) Apart from metamorphic rocks name two other categories of rocks. (3 marks)
- ii) Describe the following processes of formation of metamorphic rocks.
 - a) Dynamic metamorphism (4 marks)
 - b) Thermal metamorphism. (4 marks)
- b) Explain three ways in which rocks are significance to human activities in Kenya (6 marks)
- c) You intend to carry out a field study on the types of rocks within the school locality.
 - i) Identify three items that you will carry during the study (3 marks)
 - ii) State three activities that you will be involved in during the study (3 marks)
8. a) Define the term vegetation (2 marks)
- b) i) Explain how the following influences the distribution of vegetation
 - soil (4 marks)
 - Relief (4 marks)

- ii) State five uses of vegetation (5 marks)
- c) Describe the characteristics of Savanna vegetation (5 marks)
- d) Name the grassland found in the following regions (4 marks)

REGION**GRASS LAND**

- | | |
|-------------------|-------|
| i) Canada | _____ |
| ii) Argentina | _____ |
| iii) South Africa | _____ |
| iv) Australia | _____ |

9. a) i) Differentiate between ocean and sea (2 marks)
- ii) Explain three causes of variation in the amount of salt in ocean water (6 marks)
- b) i) Identify three processes involved in wave erosion (3 marks)
- ii) With an aid of a well labeled diagram, describe the process through which a wave cut platform is formed. (8 marks)
- c) Explain the significance of oceans to human activities (6 marks)
10. a) i) Define folding (2 marks)
- ii) Name four types of folds (4 marks)
- iii) State three factors that determine the folding of crustal rocks. (3 marks)
- b) i) Name the young fold mountains found in the following continents
- | | |
|---------------|----------|
| Africa | (1 mark) |
| Europe | (1 mark) |
| Asia | (1 mark) |
| North America | (1 mark) |
- ii) Describe the formation of Fold Mountains according to convectional current theory. (4 marks)
- c) Explain four effects of folding on physical environment (8 marks)

IGAMBANG'OMBE JOINT EVALUATION TEST 2023**312/2****GEOGRAPHY PAPER 2**

1. a) Define the term environment (2 marks)
- b) Give three effects of water pollution on the environment. (3 marks)
2. a) Name two exotic species of trees planted in Kenya (2 marks)
- b) State three reasons why it is necessary to carry out afforestation programme in Kenya (3 marks)
3. a) State three measures which the government of Kenya has taken to reduce infant mortality (3 marks)
- b) Give three reasons why it is necessary for the government of Kenya to carry out national census. (3 marks)
4. a) Name two imports from Europe to Kenya (2 marks)
- b) Give three factors that limit trade among member states of the COMESA (3 marks)
5. State four ways in which Kenya has benefited from the motor vehicle assembly industry (4 marks)

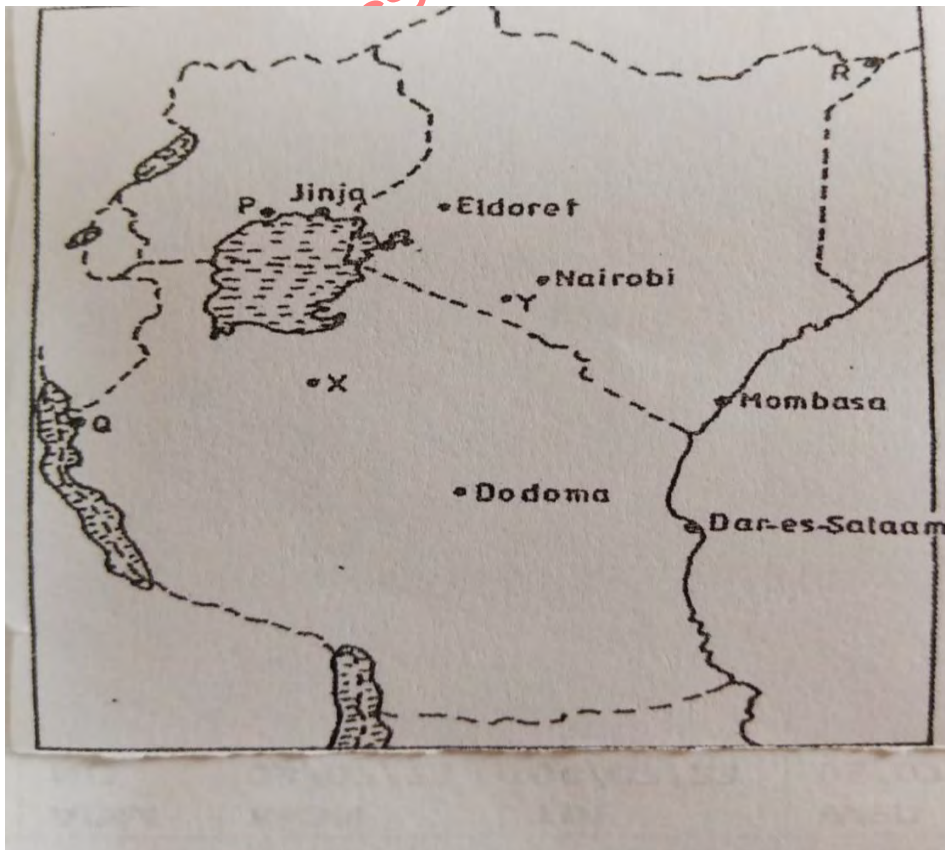
SECTION B

6. Use the table below to answer the following questions.

Value of export earning of selected crops form Kenya (Ksh Million)

CROP	2012	2013	2014
Tea	101441	104648	93996
Coffee	22271	16328	19913
Sisal	1184	1020	1325
Total	124896	121996	115234

- a) i) Using a scale of 1cm to present 50,000 million, draw proportional circles to represent the total export earnings between 2012 and 2014. Use the diameter method. (10 marks)
- ii) Calculate the percentage decline in export volume between 2012 and 2014. (2 marks)
- b) State four disadvantages of using proportional circles to represent the export values. (4 marks)
- c) Explain three physical conditions that favor coffee growing in Central highlands of Kenya (6 marks)
- d) State three problems facing coffee farming in Brazil (3 marks)
7. a) Explain each of the following methods of land rehabilitation (4 marks)
- i) Mulching (4 marks)
- ii) Bunds and gabions (6 marks)
- b) Explain four physical factors which influenced the location of Mwea irrigation scheme. (8 marks)
- c) State how the government policy influenced the establishment of Mwea-Tebere irrigation scheme (3 marks)
- d) You intent to carry out a field study on irrigation farming in Mwea Tebere irrigation scheme.
- i) Identify the two hypothesis you would develop for the study. (2marks)
- ii) State two reasons why you need to sample the area of study (2 marks)
8. The map below shows the location of some urban centres in East Africa.



- a) i) Name the towns marked P,Q and R (3 marks)
 ii) Name the minerals that influenced the growth of the town marked X and Y (2 marks)
- b) Explain four factors that have led to the growth of Eldoret as major town in Kenya (8 marks)
- c) Compare the ports of Mombasa and Rotterdam under the following sub-heading
 i) Site (2 marks)
 ii) Transport links to the interior (2 marks)
 iii) The hinterland (2 marks)
 iv) Port facilities (2 marks)
- d) Explain two ways in which urbanization negatively effects the surrounding agricultural areas. (4 marks)
9. a) i) Define mining (2 marks)
 ii) State three ways in which minerals occur (3 marks)
- b) i) Explain how the following factors influence the occurrence of minerals
 Evaporation (2 marks)
 Vulcanicity (2 marks)
 Metamorphism (2 marks)
 ii) Explain shaft mining method. (4 marks)
- c) Explain the effects of mining to the environment (6 marks)
- d) Give four problems facing shaft mining (4 marks)
10. a) i) Apart from uranium, give two other non-renewable sources of energy. (2 marks)
 ii) State two advantages of using uranium as a source of energy. (2 marks)
- b) i) What is energy crisis (2 marks)
 ii) Explain three ways in which energy crisis affects the economy of Kenya. (6 marks)
 Iii) Name three dams along the seven folks project (3 marks)
- c) State four ways in which Kenya has benefited from development of geothermal power (4 marks)
- d) Explain three physical factors that influence establishment of Hydroelectric projects (6 marks)

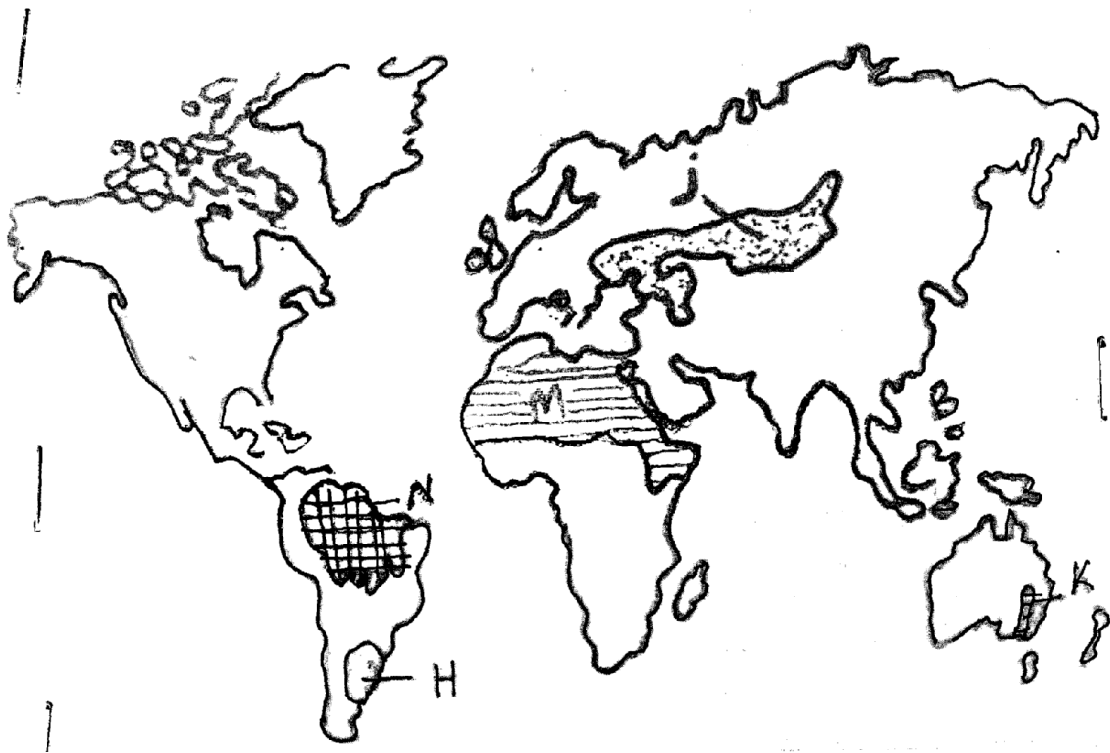
MARKING SCHEME

IGAMBANG'OMBE JOINT EVALUATION TEST 2023

GEOGRAPHY PAPER 1

1. a) **What is the shape of the earth? (1 mark)**
 – Geoid /Spherical
- b) **Give three factors that contribute to the shape of the earth (3 marks)**
 – Gravitation force
 – Centripetal force
 – Centrifugal force
2. a) **Apart from comets, name two other components of the solar system. (2 marks)**
 – Meteors – meteorites – Asteroids / Planetoids
 – Planets – planetoids – meteoroid
 – Star – Natural satellites
- b) **Give three characteristics of comets. (3 marks)**
 – Ha a tail and a head
 – The tail points away from the sun
 – Revolve around the sun in elliptical orbits
 – Their orbits cross the earth's orbit
 – Made of ice, dust and frozen gases

- b. i) Convert the ratio scale of the map extract into statement scale. (2mks)
- c) What is the bearing of trigonometrical station at grid reference 081980 from the Air photo Principals point at grit square 0997. (2mks)
- d) Give three types of natural Vegetation found in the area covered by map. (3mks)
- e) Describe the drainage of the area covered by the map. (5mks)
- f) Draw a rectangle 12cm by 10cm to represent the area enclosed by Easting 03 and 09 and Northing 80 and 85. On the rectangle, mark and name the following features. (5mks)
- Trigonometrical station 1154.
 - All weather road B 25/3
 - Seasonal swamp.
 - Ombeyi river.
- g. Citing evidence from the map, explain three social factions of Ksumu town. (6mks)
7. a) i) What is folding? (2mks)
- ii) State three factors that influence folding. (3mks)
- b) i) Apart from over thrust fold, name four other types of folds. (4mks)
- ii) With the aid of well labelled diagrams, describe the formation of an over thrust fold. (8mks)
- c) Explain four significance of fold maintains to human activities. (8mks)
8. The map below shows some vegetation regions of the world. Use it to answer questions (a) to (c)



- a.) Name the temperate grass lands marked H ,J and K. (3mks)
- b.) Describe the characteristics of the natural vegetation found in the shaded area marked N. (5mks)
- c.) Explain four ways in which the vegetation found in the area marked M adapts to the environment conditions of the region. (8mks)
- d.) You are required to carry out a field study of the vegetation which the local environment.
- Apart from identifying the different types of plants, state four other activities you will carry out during the field study. (4mks)
 - How will you identify the different types of plants. (2mks)
 - Give three reasons for visiting the area before study. (3mks)

9. a) i) Differentiate between a waterfall and a gorge. (2mks)
 ii.) State two factors that influence the rate of erosion by a river in its upper course. (2mks)
- b.) i) Describe the processes by which a river transport its load. (6mks)
 ii) Name three river depositional features. (3mks)
- c.) Describe each of the following drainage pattern using diagrams.
 i) Centripetal. (2mks)
 ii) Radial. (2mks)
 iii) Fault-guided. (2mks)
- d) Your class is planning to carry out a field study of a river in its mature stage
 i.) Give three methods you would use to record the information collected. (3mks)
 ii.) State three characteristics of a river at the mature stage that you are likely to observe during the study. (3mks)
- 10 a.) i) State three conditions necessary for the development of Karst scenery. (3mks)
 ii.) Give three sources of underground water. (3mks)
- b) i) Differentiate between Artesian basin and Artesian well (2mks)
 ii.) A part from stalagmites, name three other underground features formed in limestone areas. (3mks)
 iii) With the aid of a diagram, describe how a stalagmite is formed. (8mks)
- c.) Explain three positive significance of resultant features in Karst scenery. (6mks)

CEKENAS END OF TERM ONE EXAM-2023

312/1

GEOGRAPHY PAPER 1**CONFIDENTIAL INSTRUCTIONS****Provide students with KISUMU EAST (1:50,000)**

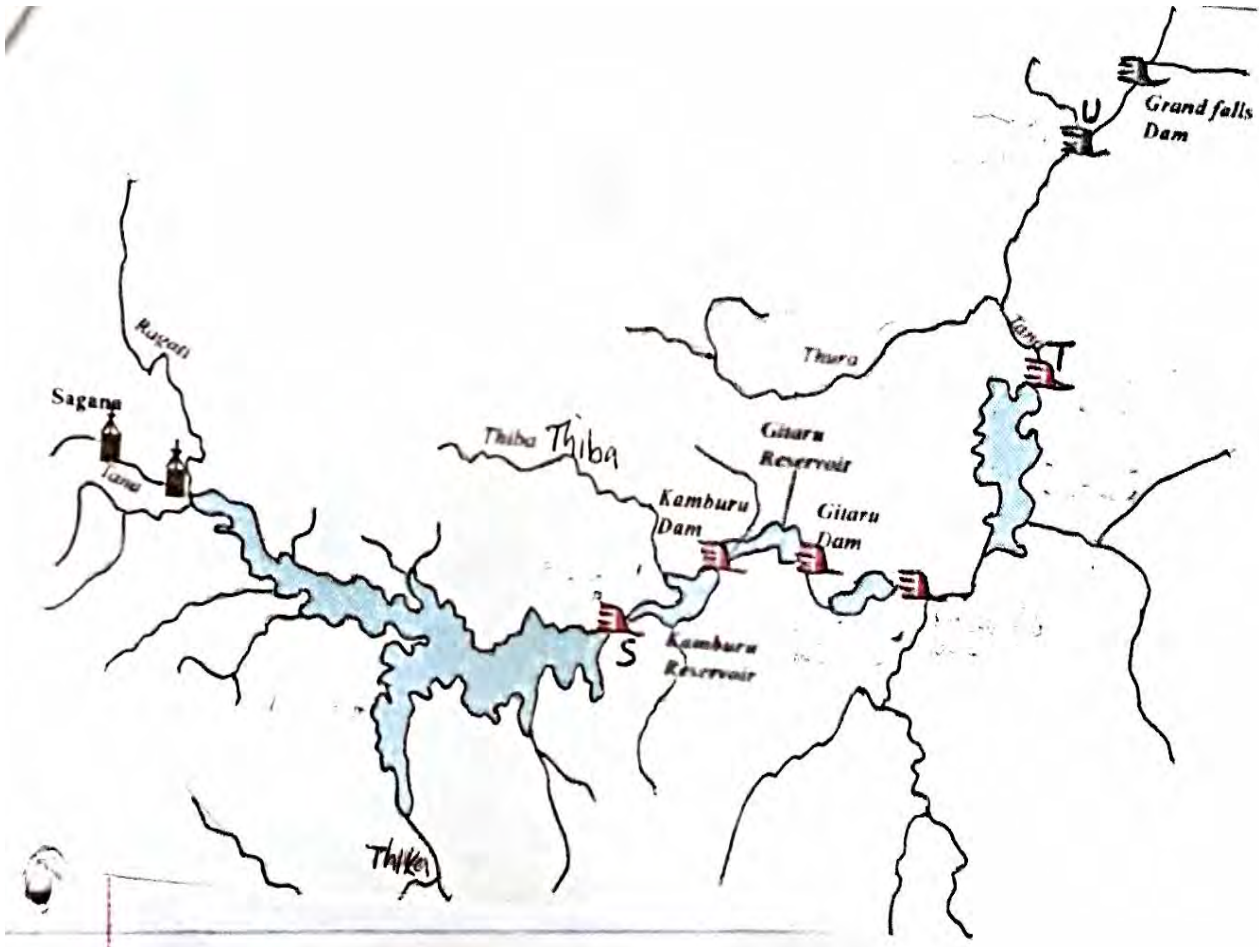
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CEKENAS END OF TERM ONE EXAM-2023

312/2

GEOGRAPHY PAPER 2**SECTION A : 25 MARKS.****COMPULSERY SECTION**

1. a) Name two minerals mined in South Africa. (2mks)
 b) Give three problems facing mining industries in South Africa. (3mks)
2. a) What is mixed farming. (2mks)
 b) State three physical conditions that favour coffee growing in Kenya Highlands. (3mks)
3. a) Name two Rivers that supply water to Mwea irrigation scheme. (2mks)
 b) State how the government policy influenced the establishment of Mwea irrigation scheme. (3mks)
4. a) Define the term fishing . (2mks)
 b) List three countries in the North Eastern Atlantic that are important for marine fishing. (3mks)
5. a) Apart from oil name two other non renewable sources of Energy. (2mks)
 b) The Sketch map below shows hydro- electric power (H.E.P) Stations along River Tana. Use it to answer questions that follow.



- i) Name the H.E.P Stations marked S and T. (2mks)
- ii) The proposed H. E.P Stations marked U. (1mk)

SECTION B: 75 MARKS

Answer question 6 and any other two questions from this section.

- 6. Study the photograph below and answer questions (a)



- a. i) Identify the type of the photograph shown. (1mk)
 ii) Using evidence from the photograph identify two indicators which show that the area receives high rainfall. (2mks)
 iii) Draw a rectangle measuring 15cm by 10cm to represent the area covered by the photograph. On the rectangle, sketch and label four main features shown on the photograph. (5mks)
- b. i) State **three** reasons why zero grazing is more popular among dairy farmers in the Kenya Highlands (3mks)
 ii) Name **three** exotic dairy cattle reared in Kenya. (3mks)
 c) Explain **four** ways in which dairy farming in Kenya is different from dairy farming in Denmark. (8mks)
 d) State **three** challenges faced by dairy farmers in Kenya. (3mks)
7. a) i) State **three** methods used in mining. (3mks)
 ii) Name the minerals found in the following areas (3mks)
 a. Magadi
 b. Mwadui
 c. Kasese
- b. Explain how the following factors influence mining of minerals.
 i) Technology. (2mks)
 ii) Quality of the ore (2mks)
 iii) Accessibility. (2mks)
- c) Describe how deep shaft mining method is used in extraction of minerals. (8mks)
 d) State two leading oil producing countries in the middle East. (2mks)
 e) State **three** uses of petroleum. (3mks)
8. a) i) Differentiate between land reclamation and land rehabilitation. (2mks)
 ii) Give three ways in which the government is trying to rehabilitate overgrazed lands in Kenya. (3mks)
- b) Explain three conditions that favour irrigation farming in Kenya. (6mks)
 c. i) Name three polders that make up the zuiderzee reclamation project in the Netherlands. (3mks)
 ii) Describe the stages of reclamation of land from the sea in the Netherlands. (6mks)
- d) Your School intend to carry out a field study in Mwea Tebere irrigation scheme.
 i) Identify the two types of hypothesis you would develop for the study. (2mks)
 ii) Give three reasons why you need to sample the area of study. (3mks)
9. a) i) Distinguish between forestry and forest. (2mks)
 ii) Discuss the influence of the following factors on the distribution of natural forests.
 • Climate. (2mks)
 • Human activities. (2mks)
 • Relief. (2mks)
- b. Explain three measures which have been taken to manage forests in Kenya. (6mks)
 c. Give the difference between the softwood forests in Kenya and Canada under the following headings
 i) Species. (2mks)
 ii) Period of harvesting. (2mks)
 iii) Transportation. (2mks)
- e. Your class intends to carry out a field study on exotic trees of Kenyan Highlands.
 i) Name two types of exotic trees they are likely to observe. (2mks)
 ii) Identify three methods you will use to record data in the field. (3mks)
10. a) i) State two effect of drought on wildlife in Kenya. (3mks)
 ii) Name two game ranches in Kenya. (2mks)
 b) State the significants of wildlife in Kenya. (4mks)
 c i) Differentiate between domestic and international tourisms. (2mks)

- ii) Explain four problems associated with tourism in Kenya. (8mks)
 iii) Explain three reasons why Switzerland receives more tourists than Kenya. (6mks)

CEKENAS END OF TERM ONE EXAM-2023

312/1

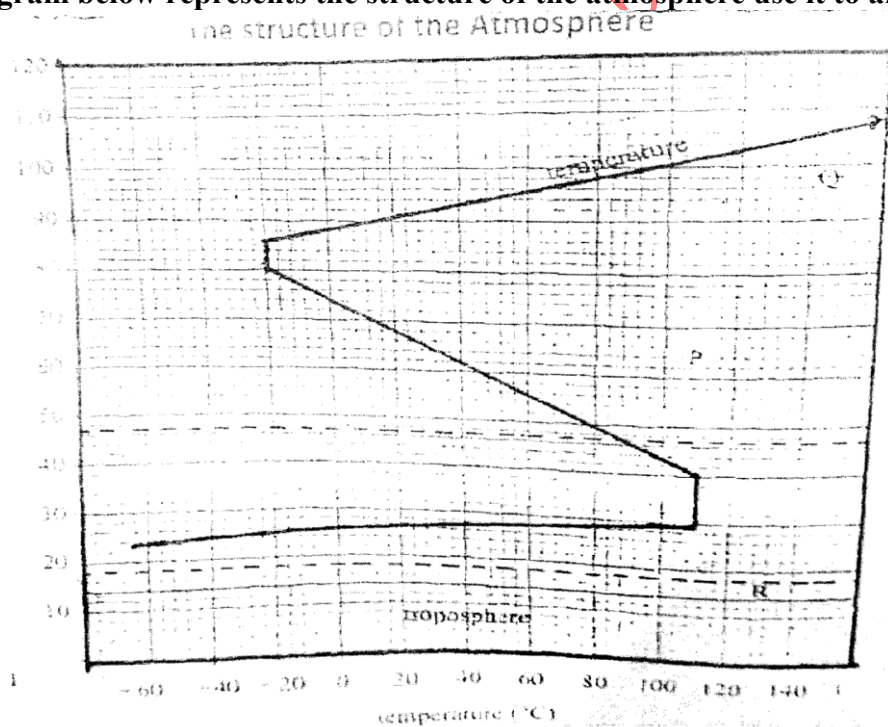
GEOGRAPHY PAPER 1

MARKING SCHEME

SECTION A

ANSWER ALL THE QUESTIONS IN THIS SECTION

- 1 a) Define the term Environment. (2mks)
 – it is the sum of all the external conditions surrounding an organism which influence the behavior of an organism affecting the life development of organisms and its activities.
- b.) List any 3 major areas covered in physical Geography. (3mks)
 – The Earth and the solar system
 – Weather and climate
 – Rocks and minerals
 – Internal land forming processes
 – External land forming processes
 – Vegetation
 – soil
- 2 a) The diagram below represents the structure of the atmosphere use it to answer question (a)



- a) Name
- i) The parts marked P and Q. (2mks)
 P-Mesosphere
 Q- ionosphere
- ii) The layer of discontinuity marked R. (1mk)
 Tropopause
- b) State two characteristics of weather conditions in the troposphere. (2mks)
 – temperature decrease with increase in height/normal lapse rate/rate decrease 1°C for 16cm/environmental
 – contains most of atmospheric water vapour

MATHIRA WEST INTER-SCHOOL EVALUATION TEST**312 /1****GEOGRAPHY PAPER 1****AUGUST 2023****SECTION A**

1. (a) Differentiate between meteors and meteorites. (2 Marks)
- (b) State three effects of earth's rotation. (3 Marks)
2. (a) Name two features that result from feature eruption. (2 Marks)
- (b) State three negative effects of volcanic activities in Kenya. (3 Marks)
3. (a) State three reasons why lake Naivasha is a fresh water lake. (3 Marks)
- (b) Give three processes that lead to formation of lakes. (3 Marks)
4. (a) Identify two characteristics of ocean water. (2 Marks)
- (b) Mention two types of tides. (2 Marks)
5. (a) Name two underground features in karst scenery (2 marks)
- (b) State three factors that influence the occurrence of underground water (3 Marks)

SECTION B

6. a) Use the map of Nyeri to answer question 6
 - i. What is the map title (1 mark)
 - ii. Identify two districts found in Nyeri. (2 marks)
 - iii. Identify index of adjoining sheet found in the Northern and Southern. (2 marks)
- b). i. Name any three types of land transport found in Nyeri. (3 marks)
- ii. Name two physical features found in grid square 6258. (2 marks)
- iii. What is the magnetic variation of the map. (2 marks)
- iv. What is the general direction of flow of river Chania. (2 marks)
- c. i. Using a vertical scale of 1 cm to represent 50 m draw a cross section along Northing 64 from Easting 68 to Easting 78. On in mark the following
 - All weather road
 - A hill
 - A river
 (7 marks)
 - ii. Calculate the vertical exaggeration of the cross section. (2 marks)
 - iii. Determine the intervisibility of the cross section. (2 marks)
7. a) Define the hydrological. (2 marks)
- Draw a well labelled diagram of the hydrological cycle. (6 marks)
- b. i. Identify three types of river erosion. (3 marks)
- ii. State three factors that affect the rate of river erosion. (3 marks)
- c. Describe three processes through which a river transports its load. (3 marks)
- d. i. Explain two causes of river rejuvenation. (4 marks)
- ii. Give three three features resulting from river rejuvenation. (3 marks)
8. a. i. Distinguish minerals and rocks. (2 marks)
- ii. List three characteristics of minerals. (3 marks)
- b. Describe the formation of coral rocks. (4 marks)
- c. Explain four ways in which sedimentary rocks are significant to the kenyan economy. (8 marks)
- d. Students of school X were to study rocks around the school.
 - i. Identify two methods they would use to classify the rocks around the school. (3 marks)
 - ii. Identify three follow up activities they would engage in. (3 marks)
 - iii. Give three advantages of studying rocks through fieldwork. (3 marks)
9. a. i. What is soil catena. (2 marks)
- ii. Name the main components of the soil. (3 marks)

- b. Explain how the following factors influence soil formation
- Time . (2 marks)
 - Topography. (2 marks)
 - Aspect. (2 marks)
- c. Draw a well labelled diagram of mature soil . (6 marks)
- d. Explain four ways in which human activities contribute to soil erosion. (8 marks)
10. a. i. State three causes of earth movements. (3 marks)
- ii. What is folding? (2 marks)
- iii. Differentiate between a simple symmetrical fold from asymmetrical fold. (2 marks)
- b. With the aid of a well labelled diagram describe the formation of an overthrust fold. (6 marks)
- c. Students of school P are planning to carry out field study on a folded landscape.
- i. Identify three ways in which the fold mountains they will come may be formed. (3 marks)
- ii. State three ways in which they will prepare for the study. (3 marks)
- iii. Give three reasons why they would require a work schedule. (3 marks)

MATHIRA WEST INTER-SCHOOL EVALUATION TEST

312 / 2

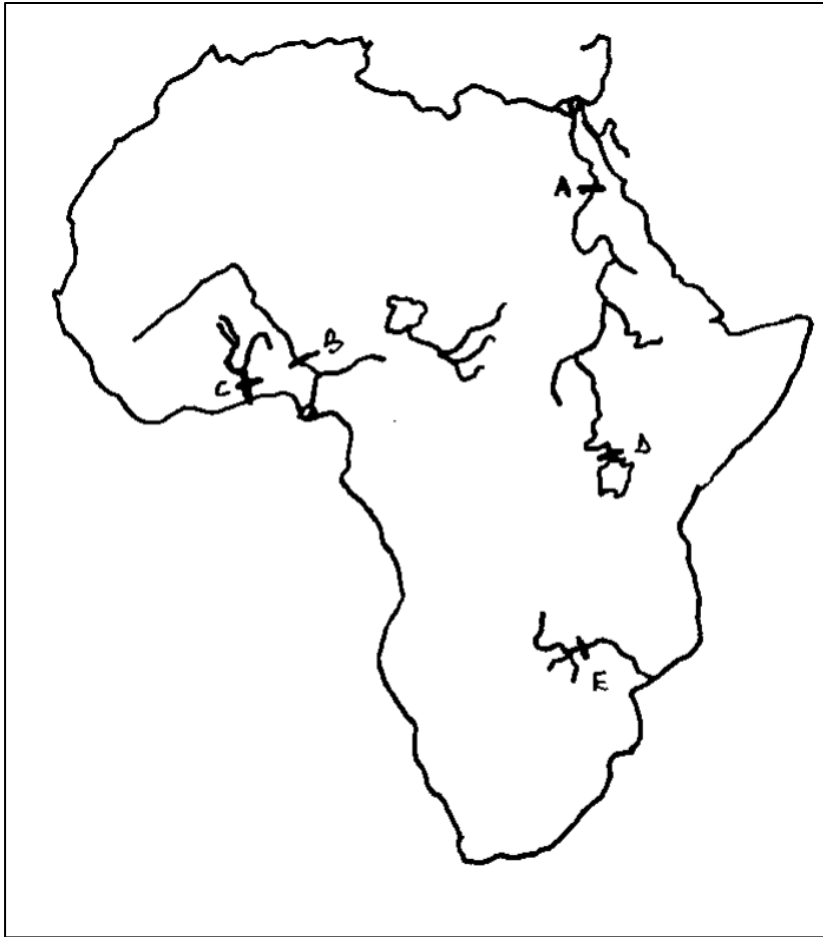
GEOGRAPHY PAPER 2

AUGUST 2023

SECTION A

Answer All Questions in this Section

1. a) What is domestic tourism? (2 Marks)
- b) State **three** factors that hinder domestic tourism in Kenya. (3 Marks)
2. a) Differentiate between visible trade and invisible trade (2 Marks)
- b) State **three** benefits that Kenya will get from the renewal of East African cooperation. (3 Marks)
3. a) What is a polder ? (2 Marks)
- b) List **three** benefits of the Zuyder Zee project. (3 Marks)
4. State **four** efforts that the Kenya government is doing to reduce infant mortality (4 Marks)
5. a) State **two** advantages of using solar energy. (2 Marks)
- b) Study the Map of Africa provided to answer the question that follows. Name the hydroelectric power stations marked A, B, C, and D. (4 Marks)



SECTION B

Answer question **6 compulsory** and **any other 2** questions

6. Study the photograph below and use it to answer question (a).



- (a) (i) Identify the type of photograph shown above. (1 Mark)
- (ii) Describe the characteristics of the forest shown on the photograph. (4 Marks)
- (b) Draw a rectangle measuring 15 cm by 10 cm. On it, sketch and label **five** main features shown on

- the photograph. (5 Marks)
- (c) (i) Name **two** indigenous softwood tree species in Kenya. (2 Marks)
(ii) Explain **three** problems facing forestry in Kenya. (6 Marks)
(iii) State **three** factors favouring the development of softwood forests in Canada. (3 Marks)
- (d) Give **four** differences between softwood forests in Kenya and Canada. (4 Marks)
7. a) i) What is a fossil fuel? (2 Marks)
ii) List two fossil fuels that have recently been discovered in Kenya (2 Marks)
iii) State **three** formations in which mineral ore occurs. (3 Marks)
- b) Explain how the following factors influence mining
i) Value of the mineral (2 Marks)
ii) Transport (2 Marks)
- c) i) Describe how solution mining method is carried out. (5 Marks)
ii) Give **three** negative effects of mining to the environment. (3 Marks)
- d) i) Name two areas where diamond is mined in South Africa (2 Marks)
ii) Describe how diamond is processed (4 Marks)
8. a) i) Name **two** counties where coffee is grown in Kenya. (2 Marks)
ii) State **four** physical factors that favour coffee growing in Kenya (4 Marks)
- b) Describe the stages involved in coffee production from picking to marketing (6 Marks)
- c) i) Define the term 'dairy cattle farming' (2 Marks)
ii) Name **three** main breeds of dairy cattle reared in Kenya (3 Marks)
- d) Compare dairy farming in Kenya and Denmark under the following sub-heading. (8 Marks)
i) Mechanization
ii) Grazing practice
iii) Milk processing
iv) Transportation of milk
9. a) i) What is urbanization? (2 Marks)
ii) Outline **four** functional zones of an ideal urban centre. (4 Marks)
- b) State any **three** reasons that might lead to the development of nucleated settlement patterns. (3 Marks)
- c) i) State **four** factors that have favoured the rapid growth of Thika town as an industrial centre. (4 Marks)
ii) State any **four** functions of New York City. (4 Marks)
- d) Explain **four** problems facing urban centres in Kenya. (8 Marks)
10. a) i) What is Environmental conservation. (2 Marks)
ii) Name **four** environmental hazards. (4 Marks)
- b) You have recently been appointed the chief Environmental protection officer in Country of Nyeri. Outline **four** programmes you would initiate for the country to achieve its objectives of a clean Environment. (4 Marks)
- c) (i) Identify **four** measures that the government of Kenya has taken to control floods. (4 Marks)
(ii) Give **three** reasons you should conserve your environment. (3 Marks)
- d) Your Geography class undertook a field study on environmental pollution in a major urban centre in Kenya.
(i) Name **three** types of pollution that you may have observed. (3 Marks)
(ii) Give **three** effects of pollution you may have identified. (3 Marks)
(iii) Give **two** methods of collecting data you may have used. (2 Marks)