1. INTRODUCTION TO GEOGRAPHY

The topic entails:

- ***(i) Definition of Geography and Environment***
- ***(ii) Description of the branches of Geography***
- (iii)***Explaining the importance of studying Geogrpahy and its relationship with other disciplines***.

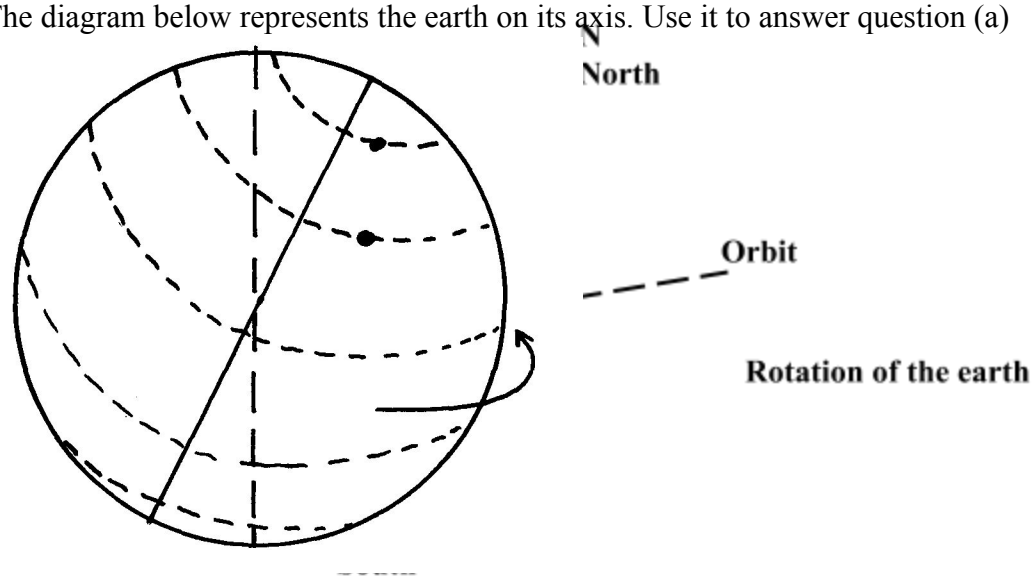
1. Explain why the study of Geography is beneficial in the management and conservation of the environment.

2. THE EARTH AND THE SOLAR SYSTEM

The topic entails:

- ***(i) Definition of Solar System.***
- ***(ii) Explaining the origin of the earth***
- ***(iii) Explaining the effects of rotation and revolution of the earth.***
- ***(iv) Description of the structure of the earth***

1. The diagram below represents the earth on its axis. Use it to answer question (a)



a) i) Name the latitude marked **G**

ii) What is the angle of inclination of the earth's axis from its orbit

b) i) State **two** effects of the rotation of the earth

ii) When the local time is 2.00 p.m at longitude 45°E, what is the longitude of a place whose local time is 10.30 a.m

c) Name **two** local winds experience around lake Victoria region

2. The table below represents rainfall and temperature figure for a town in Kenya .Use it to answer the questions that follow:-

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
Temp (°C)	27	28	28	28	27	25	25	24	25	26	27	26
Rainfall(mm)	25	38	99	140	277	439	277	69	142	201	71	25

a)i) calculate the annual range of temperature for the town

ii) Calculate the total annual rainfall for the town (1mk)

b) State **three** characteristics of the climate experience in the town

3. a) What is a solstice

b) State **three** effects of the revolution of the earth

4. (a) (i) Give **two** theories that explain the evolution of the solar system and the origin of the earth

(ii) Identify the force that causes the earth to bulge at the equator

(b) Give **two** reasons that support the belief that the interior of the earth is very hot

5. a) State **two** theories that are used to explain the origin of the earth

b) What is solar "system"?

6 a). Name **two** planets without natural satellites in the solar system

(b) (i) What is a time zone?

(ii) Give the reason why the International Date Line is significant. (2mks)

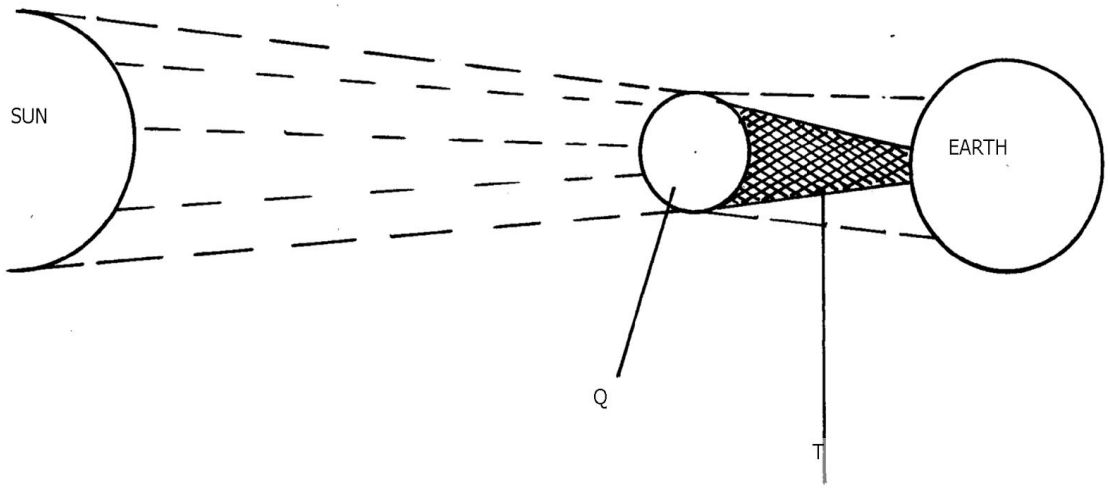
(c) State any **two** characteristics of Latitudes.

7. (a) What is the solar system

(b) Give **three** reasons why the interior of the earth is very hot

8. (a) The diagram below represents an eclipse. Use it to answer the following questions:

(i) Name the type of eclipse



(ii) Identify the parts marked **Q** and **T**

(b) State **three** effects of the rotation of the earth

9. a) State **three** reasons why the interior of the earth is known to be very hot

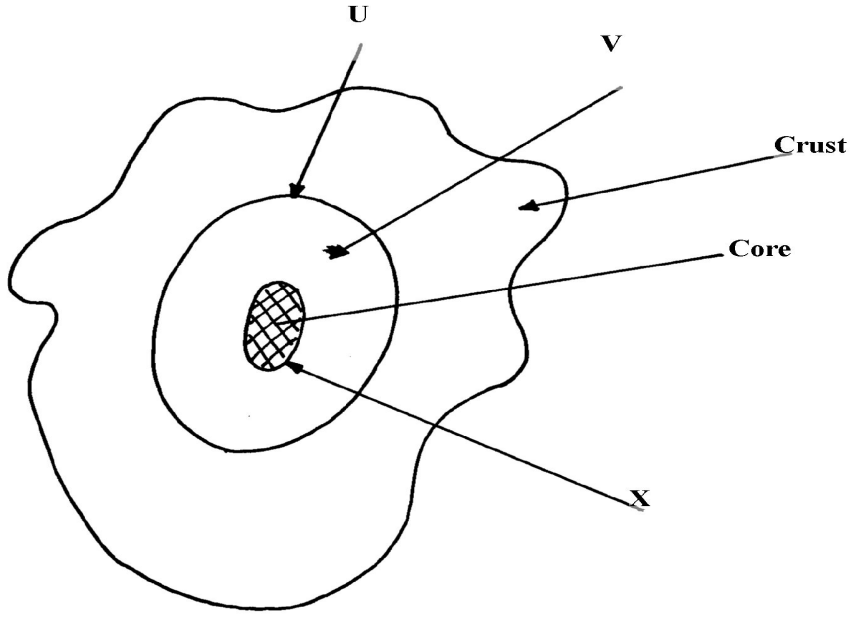
b) Give **two** effects of the elliptical shape of the earth

10. (a) (i)What is an equinoxal date?

(ii) Name **two** equinoxal dates

(iii) State **two** changes caused by the earth's revolution around the sun

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



a)Name the arts named u, v and x

b) Describe the characteristics of

i)Crust ii) Core

3. WEATHER AND CLIMATE

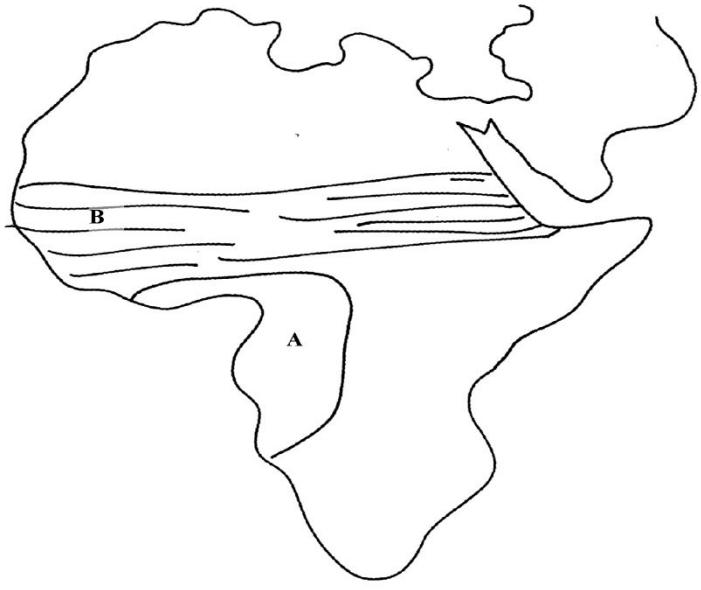
The topic entails:-

- ***(i) Defining weather and stating its elements***
- ***(ii) Explaining conditions necessary for siting a weather station.***
- ***(iii) Use instruments to measure elements of weather***
- ***(iv) Analyse and interpret data on weather conditions***
- ***(v) Description of the structure and composition of the atmosphere***
- ***(vi) Explain factors influencing weather***
- ***(vii) Carrying out a field study on weather station***
- ***(viii) Distinguish between weather and climate***
- ***(ix) Explain the factors that influence climate***
- ***(x) Description of the characteristics of the climatic regions of Kenya.***
- ***(xi) Description of characteristics of major climatic regions of the World.***
- ***(xii) Accounting for the causes of aridity and desertification***

(xiii) Explaining the effects and possible solutions to aridity and desertification

(xiv) Discussing the causes and impact of climate change on physical and human environment

1. State **three** causes of desertification.
2. a)i) Differentiate the term aridity and desertification
   ii) Differentiate between weather and climate
   b) State **two** causes of temperature inversion
   c) Explain the occurrence of a land breeze
3. a) Give **three** characteristics of the inter- tropical convergence zone
   b) (i) State **three** natural causes of climate change
   ii) Explain **four** consequences of climate change on the physical environment
   c) Give four reasons why some areas within the equatorial belt do not experience true equatorial climate
4. (a) Describe the climatic conditions experienced in the Kenya highlands
   (b) Explain **four** effects of folding to human activities
5. (a) Distinguish between **weather** and **climate**
   (b) State **six** characteristics of equatorial climate
6. (a) Explain how the following factors influence climate:
   (i) Ocean currents
   (ii) Altitude
   (b) Study the map of Africa below and answer the following questions:



(i) Describe the characteristics of climate marked **A.**

7. (a) State **three** conditions necessary for the formation of dew
   (b) State **two** climatic reasons why the government should evict settlers from the Mau forest complex in the Rift valley of Kenya
8. (a) (i) What is a fog?

(ii) State any **two** conditions necessary for the formation of fog.

(b) Name any **two** isothermic layers of the atmosphere.

9. (a) What is an air mass?

(b) Give **two** climatic characteristics of the Inter-Tropical Convergence Zone (ITCZ)

10. (a) Describe **two** characteristics of a mountain climate

(b) (i) State **two** human causes of climate change

(ii) Explain **three** consequences of climate change

(c) Four classes intend to visit a weather station near your school to study the instruments for measuring weather element:-

(i) Describe how you would use a rain gauge to measure rainfall

(ii) Name **two** instruments you would find inside a Stevenson screen

11. a) What do you understand by:

i) Micro- climate

ii) Green house effect

b) Name **two** weather recording instruments that are placed in a Stevenson's screen

12. (a) What is an air mass?

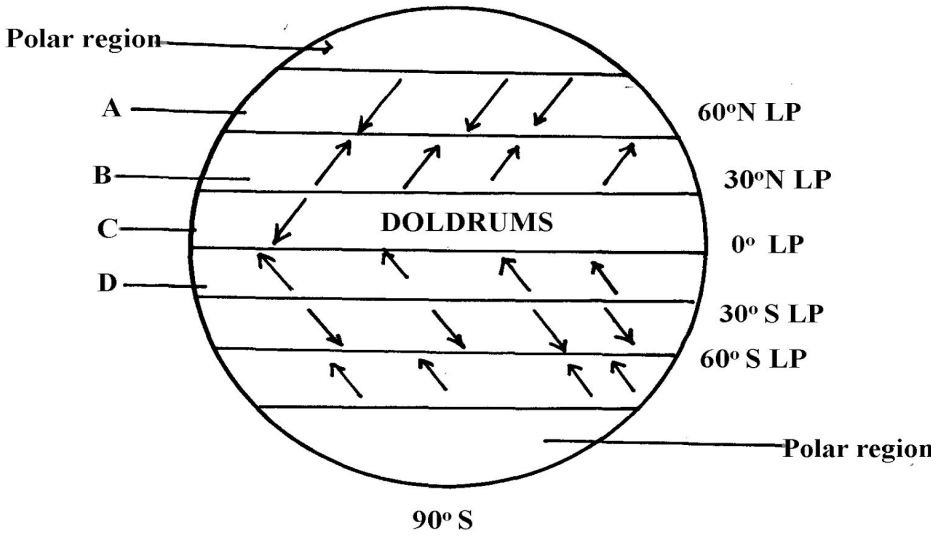
(b) What two conditions favour formation of air mass?

13. (a) What is the Inter-tropical convergence Zone?

(b) Account for any **four** characteristics of tropical rainforests.

14. (a) What is an air mass?

(b)Study the diagram below and name the air masses marked **A, B , C** and **D**



Key

LP- Low Pressure

HP- High Pressure

15 (a) (i) What is global warming?

(ii) Give any **four** causes of climate change.

(iii) Name **four** Green house gases

(b)(i) Explain **five** effects of climate change

(ii) Identify with evidence **two** climatic aspects that could have influenced the distribution of vegetation

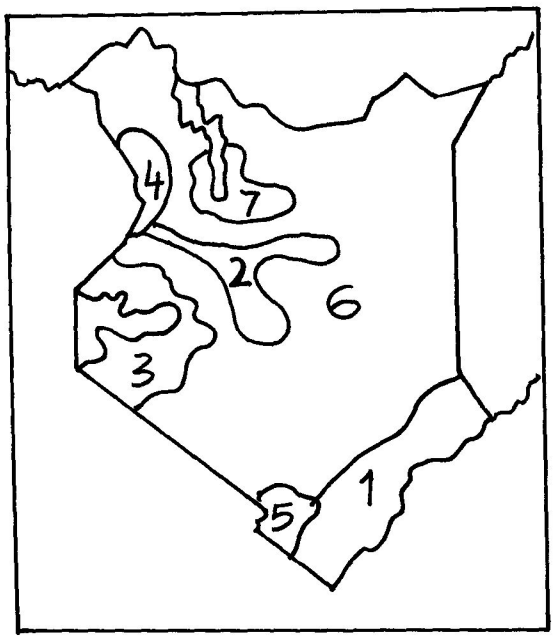
16. (a Differentiate between:

(i) Aridity and desertification

(b) Give **three** reasons why the recording of weather data at a weather station may be inaccurate

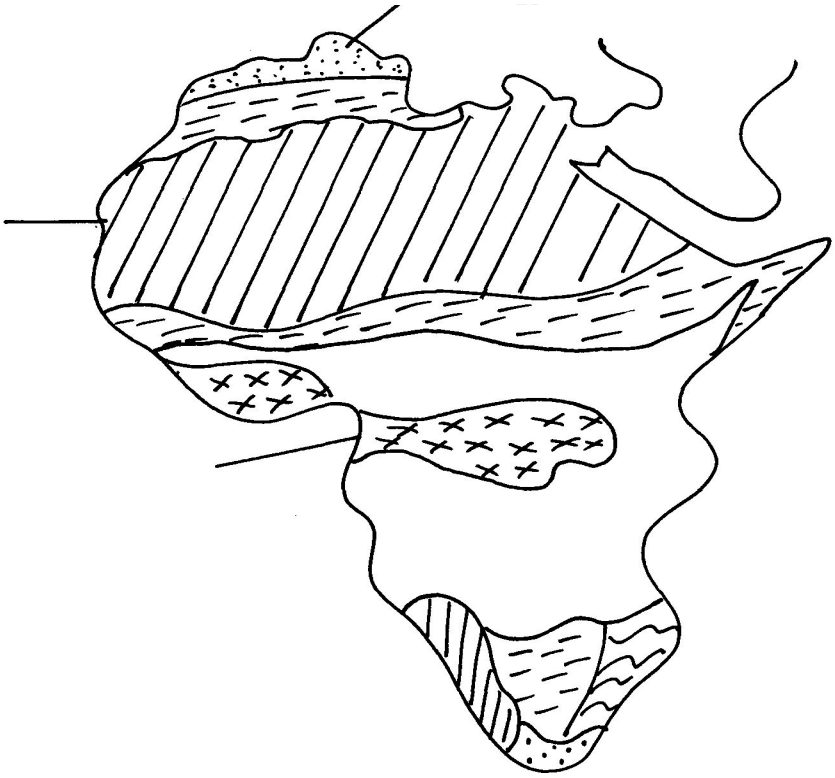
(c) State **two** qualities that makes Stevenson screen suitable for its work

17. The map below shows the climatic regions of Kenya
(a) Use it to answer the question **a** and **b**



. (a) Name the climatic region name **2** and **3**
(b) State **three** characteristics of climatic region marked 7

18. The map of Africa below shows the different climatic regions of Africa. Use it to answer question 18.(a).



a)i)Identify the climatic types marked **X** and **Y**
ii) Name any **four** characteristics of the climate marked Z
b) i) Briefly explain the green house effect and the global warming
ii) Explain **three** effects of climatic change on the physical environment
c) Explain how the following factors influence climate
i) Altitude
ii) Continentality
iii) Ocean currents

4. STATISTICAL METHODS

The topic entails:-

(i) Defining statistics
(ii) Identifying types and sources of statistical data
(iii) Identifying and describing methods of collecting and recording data.
(iv) Analysis, interpretation and presentation of statistical data using appropriate graphical methods.
(v) Explaining the advantages of each method of data presentation.

1. Study the table below and answer questions that follow:-

CROP	**1978**	**1979**	**1980**	**1981**	**1982**
COFFEE	1000	990	870	830	840
TEA	750	700	650	700	600
PYRETHRU	300	250	350	400	450
M	500	450	550	600	350
MAIZE					

(a) (i) Using 1cm to represent 500 tons, draw a compound bar graph to represent the data.

(ii) Give **two** disadvantages of using the method to represent statistical data.

2. The table below shows leading import crops by value (Kshs. Million). Use is to answer questions a – c

	CROP			
Year	**Un milled wheat**	**Maize**	**Rice**	**Wheat flour**
2000	6,989	4,664	1,968	180

2001	7,515	3,342	2,619	639
2002	5,577	229	2,104	237
2003	6,099	1,417	2,981	168
2004	6,754	4,647	3,659	200

(a) (i) Using a scale of 1cm represents 100,000 , draw a comparative bar graph to represent

the data in the table above

(ii) Give **three** advantages of suing comparative bar graphs

(b) Explain **three** reasons why Kenya is a producer of the commodities shown in the table

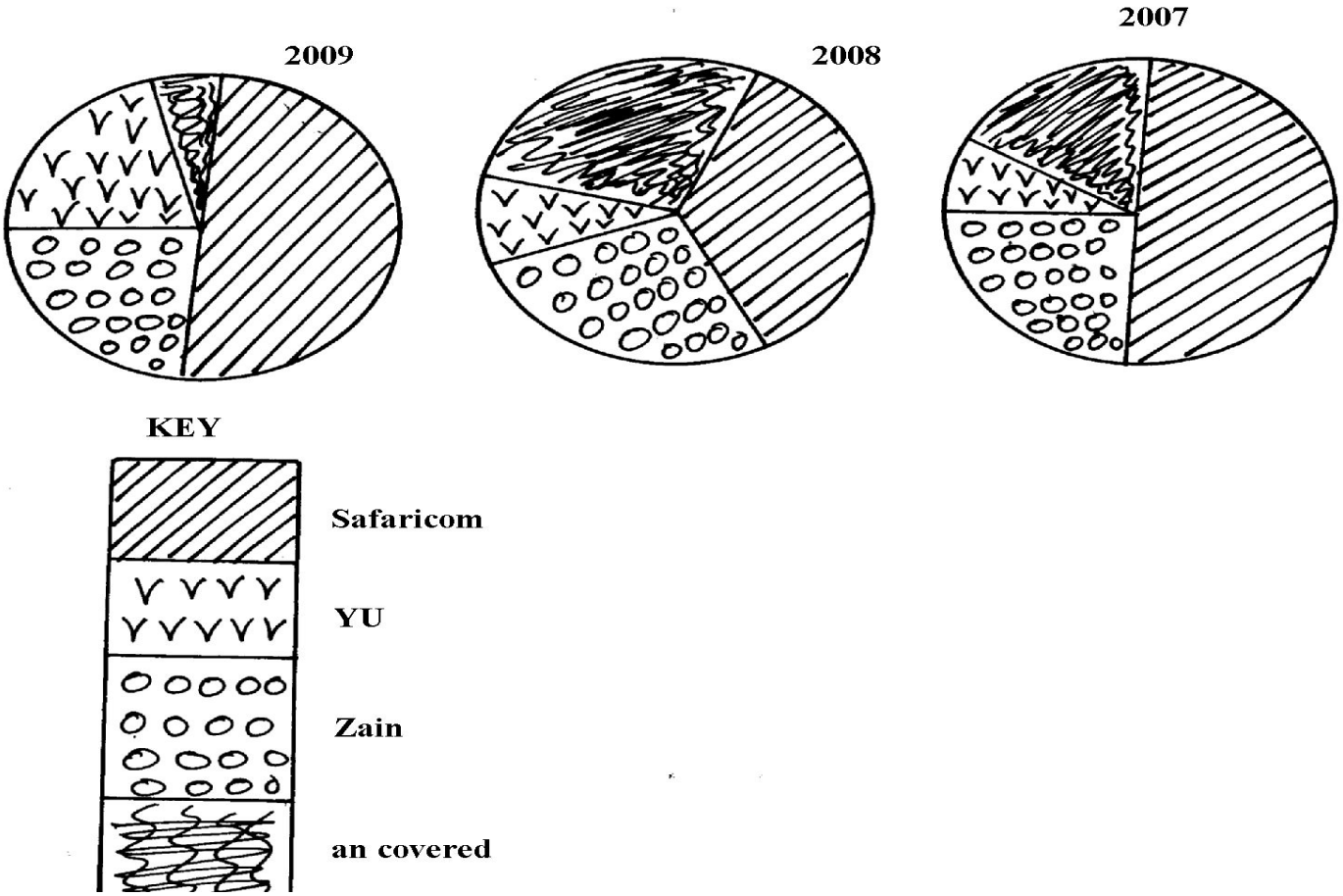
above yet she imports the same

3. The table below shows milk production in '000 units in selected Districts

District	1982	1992	2002
Trans nzoia	24	26	40
Kiambu	23	25	31
Meru	25	27	32
Bungoma	12	14	20

a) i) Using a vertical scale of 1 centimeter to represent 10,000 units, draw a compound bar graph to represent the above given data

4. Study the figure below and use it to answer question 6. The figure depicts proportional



divided circles showing the extend of network coverage in Kenya between 2007 and 2009

Uncovered

a) i) State **four** deductions that can be made from the above representation
ii)State **three** advantages of using proportional circles in representing data

5. The table below shows four principal crops produced in Kenya in the years 2000 and 2001.

Use it to answer questions.

CROP AMOUNT IN METRIC TONS

YEAR	2000	2001
Wheat	70,000	13,000
Maize	200,000	370,000
Coffee	98,000	55,000
Tea	240,000	295,00

(a) (i) Using a radius of 5 cm, draw a pie chart to represent crop production in the year 2000.

(ii) State **two** advantages of using pie charts.

(b) Calculate the percentage increase in wheat production between the years 2000 and 2001.

6. Study the data given and use it to draw a pie chart showing mineral production in Kenya;

Mineral	**Amount (000 tonnes)**
Gold	26
Flouspar	14
Soda ash	32
Zink	28

(a) Using a radius of 5cm, draw a pie chart to represent the above data
(b) List **three** advantages of using a pie chart in representing data

5. MAPS AND MAP WORK

The topic entails:

- ***(i) Definition of pictures, Plans and maps***
- ***(ii) Explaining the relationship between pictures, plans and maps***
- ***(iii) Identifying types of maps and stating their uses.***
- ***(iv) Identifying and use of marginal information on maps***
- ***(v) Identifying types and uses of scales***
- ***(vi) Determining distances and areas using scales***
- ***(vii) Distinguishing direction and bearing***
- ***(viii) Identifying traditional and modern methods of locating places and features***
- ***(ix) Locating places and features on maps using various methods.***
- ***(x) Description of different methods of representing relief on topographical maps.***
- ***(xi) Enlargement and reduction of topographical maps***
- ***(xii) Drawing cross-section from topographical maps***
- ***(xiii) Calculation and interpretation of vertical exaggeration and gradient***
- ***(xiv) Determination of indivisibility.***

1. (a) Identify **any two** adjoined map sheets to the area covered by the map

(b) (i) Give **two** features of the map which shows that the area to the south east of the area covered by the map receives high amount of rainfall(cite evidence)

(ii) Name **two** physical features found in grid square 4548

(c) (i) Reduce by a half the area covered by easting 23 to 30 and northing 47 to 53

(ii) On the reduced area mark and label the following:-

All weather road loose surface

District boundary

(d) (i) Describe the drainage of the area covered by the map to the south of northing 50

(ii) Citing evidence from the map give **three** economic activities carried out in the area covered by the map

2. (a) (ii) What is the **latitudinal** and **longitudinal** location of shopping centre at grid square 5863

(ii) Name the continuous man made feature along Road B1

(b) (i) Apart from spot height, give **two** other methods which have been used to show relief on the map

(ii) Measure the length of the road D313 between Northing 68 and Northing 70. Give your answer in kilometers

(iii) Calculate the bearing of the culvert in grid square 6066 from river confluence in grid square 6269

3. (a) (i) Draw a cross-section along Easting 67 from Northing 67 to Northing 71. (Use a vertical scale of 1cm rep. 80m)

On the cross section you have drawn, mark and name:

- Hill
- Pass

- Road D313

(ii) Calculate the vertical exaggeration of the cross section you have drawn

4. Study the map of Belgut 1:50,000 (sheet 117/3) provided and answer the following questions

a)i)Give the general direction of the flow of river Itare

ii) What is the bearing of a trigonometrical station 117S 13 at grid reference 443512 from

a tea nursery found at grid reference 443447?

iii) Name **two** types of trigonometrical station that have been used to show the relief in the area covered by the map

iv) Calculate the area that s found on the western side of river Sondo. Give answers in meters

b)i) Using a vertical scale of 1cm to represent 100 meters draw a cross-section from grid reference 260520 to grid reference 340520

ii) On the cross-section, mark and label the following

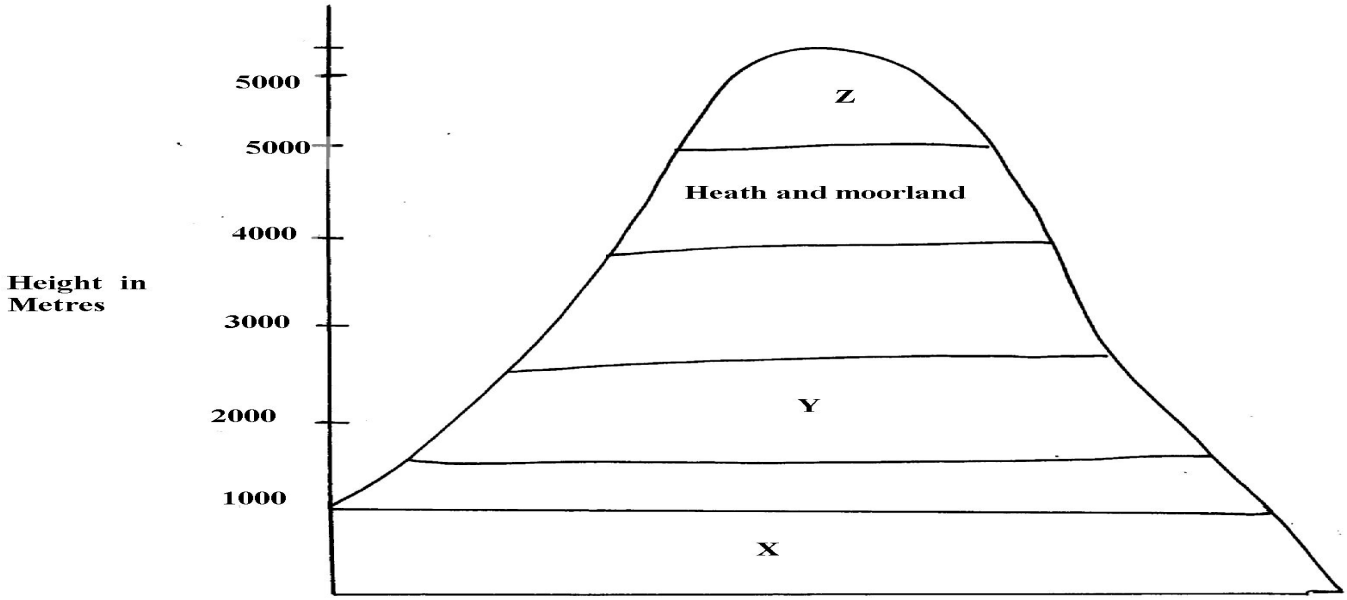
- A hill
- A provincial boundary
- All weather road, loose surface
- Riverine trees

iii) Calculate the vertical exaggeration of the cross-section

c) Students from Chemamul School set out to carry out field work in the area of Belgut

i) With evidence, name **two** crops they found being grown in the area

Use the diagram below to answer questions 5



5. (a) Name the vegetation types marked **X** and **Y**

(b) Give **two** reasons for the absence of vegetation at **Z**

(c) Name any o**ne** part in Kenya represented by this diagram

6. Use the map of Kericho (1:50,000) to answer the questions

Study the map of Belgut 1: 50000 (sheet 117/3) provided and answer the following questions

. (a) (i) What is the height of the highest contour in the area covered by the map?

(ii) Give the longitudinal extent of the area covered by the map.

(iii) Calculate the area of the part of Kisii district shown on the map.

(iv) What is the six figure grid reference of the junction at Marumbasi?

(b) (i) Draw a rectangle 10cm by 14cm to represent the area between easting 30 and 40

(ii) On the rectangle mark and name the following:-

- A plantation
- River Yurith
- A seasonal swamp
- The bridge at Kabirigut

(iii) Calculate the new scale of your reduction

(c) Describe **three** ways in which physical factors have influenced the construction of all weather roads in the area.

(d) (i) Citing evidence from the map, explain **three** factors that favour the growing of tea in Belgut.

(ii) With evidence from the map name any other crop grown in the area other than tea.

7. Study the map of Belgut: 1:50000 (sheet 117/3) provided and answer the following questions

. a) i) Convert the scale of the map into statement scale

ii) Give the longitudinal extend of the area covered by the map

iii) Calculate the bearing of the posho mill at Kiptule from the spot height at Kiptere

b) Apart from forests name other vegetation types in the area covered by the map

c)i) Draw a rectangle measuring 15cm by 8cm o represent the area south of northing 50 and

West of easting 30. On the rectangle mark

- River Sondo
- Coffee mill
- All weather road loose surface
- Wood land

ii) Describe the drainage of the area covered by the map

d) What factors on the map can promote trading activity

8. Study the topographic map of Belgut provided and use it to answer this question

(a) (i) Name the **two** provinces covered in the area by the map

(ii) What is the general direction of Ikamu school from Chemamul school?

(iii) Write the **six** figure grid reference of the Posho Mill at Kiptule

(b) (i) Measure the distance of all weather road (bound surface) from Kapsuser shops to its ends in the North-East to Kericho. Give your answer in Kilometers

(ii) Identify **two** methods used in the map to locate places

(iii) Name **three** types of natural vegetation found in the area

(iv) Citing evidence from the map, name three agricultural activities carried out in Belgut area

(c) Citing evidence from the map, explain three physical factors which have influenced settlement in the area

(d) Describe the drainage of the area covered y the map

9. a i) What type of map is Belgut sheet?

ii) Give **two** methods used in representing relief on the map extract.

b i) What is the length of the Murram road from Marumbasi to Kiptere Sunchen (Give your answer in Km)

ii) Name the main crop planted under plantation from the map

c i) Explain how relief has influenced settlement in the area covered by the Map

ii) Citing evidence from the map, give two social – economic activities carried out in the area covered by the map.

d i) Using a vertical scale of 1 cm to represent 100 metres, draw a cross section from the East 440000 to easting 500000 on the cross section label:

- Road
- River
- Forest

10. Study the map of BELGUT 1:50,000 provided and answer the following questions

a)i) Give the longitudinal extent of the area covered by the map

ii) Convert the scale of the map into a statement scale

iii) Name **two** methods that have been used to represent relief on the map

b) i) Draw a cross-section between grid references 29050 and 33050. Use scale of 1cm to represent 20 meters

ii) On the cross-section Mark and name:.
- papyrus swamp
- All weather road loose surface

iii) Calculate the vertical exaggeration

11. a) Describe the drainage of the area covered by the map
b) Citing evidence from the map, give **three** economic activities carried out in the area covered by the map
c) State **two** functions of the tea factory to the population around.
d) Give **three** reasons to show the area covered in the map receives high rainfall. The evidence should be deducted from the map

12. Study the map of **Belgut** 1:50,000(sheet 117/3) provided and answer the following questions
(a) (i) What type of a map is Belgut ?
(ii) Give the grid square in which Matongo school is found
(iii) Calculate the area enclosed by Kendu-Kisii, all weather roads (bound surface) to the West of the map
(iv) Citing evidence from the map, identify **four** social activities taking place in the map
(b) (i) Draw a cross-section along Northings 54 between Eastings 26 to 32. Use vertical scale of 1cm to represent 20m. On it mark and name:-
(I) River
(II) Loose surface road
(III) Swamp
(ii) Calculate the vertical exaggeration
(c) Describe the drainage of the area covered by the map
(d) Citing evidence from the map, explain **two** conditions that favour cattle rearing in the area covered by the map

13. Study the map of Kericho (1:50,000) sheet 117/4 provided and answer the following questions
(a) i) What is the bearing of the secondary trigometrica station 2173 around Kapcheptoror school form the dry weather road junction at Kipchimchim school
(ii) Give a six-figure grid reference of the trigometrical station (other) 1811 near Poiywek school
(iii) Convert the scale of the map into a statement scale
(iv) Using liens of latitudes and longitudes give the position of Keongo school at gird square 5662
(v) Give **two** methods used in representing relief in the are covered by the map
(b) Citing evidence from the map, state:-
(i) Two social functions of Kericho Municipality
(ii) Two economic activities carried out in the area covered by the map

(c) Using a vertical scale 1cm represents 20m

(i) Draw a cross section form grid reference 550640 to 590660

(ii) On the cross-section, mark and name the following:-

- A river
- Dry weather road
- A hill

(d) Describe the drainage of the are covered by the map

14. Study the map of Belgut (117/3) provided and answer the questions that follow:

(a) Identify **two** provinces covered by the map of Belgut

(b) (i)Using a vertical scale 1cm represents 50m, draw a cross section from grid reference 260590 to 330560. on it mark and name;

- All weather loose surface roads
- Marshes
- River

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

(iii) What type of map is Belgut?

15. Study the map of **BELGUT (1:50000 sheet 117/3)** provided and answer the questions below:

a)i) Give the six figure grid references of the confluence of the river Itare and river Kitoi.

ii) Measure the length in kilometers of all weather roads loose surface from the junction at grid square 3957 to the junction at Kipmaso grid square 3751.

iii) Give the name to the adjoining sheet found in the North East of Belgut .

b) i) What is the longitudinal extent of the area covered by the map?

ii) What is the approximate height of the school at kiptere grid square 3658?

c) i) Describe the drainage of the area covered by the map.

ii) Using a vertical scale of 1cm to represent 40 metres draw a cross-section along northing 53 from easting 24 to 29.

On it mark and name

- regional boundary
- Foot path
- main track (motorable)

d) i) Describe the distribution of the settlement of the area covered by the map.

ii) Citing evidence from the map, explain **two** factors that may favour trading activities in the area covered by the map.

6. FIELD WORK

The topic entails:-

(i) Definition of field work

(ii) Stating different types of field work

(iii) Explaining the importance of field work

(iv) Explaining the procedure to be followed during field work

(v) Identifying possible problems during field work

(vi) ***Carrying out field work within the local environment.***

1. a) Form four students of your school carried out a field study on beef farming in Narok District.
   (i) State **four** objectives of their study.
   (ii) Give **four** follow up activities they carried out.
   (b) Students of Kakao secondary school intend to undertake a field study of Olkaria I geothermal
   power generating project. Answer the following questions;
   (i) State **three** objectives they would write down for the field study
   (ii) List **three** preparations they would undertake before the actual field study
   (c) Your class visited a biogas digester near your school;
   (i) Describe how it was constructed
   (ii) List **three** raw materials the class may have identified which are used in the production
   of biogas

2. a) You are planning to carry out a field study on soil in an arid region.
   i) What are some of the characteristics you would observe?
   ii) Why would you prepare a working schedule for the study?

3. a)i)Give **three** natural vegetation zones on mount Kenya
   ii) Name three temperate grasslands found in the world
   iii) Describe the characteristics of the hot desert vegetation
   b) Explain **three** causes of the decline of the areas under forests in Kenya
   c) You are supposed to carry out a field study of a weather station near your school
   i)What preparations would you make for the study
   ii) What instruments are you likely to find within the Stevenson box

4. (a) You are required to carry out a field study on vegetation within the local environment;
   (i) Apart from identifying different types of plants, state other activities you will carry during the field study
   (ii) How will you identify the different types of plants
   (b) Form four students from Kisumu west district carried out a field study in an area of soil erosion in Machakos district
   (i) State **three** causes of soil erosion they could have identified
   (ii) Name **two** effects of soil erosion they have identified
   (iii) State any **one** objective for their study

5. (a) Students from Kisumu West secondary school carried out a field study in the area covered by the map
   (i) What **three** preparations did they make?
   (ii) State any null hypothesis for the study
   b) Your class intends to carry out a field study on weathering within the vicinity of the school

i) State the type of information you are likely to collect
ii) State **two** follow up activities you are likely to carry after the study

6. (a) Students from Kericho school set out to conduct a field study on the relationship between
climate and vegetation of the area covered by the map.
(i) What preparation did they carry out for the study?
(ii) State **three** evidences they would identify to support climate change.
(iii) State **two** possible alternative hypotheses for the study
(b) Students are planning to carry out a field study in the area affected by climate change;
(i) State **three** ways in which observation would be the best method of data collection.
(c) Citing evidence from the map, explain **three** factors that have influenced settlement in the
area covered by the map.

7. (a) Students of Chepkosilen school carried a field study on economic activities in the area covered by the map.
(i) Give **two** preparations they made before the study.
(ii) State **two** hypotheses for their study.
(iii) Citing evidence, identify **three** economic activities that they studied.
(iv) What type of map is Belgut?

(b) Students from your school have conducted a field study on a Lake in Kenya
(i) In their study they identified some of the problems affecting the lake to have been caused by nearby **industries** and **deforestation** in the surrounding areas. Explain how
each of the two could have affected the lake.
(ii) Name any **two** methods they might have used to collect the data.
(iii) State any **two** reasons why it would be important to do follow-up after the study
(d) You are required to carry out a field study on soil erosion around your school
(i) State **two** methods you would use t record data
(ii) Give **three** problems you may encounter during the field study

8. a) Students of Masabot School carried out a field study of Changoi tea factory.
i) Name **two** types of roads they used to travel to Changoi tea factory.
ii) What preparations they were likely to make for the study
b)(i) Suppose you were a student in the school at Tegat and you plan to carry out a day's field study of Changoi tea factory. Design a working programme (schedule) you would
use during the day of study
. ii) Your class is required to carry out a field study of a river. What would be the advantages
of dividing the class into groups according to the stages of the long profile of the river ?

9. a) You intent to carry out a field study on a desert landscape.
   i) Apart from conducting oral interviews, state two other methods you would use to collect information
   ii) State **two** problems that you are likely to encounter in the field
   b) You are provided to carry out a field study of the vegetation within the local environment;
   i) Apart from identifying the different types of plants, state three other activities you will carry out during the field study
   ii) How will you identify the different types of plants?

10. a) Your class went for a field study in Samburu.
   i) List **three** methods they are likely to have used to present their findings
   b) i) State three activities they would be involved in.
   ii) Identify **three** problems they are likely to encounter.

11. (a) You are required to carry out a field work on soils around your school:-
   (i) State **three** objectives for your study
   (ii) State **two** reasons why it would be necessary to carry samples back to school
   (b) You carried out field work ion soils around your school:-
   (i) State **three** preparations you made before the actual day of field work
   (ii) State any **three** problems you encountered during the field work

12. (a) You are to carry out a field study on rivers near your school:-
   (i) Name **three** methods you will use to collect your data
   (ii) Why is it important to carry out a pre-visit
   (iii) How will your findings be useful to the local community?

13. (a) A field study was carried out around the rift valley lakes:-
   State **two** characteristics of the lakes they would have identified
   b) You intend to go for a field study to a region where folding has occurred.
   i) State **three** reasons why you would conduct a pre-visit.
   ii) Identify **two** methods you would use to record data.
   c)i) State **two** problems they may face during their study
   ii) State **two** follow up activities they may have been involved in after the field study

14. The table below shows the crops produced in Kenya between the years 2000 to 2002

CROPS '000'	**2000**	**2001**	**2002**
WHEAT	22	37	83
MAIZE	131	255	325
BARLEY	12	26	47
TOTAL	**165**	**318**	**455**

(a) (i) Calculate the percentage of wheat production in the year 2000

(ii) Using a scale of 1cm rep 200 units, draw proportional circles to show the production of crops each year. Show your calculations

(b) Explain **three** physical conditions which favour wheat growing in Kenya

(c) Compare wheat growing in Kenya and Canada under the following:-

(i) Mechanization

(ii) Marketing

(iii) Size

(d) State **four** uses of wheat

15. (a) Use the following information to answer the questions below:

Type of energy	**No. of families using each type**	**Average monthly income per family (Kshs.)**
Fire wood	13,400	900
Kerosene	11,200	1600
Charcoal	9,100	1000
Liquid Petroleum Gas	5,300	3000
Saw dust	4,000	900
Hydroelectricity	2,000	4500
Total	45,000	11,900

(i) Draw a pie-chart with a radius of 4cm to represent the number of families using each type of energy. Show your calculations

(b) Students from Matungu district went to study gold mining in Kakamega South district

(i) State any **two** main preparations made before field study visit

(ii) Give any **two** follow-up activities they engage in after the study

(c) Suppose you were to conduct a field study in Kakamega forest

(i) State **three** problems that are likely to hinder your work

(ii) How could you determine the following:-

-Heights of a tree

-Diameter of stem

-Tree of the same species

(d) You have been asked to conduct field study on land pollution in an urban set up;

(i) State **three** problems that you may encounter;

(ii) Your class carried out a field study on forests in your area. List **four** measures you would recommend to conserve forests in the area