

OPENER EXAMINATION: TERM 1 2024
TIME: 2 HOURS
FORM 3
GEOGRAPHY

MARKING SCHEME

INSTRUCTIONS.

Answer all questions in the space provided.

1. a) Identify two types of environment. (2mks)
 - *The physical environment.*
 - *The human environment*
- b) Give three areas of study of Human Geography. (3mks)
 - *Forestry*
 - *Wildlife, tourism and fishing*
 - *Mining, energy and industries.*
 - *Trade, transport and communication*
 - *Agriculture*
2. a) The diagram below shows the internal structure of the earth. (3mks)



- i) Name the part marked G, H,I (3mks)
 - G – *continental crust*
 - H – *Inner core*
 - I – *Outer mantel*
- ii) State three characteristics of mantel. (3mks)
 - *Mantel is made up of two parts the upper mantle and inner mantle.*
 - *Mantel is composed mainly of silicate rock.*
 - *Mantel has high density of 3.0-3.3g/cm³.*
 - *The mantel has high temperature of 300^oC.*
3. a) What is a weather station? (2mks)
 - *This is a place where the element of weather are observed, measured and recorded.*
- i) State four factors for sitting a weather station. (4mks)
 - *It should be located in open space.*

- *It should be far from tall objects such as buildings and vegetations.*
 - *The site should be relatively flat and free from flooding.*
 - *The site should be secure.*
- ii) Differentiate between positive lapse rate and negative lapse rate. (2mks)
- *Positive lapse rate is where temperature decrease with increase in altitude while negative lapse rate is where temperature increase with increase in altitude.*

4. a) i) Define the term scale. (2mks)
- *The scale is the ratio between distance on the map and the distance on the actual ground.*

- ii) Convert 1:100000 into statement scale. (2mks)

- *If 1km = 100,000cm*

$$? = 100,000$$

$$\frac{1\text{km} \times 10,000}{100,000}$$

$$= 1\text{km}$$

In statement 1cm represent 1km

5. Students of Nyandarua High school intend to conduct a field study in a market near their school.

- a) State three objectives they would formulate for their study. (3mks)

- *To find out the reasons why the market was located where it is today.*
- *To identify the level of education of the sellers.*
- *To find out where the buyers in the market came from.*

- ii) What are the major methods of data recording they would use? (4mks)

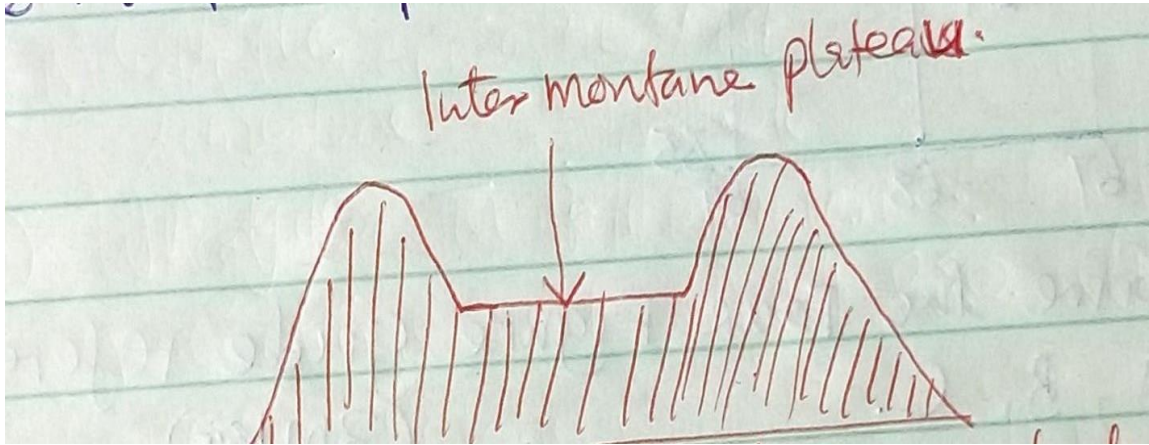
- *Field sketching*
- *Taking photographs*
- *Tallying*
- *Tape recording*
- *Taking notes*
- *Filling in questionnaire.*

- iii) Give ways in which they will present data collected. (3mks)

- *Drawing graphs and charts.*
- *Drawing sketch maps*
- *Displaying completed questionnaire*
- *Playing tapes*
- *Writing a report*
- *Giving a lecture*

6. a) What are metamorphic rocks? (2mks)
- ***Metamorphic rocks are rocks formed within the earth crust by transformation in the solid state, of pre-existing rocks as a result of high temperature and high pressure or both.***
- b) Give three examples of metamorphic rocks and their original rocks. (6mks)
- ***Granite gneiss***
 - ***Sandstone quartate***
 - ***Claystone slate***
 - ***Shale Schist***
 - ***Limestone Marble***
 - ***Augite horbblende***
- c) Outline three underground mining methods. (3mks)
- ***Drift or adit method***
 - ***Shaft method***
 - ***Solution method***
 - ***Drilling method***
7. a) i) Define the term folding. (2mks)
- ***Folding is the process in which crustal rocks are distorted by compressional forces by being caused to bend upwards or downwards.***
- iii) Outline four types of folds. (4mks)
- ***Simple symmetrical fold***
 - ***Asymmetric fold***
 - ***Overfold***
 - ***Isoclinal folds***
 - ***Recumbent fold***
 - ***Nappe fold***
 - ***Anticlinorium and synchiorium complex***

b) With a well labeled diagram describe how inter-montane plateaus is formed. (5mks)

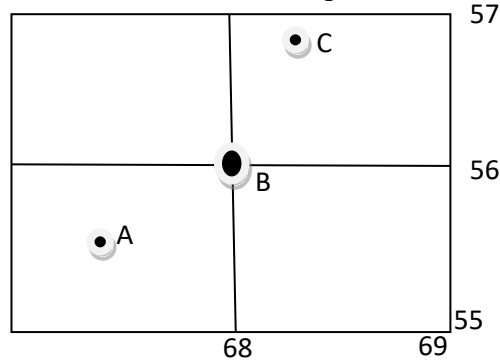


- *Is a high fairly level and between mountain.*
- *It is formed when rocks at the edge of a region become intensely folded and the middle parts resist folding resulting into mountains which enclose a high fairly level land.*

c) State the significance of folding to human activities. (6mks)

- *Fold mountains are tourist attraction which brings foreign exchange.*
- *Fold mountain are water catchment areas and sources of rivers.*
- *Some fold mountains have valuable minerals deposits for sale.*
- *Fold mountains act as protective barrier during war.*
- *Some fold mountain form windward side to receive heavy rainfall.*

8. Study the grid squares below and answer the questions that follows.



a) i) Give the four figure grid reference of A,B,C (3mks)

- A - 6755*
- B - 6855*
- C - 6856*

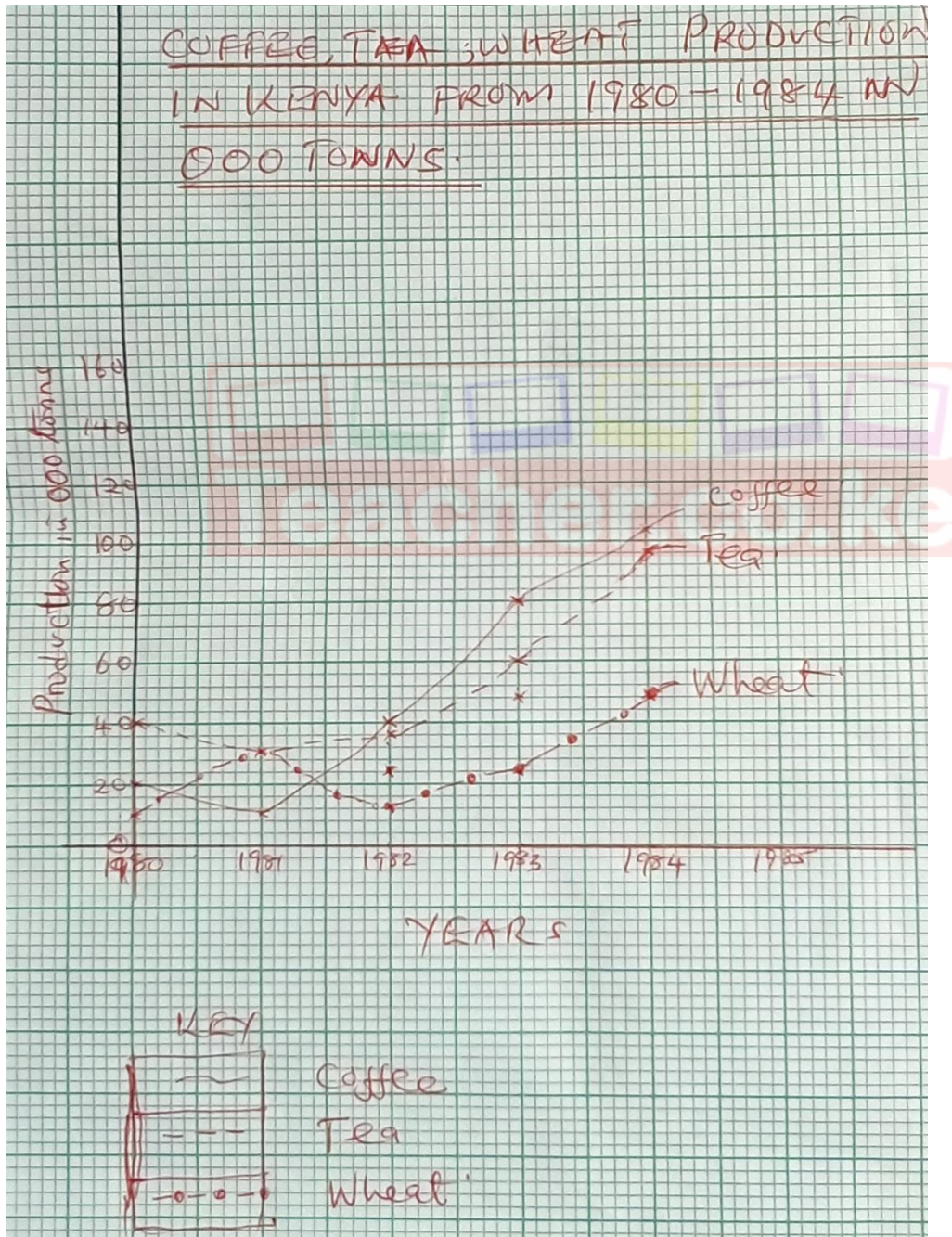
ii) Give the six figure grid references of A and B. (2mks)

- *A - 675556*
- *B - 68056*

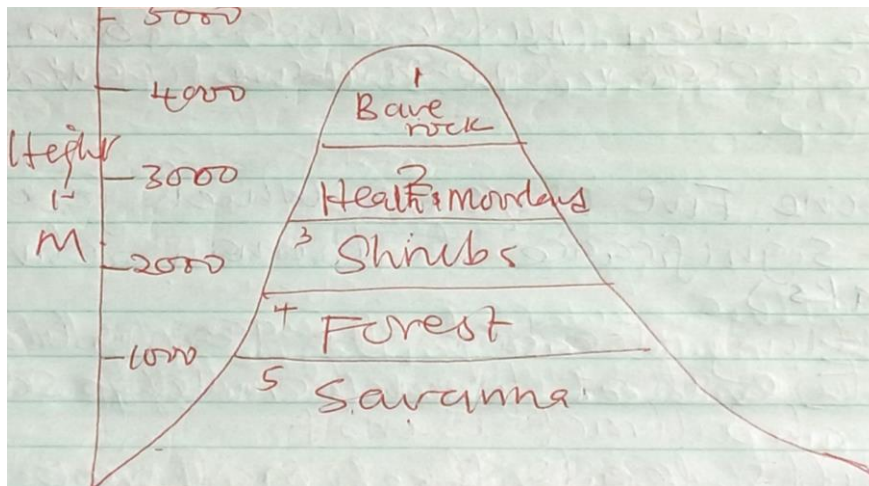
9. The table below shows the productions of three crops in Kenya from 1980-1984 in 000 tonnes. Use it to answer questions that follow.

	1980	1981	1982	1983	1984
Coffee	20	10	40	80	105
Tea	40	30	35	60	90
Wheat	10	30	15	25	15

- (a) Use the data above draw a comparative line graph to represent the data. Use scale of 1cm rep 10,000 tonnes. (7mks)



- ii) State three advantages of comparative line graph. (3mks)
- *One is able to make comparison of the items very easily.*
 - *It is easy to draw since they do not involve many calculations.*
 - *They are easy to interpret.*
- ii) State three disadvantages of comparative line graph. (3mks)
- *Number of item which are represented are limited.*
 - *Total amount of valuable cant be established at a glance.*
 - *Crossing of line may make interpret and comparison difficult and confusing.*
10. a) Give two areas that experiences equatorial climate. (2mks)
- *Amazon bas in S. America*
 - *Coast of Africa from Guinea to*
 - *Southern part of Nigeria*
 - *S.E. Asia in Malaysia*
- ii) State four characteristics of Equatorial climate. (4mks)
- *High temperature throughout the year.*
 - *Heavy rainfall throughout the year*
 - *Experience convectional rainfall.*
 - *High relative humidity.*
 - *Low pressure all year round.*
- a) Outline types of temperate grassland and areas it is found in the world. (5mks)
- *The prairies – U.S.A – Canadian province*
 - *The steppes Eurasia*
 - *The pampas – Argentina*
 - *The veldt – S. Africa*
 - *The Down - Australia*
- ii) Study the diagram below and answer questions that follow.



Name the vegetation type marked A,B,C,D. (4mks)

A – *Heath and moorland*

B – *Bamboo forest*

C – *Temperature forest*

D – *Rain forest*

iii) State four significance of vegetation. (4mks)

- *Forest adds beauty to country's landscape.*
- *Vegetation protects soil from erosion by wind and rain water.*
- *Vegetation partly decay to form humus making the soil fertile.*
- *Some plants roots barks and leaves are used for medicine.*
- *Forest modify the climate of the surrounding area by increasing rainfall and reducing temperature.*

11. a) Define the term forestry. (2mks)

- *Forestry is the science of developing and managing forests including cultivating them.*

b) Explain how the following factors influencing type and distribution of forests.

i) Temperature (2mks)

- *High temperature causes fast growth of trees while low temperature causes slow growth.*

ii) Precipitations (2mks)

- *There are dense forest where there is heavy precipitation while there is less forest cover in areas with little precipitation.*

b) State three problems facing forestry in Kenya. (3mks)

- *Encouragement by people by clearing them for agriculture and settlement.*
- *Destruction especially young trees by herbivorous wild animals such as elephant.*
- *Destruction of huge tracks of forests by fire.*
- *Pests and diseases outbreak which can result in destruction of forest.*

