

# KCSE MADE FAMILIAR GEOGRAPHY

**Topically Analysed KCSE past Questions**

**For Marking Schemes Call 0705525657**



	<b>TOPIC</b>	<b>QUESTION PG</b>	<b>ANSWER PG</b>
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# 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 Geography and its relationship with other disciplines.*

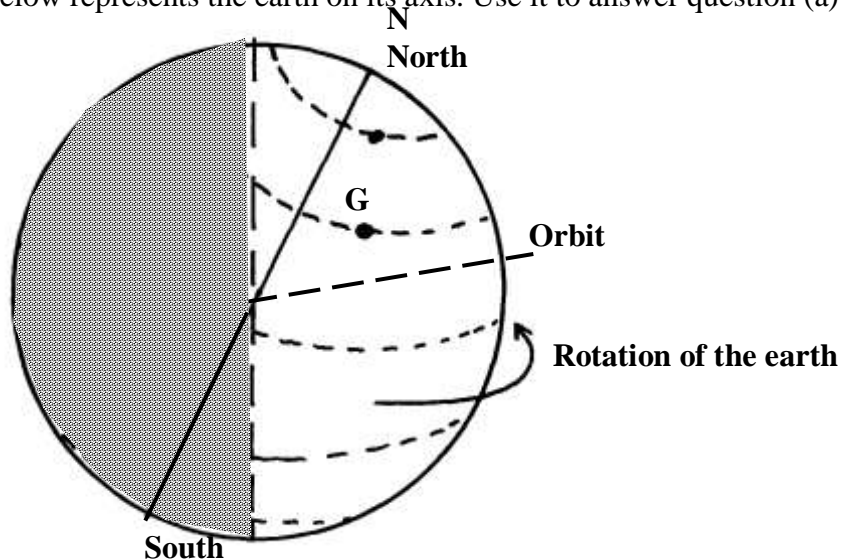
1. Explain why the study of Geography is beneficial in the management and conservation of the environment.

# 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)



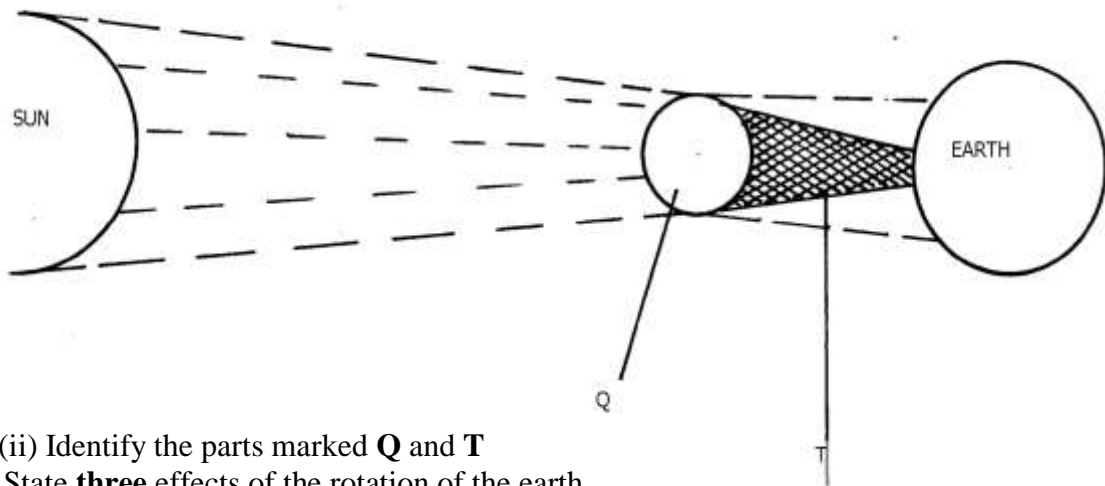
- a)
    - i) Name the latitude marked G
    - ii) What is the angle of inclination of the earth's axis from its orbit
  - b)
    - i) State **two** effects of the rotation of the earth
    - ii) When the local time is 2.00 p.m at longitude 45°E, what is the longitude of a place whose local time is 10.30 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

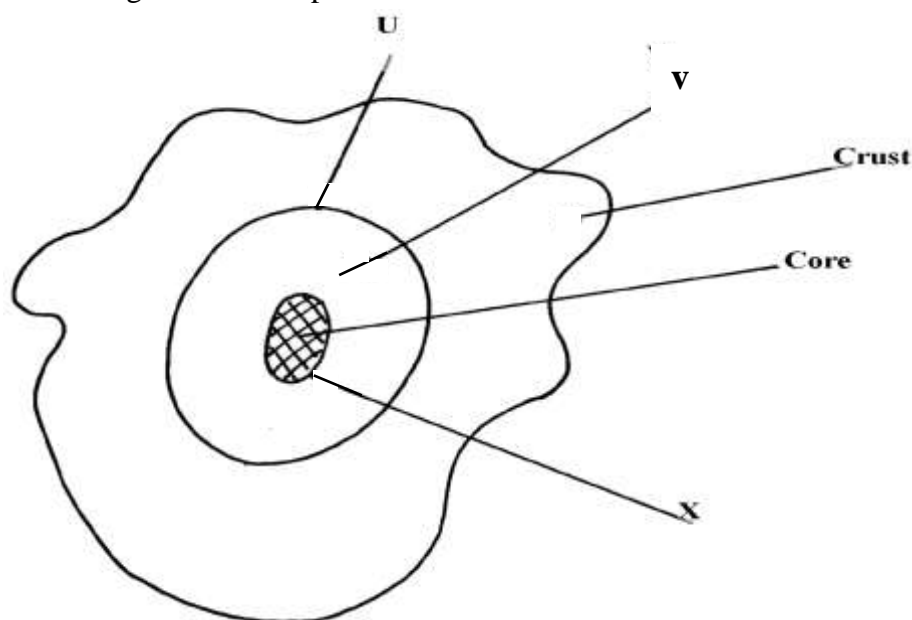
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3. a) What is a solstice  
b) State **three** effects of the revolution of the earth
4. (a) (i) Give **two** theories that explain the evolution of the solar system and the origin of the earth  
(ii) Identify the force that causes the earth to bulge 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.)



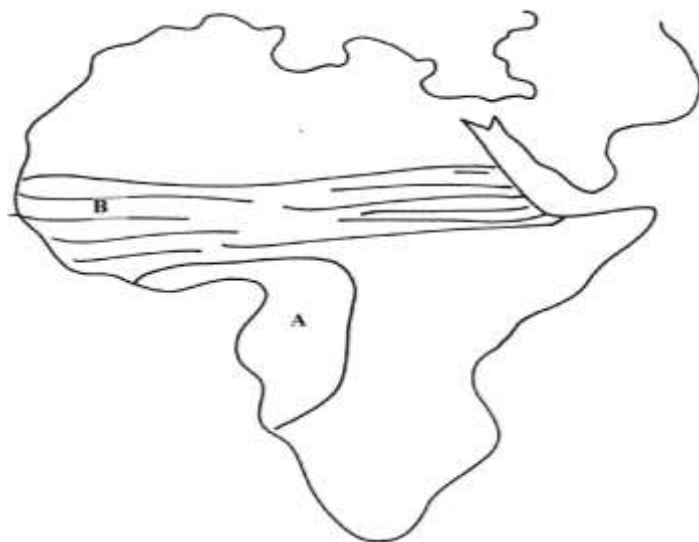
- a) Name the parts named u, v and x  
b) Describe the characteristics of  
i) Crust ii) Core

### **3. WEATHER AND CLIMATE**

*The topic entails:-*

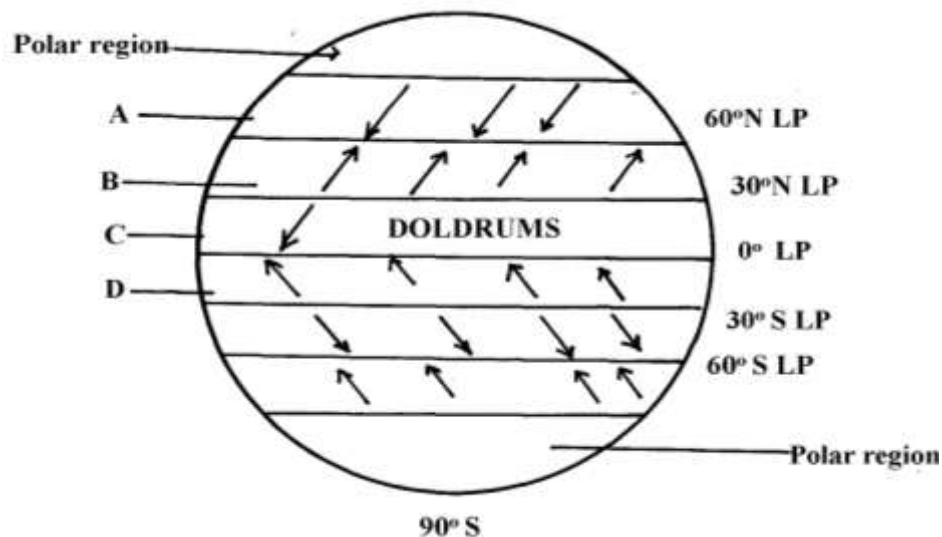
- (i) *Defining weather and stating its elements*
  - (ii) *Explaining conditions necessary for siting a weather station.*
  - (iii) *Use instruments to measure elements of weather*
  - (iv) *Analyse and interpret data on weather conditions*
  - (v) *Description of the structure and composition of the 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



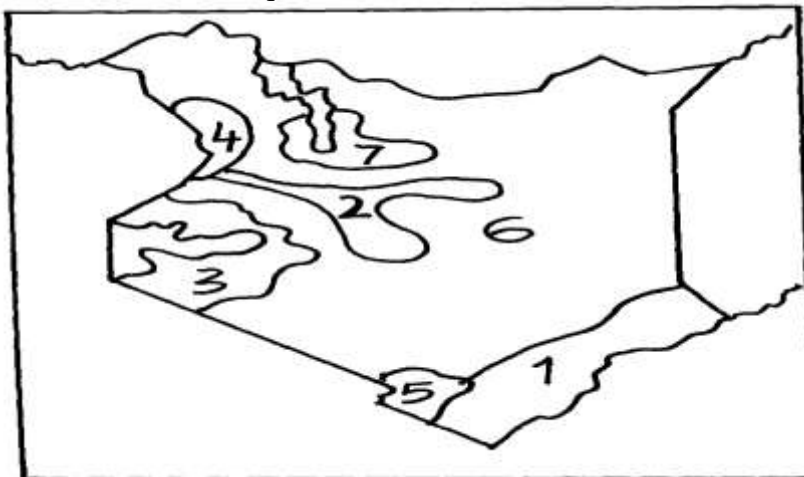
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**Key**

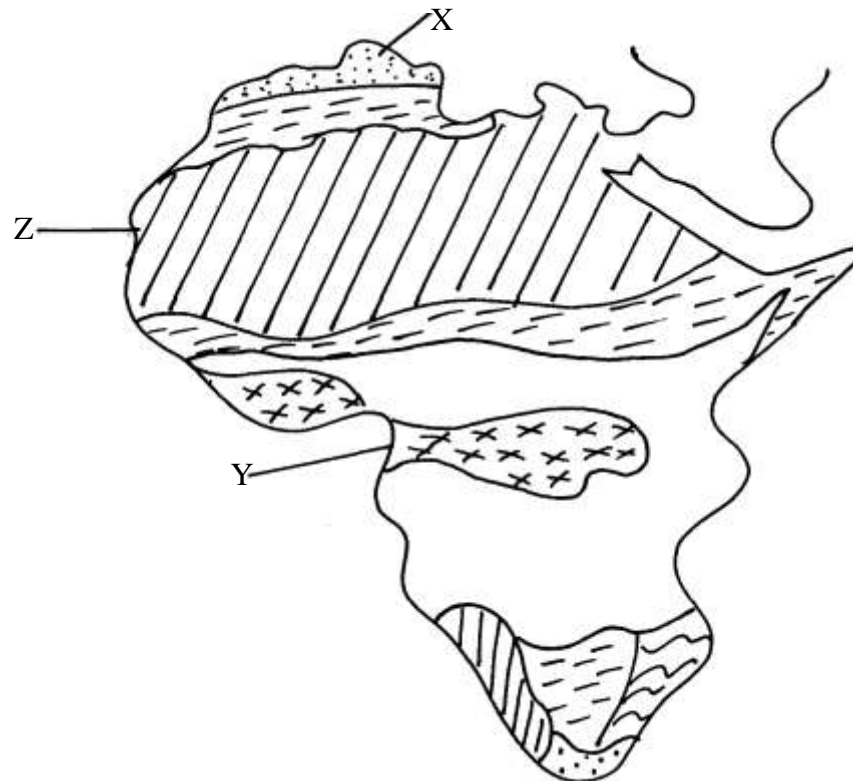
LP- Low Pressure

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
PYRETHRUM	300	250	350	400	450
MAIZE	500	450	550	600	350

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- (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 it to answer questions a – c

	<b>CROP</b>			
<b>Year</b>	<b>Un milled wheat</b>	<b>Maize</b>	<b>Rice</b>	<b>Wheat flour</b>
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

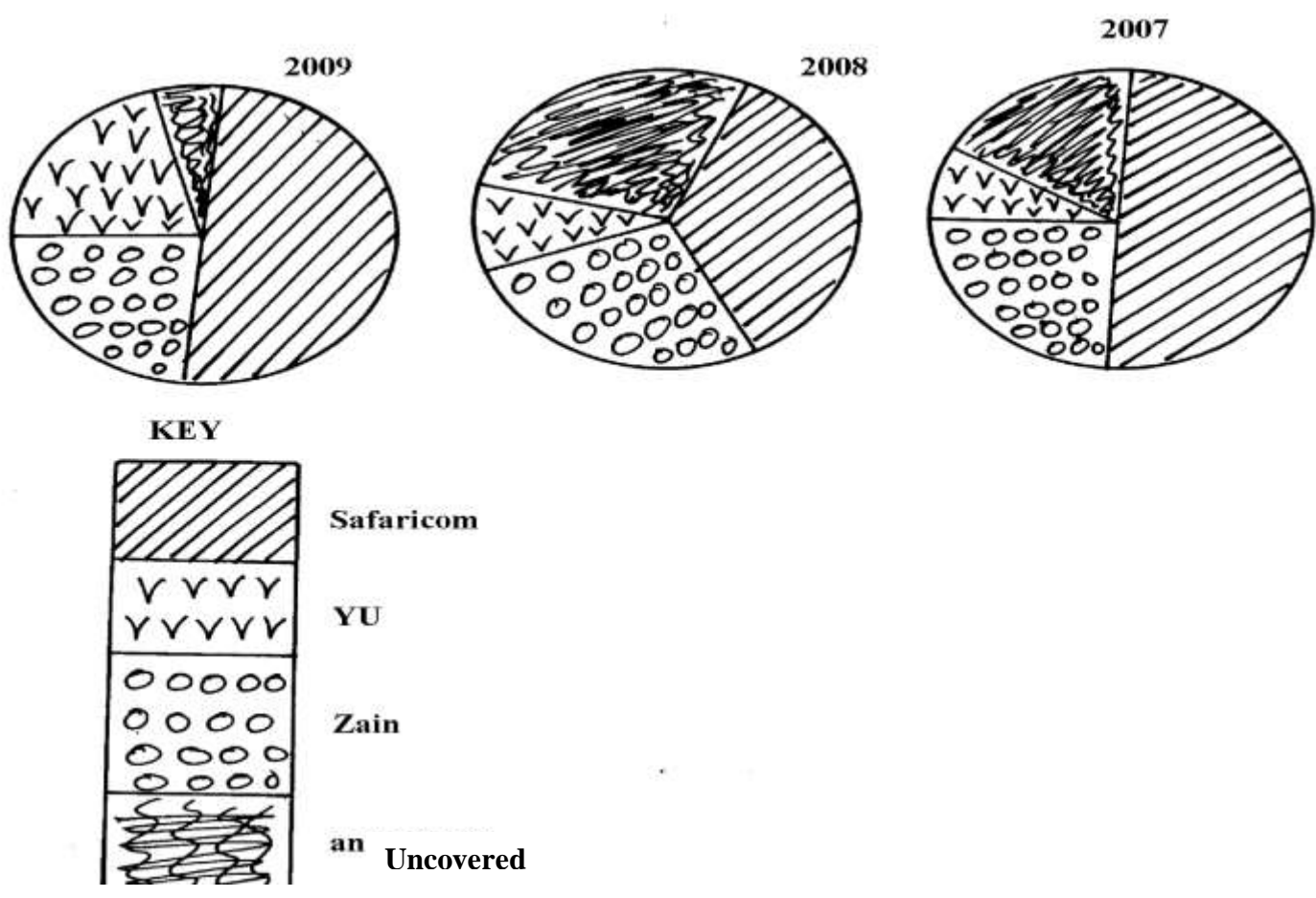
- (a) (i) Using a scale of 1cm represents 100,000 , draw a comparative bar graph to represent the data in the table above  
(ii) Give **three** advantages of using comparative bar graphs  
(b) Explain **three** reasons why Kenya is a producer of the commodities shown in the table above yet she imports 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



- 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**

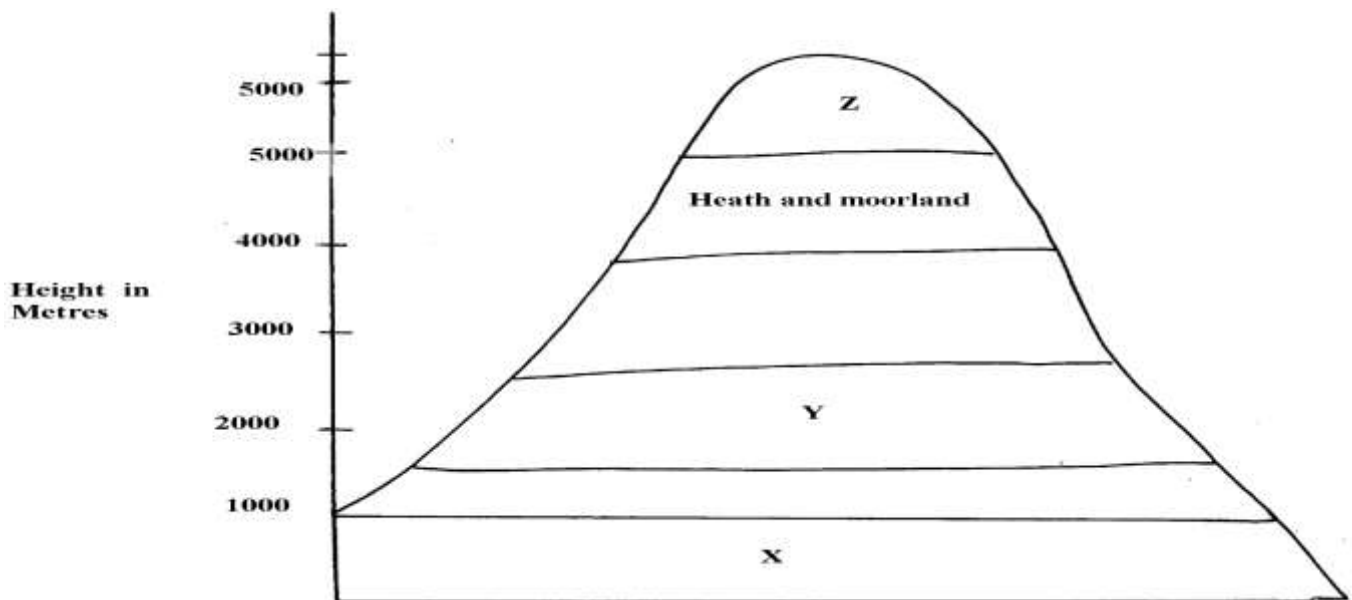
*The topic entails:*

- (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** adjoining 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)
    - (i) 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 is 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 **one** 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 extent 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 to 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 by 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 trigometrical station 2173 around Kapcheptoror school from 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 grid 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 to 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

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

- (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

## **7. MINERALS AND ROCKS**

**The topic entails:-**

- (i) *Defining minerals and rocks*
- (ii) *Stating the characteristics of minerals*
- (iii) *Classification of rocks according to mode of formation*
- (iv) *Stating the characteristics of rocks*
- (v) *Accounting for the distribution of major types of rocks in Kenya.*
- (vi) *Explaining the significance of rocks*
- (vii) *Identifying major types of rocks and their uses within the local environment.*

1. (a) State **two** formations in which mineral ores occur  
(b) Give **three** negative effects of open cast mining on the environment
2. a) Briefly describe how minerals occur in veins and lodes  
(b) Describe how coral rocks are formed
3. State **three** classification of sedimentary rocks based on their mode of formation
4. a) A part from Thermal Metamorphism, name two other types of metamorphism  
b) Describe the following types of rocks
  - i) Calcareous rocks
  - ii) Carbonaceous rocks.
  - iii) State **three** examples of rocks that are dominant at the coast of Kenya.
- c) i) Explain how sedimentary rocks are formed through the following processes.  
Mechanical Process  
ii) Chemical Process
5. (a) Give **three** ways through which rocks may be metamorphosed. (3 mks)  
(b) Name **two** examples of plutonic rocks  
c) State **three** conditions that favour the formation of an artesian basin.

## **8. MINING**

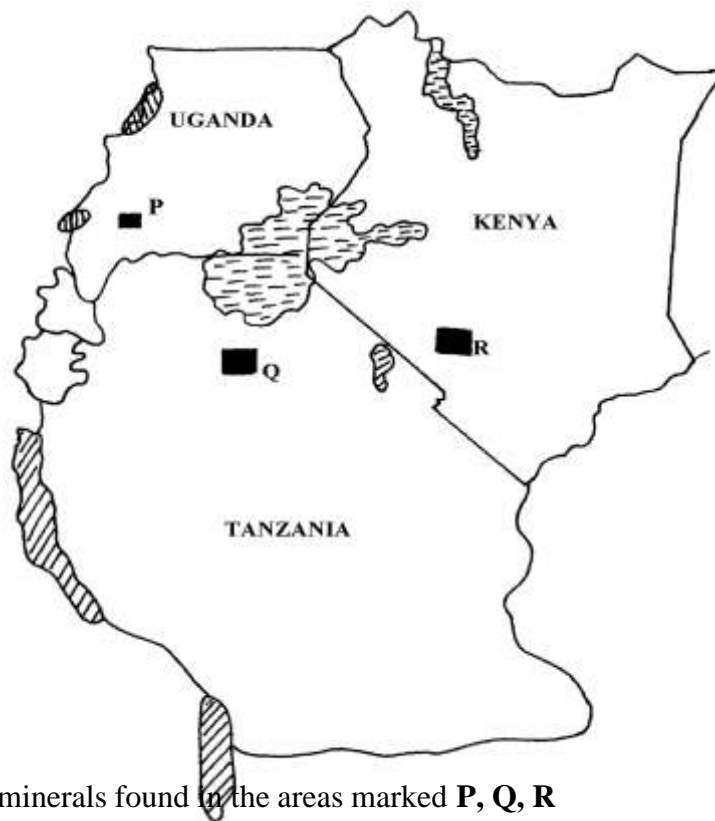
**This topic entails**

- (i) *Defining mining*
- (ii) *Explaining the factors influencing:-*
  - The occurrence of minerals
  - Mining activities
- (iii) *Describing methods of mining*
- (iv) *Locating major minerals on the map of East Africa*
- (v) *Explaining the significance of minerals in Kenya*
- (vi) *Accounting for the problems facing the mining industry in Kenya.*
- (vii) *Explaining the effects of mining on the environment in Kenya.*
- (viii) *Describing the occurrence of specific minerals and their exploitation in selected countries.*

1. (a) (i) What problem has been brought about by uncontrolled mining of minerals in Kenya?  
(ii) Where is fluorspar mined in Kenya?  
(iii) Describe how trona is mined and processed in Magadi  
(b) (i) List **two** ways in which mining leads to loss of biodiversity  
(ii) List **two** ways in which mining leads to pollution

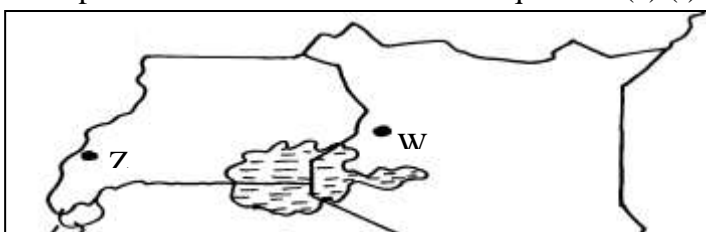
2. (a) (i) Name **three** methods of mining.  
(ii) State **five** factors that influence the exploration of minerals.  
(iii) State **three** ways in which mining derelicts can be reclaimed.
3. (a) State **two** ways in which gold in South Africa occurs. (2mks)  
(b) Give **three** ways in which abandoned mined sites could be rehabilitated.
4. (a) Name **two** countries in Africa where oil is mined  
(b) State **two** by-products of crude oil
5. (a) (i) Define the term '**mining method**'  
(ii) Explain how the following factors influence mining:-  
- Technology  
- Quality of the ore  
(b) Use the map of East Africa below to answer question (i)

**MAP OF EAST AFRICA**



- (i) Name the minerals found in the areas marked **P, Q, R**  
(ii) Name **two** areas in South Africa where diamonds are mined
- c) Open-cast method of mining.  
d) Benefits of trona to Kenya.  
e) Problems facing the mining industry in Kenya.

6. Use the map of East Africa below to answer question (a) (i)



- (a) (i) Name the minerals mined in the areas marked **W, X, Y** and **Z**  
(ii) Give **four** ways in which minerals occur
- (b) Identify any **five** factors that influence the exploitation of minerals
- (c) Explain any **four** problems associated with mining
- (d) List any **four** main minerals mined in Kenya

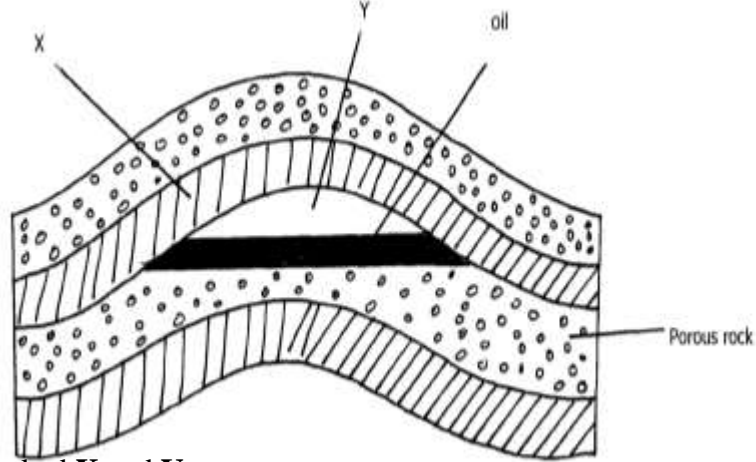
7. (a) Give **three** main methods of mining
- (b) The following data shows the value of minerals exported from Tanzania between the years 2000-20003. Use it to answer the following questions:

<b>Value of mineral exports in millions of Tshs.</b>				
	<b>2000</b>	<b>2001</b>	<b>20002</b>	<b>2003</b>
Gold	680	700	500	400
Diamonds	1000	800	700	900
Mica	400	100	400	100

- (i) Calculate the percentage decline in the value of diamond exports between 2000 and 20001.
- (c) Explain any **four** ways in which trona mining contributes to the growth of the economy in Kenya

8. (a) (i) State **three** methods used in mining
- (ii) Name the mineral found in the following areas;-
- Magadi
  - Mwandui
  - Kasese
- (b) Describe the following factors influence mining of minerals
- (i) Technology
  - (ii) Quality of ore
  - (iii) Accessibility
- (c) Explain **four** problems facing the mining of Gold in South Africa
- (d) (i) List **two** leading to oil producing countries in the middle East
- (ii) State **three** uses of petroleum
- (e). State **three** problems of land dereliction

9. The diagram below shows



- (a) Identify the parts marked **X** and **Y**  
(b) Give **three** reasons why Kenya imports petroleum in crude form and not as refined by-products
10. (a) Differentiate between veins and lodes  
(b) State **three** effects of land dereliction
11. (a) (i) Give **three** methods of mining.  
(ii) Name **two** places where gold is mined in Tanzania.  
(b) Explain **four** factors which influence the exploitation of minerals.  
(c) State **four** negative effects of mining on the environment.  
(d) (i) Describe how solution mining is carried out.  
(ii) State **three** ways in which mining contributes to the economy of Kenya.
12. (a) (i) Name **three** methods of mining  
(ii) Explain **three** ways in which soda ash contributes to the economy of Kenya  
(iii) Identify **four** problems facing gold mining in South Africa  
(b) (i) State **three** conditions necessary for the formation of petroleum  
(ii) Give **two** by-products obtained when crude oil is refined  
(c) What **three** benefits would Kenya get if the current prospecting for oil yields good results  
(d) (i) Name **two** minerals mined in the Southern Highlands of Tanzania  
(ii) Name **two** ports through which minerals from East Africa are exported through

## 9. INTERNAL LAND-FORMING PROCESSES

**This area covers :-**

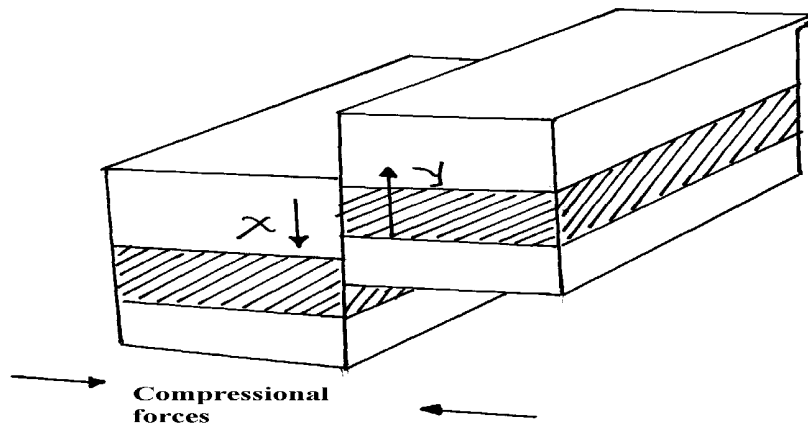
- a) **Earth Movements**
- b) **Folding**
- c) **Faulting**
- d) **Vulcanicity**
- e) **Earth Quakes**

**It entails:**

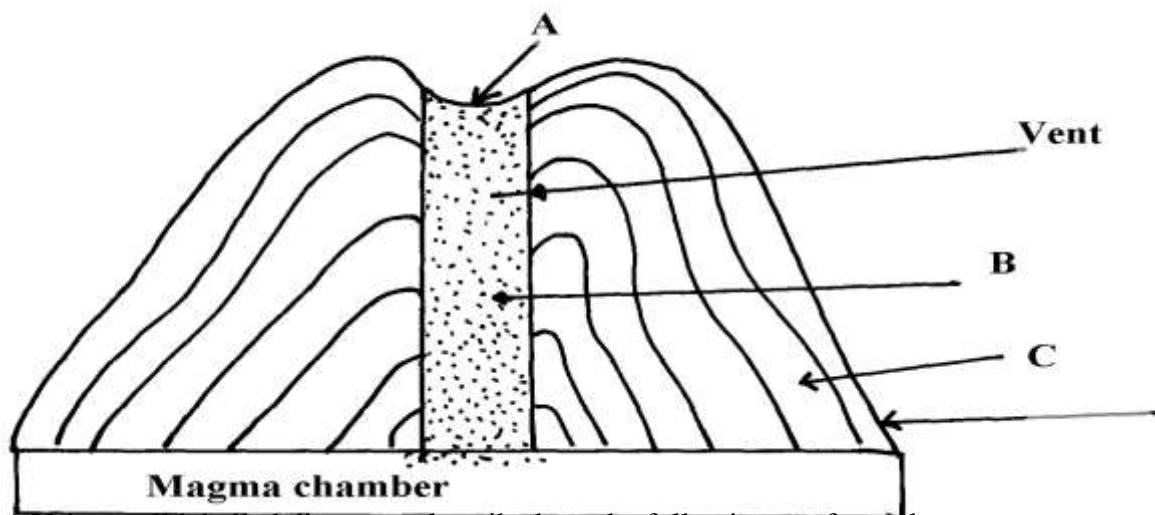
- (i) *Definition of earth movements*
- (ii) *Explaining the causes of horizontal and vertical earth movements.*
- (iii) *Explaining theories of continental drift and plate tectonics*
- (iv) *Defining folding, faulting and vulcanicity and earthquakes.*
- (v) *Explaining the*
- (vi) *Description of types of folds, faults, and forms of vulcanicity*
- (vii) *Explaining the resultant features due to folding, faulting and vulcanicity*
- (viii) *Explain causes of earth quakes.*
- (ix) *Describing how earth quakes are measured*
- (x) *Account for the world distribution of earth quake ones, fold mountain systems and features resulting from faulting and vulcanicity*
- (xi) *Explaining the significance of the resultant features of folding, faulting, vulcanicity and the effects of earth quakes.*

1. a) Composite volcano  
b) i) What are earthquakes?  
ii) Name **two** types of earthquake waves  
iii) Explain **three** ways in which volcanic mountains positively influence human activities
2. a) Using well labeled diagrams, distinguish between a simple symmetrical fold and an asymmetrical fold.  
b) i) Name **two** fold mountains of the Alpine Orogeny  
ii) With the aid of well labeled diagrams, describe how a fold mountain is formed.  
c) Explain **three** positive effects of folding on the physical & human environment.
3. (a) State **three** ways in which the earth's crust is affected by the earthquakes  
(b) State **two** evidences of continental drift theory  
(c) Name **three** types of plate tectonic boundaries
4. (a) (i) What are tectonic plates  
(ii) Give any **two** examples of oceanic plates:-  
(b) Describe how the following cause earth movements:  
(i) Isostatic adjustment  
(ii) Magma movement in the crust  
(iii) Convectional currents in the mantle.
5. (a) Give any **two** natural causes of earthquakes  
(b) Name **three** characteristics of the rift valley lakes of Kenya
6. (a) State **three** characteristics of the rift valley lakes of Kenya  
(b) (i) What are earthquakes?  
(ii) Name **three** types of earthquake waves  
c). Differentiate between extension boundaries and compression boundaries.

7. a. i) What is an earthquake  
ii) Give **two** ways in which earthquakes can be predicted  
b) State **two** ways in which faulting interferes with transport and communication lines.
8. The diagram below represents a feature resulting from faulting



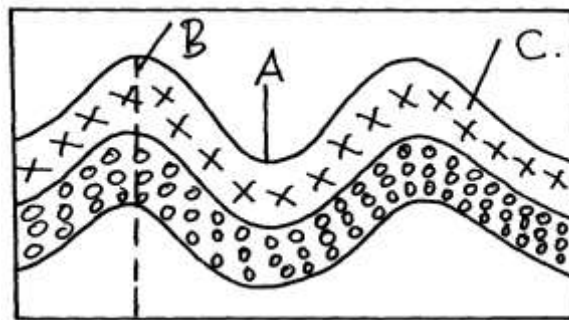
- (a) Name the feature  
(b) Name part **x** and **y**  
(c) Give **three** negative of an earthquake
9. (a) Differentiate between hot springs and geysers  
(b) The feature below show an extrusive landform in a volcanic area



- (c) Using well labelled diagrams, describe how the following are formed:  
(i) An anticlinal fault  
(ii) An overthrust fold
- (d) (i) Explain any **three** ways in which features resulting from volcanicity are a problem to people  
(ii) Describe how subsidence can lead to formation of a caldera.
10. (a) What is the plate tectonic theory ?  
(b) Name **three** types of tectonic plate boundaries .  
(c) Explain **two** evidences that support continental drift theory.



11. (a) (i) Name **two** fold mountains in Africa apart from Atlas mountains  
(ii) Differentiate between **symmetrical** and **asymmetrical** folds  
(iii) Apart from symmetrical and asymmetrical folds, name other types of folds  
(b) (i) With the aid of well labeled diagrams explain the formation of **fold** mountains  
(ii) Give **two**-examples of fold mountains in North America
12. a) Effects of the elliptical shape of the earth's orbit  
b) Mention **three** causes of the earth movements
13. a) List **two** characteristics of destructive plate boundary  
b) Outline three natural causes of earthquakes  
b) State **two** effects of earthquakes on crystal rocks
14. a) List **two** factors that determine the degree of folding in rocks  
b) State three effects of faulting on drainage systems
15. (a) State any **one** evidence that support the theory of the drifting of continents  
(b)(i) Apart from Africa, name **any two** other continents that form the Gondwanaland  
(ii) What is panthalassa?
16. a) Give **two** reasons why hardwood trees species in Kenya are in danger of extraction  
b) State **three** problems that affect forestry in Canada
17. The diagram below shows a simple fold  
(a) (i) Name the part marked **A**, **B** and **C**



- (ii) Name **two** fold mountains outside Africa  
(iii) Give **three** landform associated with folded regions  
(b) With the aid of well labeled diagram describe the process of formation of Fold Mountain  
(c) Explain **four** ways in which folding influences human activities

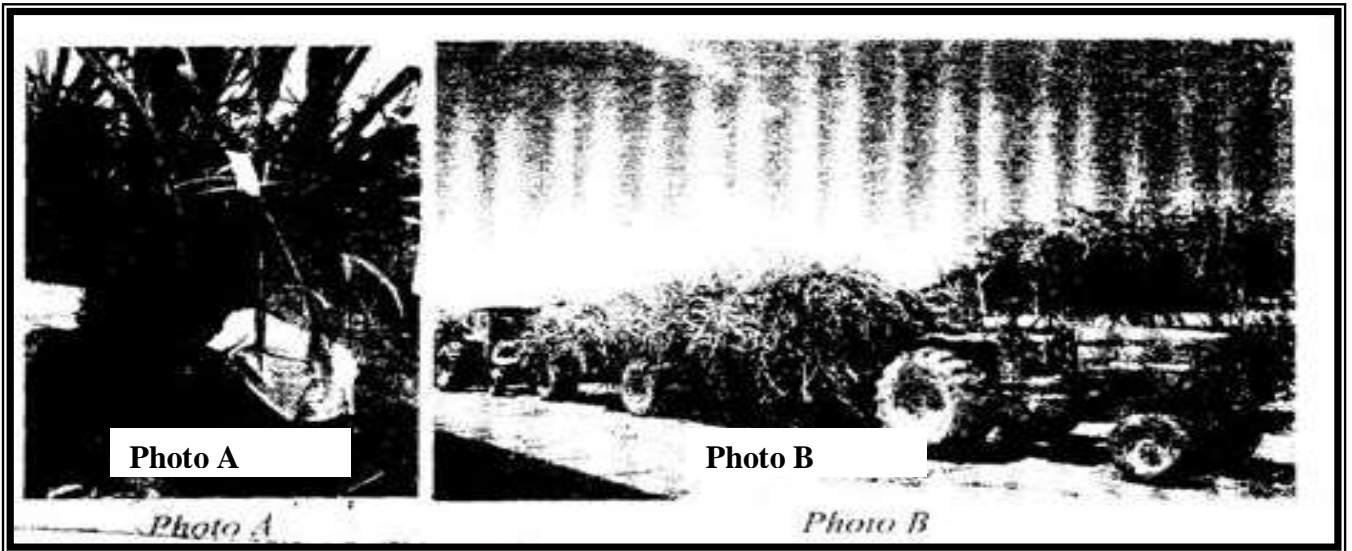
## **10. PHOTOGRAPH WORK**

*The topic entails:-*

- (i) *Identifying types of photographs*
- (ii) *Describing parts of a photograph*
- (iii) *Estimating the sizes of features appearing on photographs*
- (iv) *Making sketch form photographs*
- (v) **Identifying and interpreting features on photographs.**

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1. Study the photograph (a) and (b) and use them to answer the questions below:-



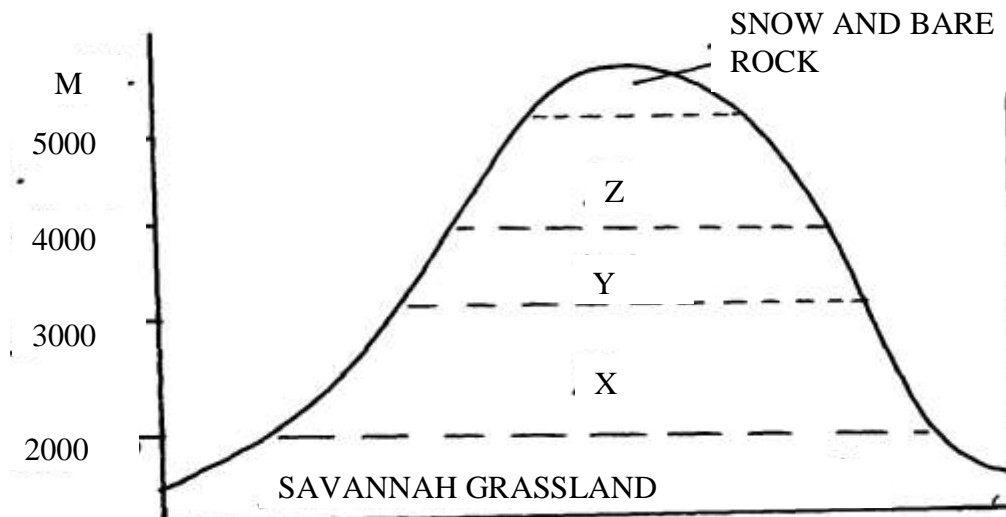
- (a) (i) Name the type of photograph shown in the figure (b)  
(ii) Name **three** human activities carried out in photographs (a) and (b)
- (b) If the **two** photographs were taken from western province, name **four** districts in the province the photographs are likely to have been taken from?
- (c) Explain **five** physical conditions that encourage the growth of crops in photograph (a)
- (d) State **five** problems facing farmers of this crop in Kenya
2. (a) (i) State **three** characteristics of the animal breeds  
(ii) Explain why the above activity is mainly located in the highlands in Kenya

## 11. VEGETATION

The topic entails:

- (i) **Definition of vegetation**
  - (ii) **Discussing the factors influencing the distribution of vegetation**
  - (iii) **Identifying and describing the characteristics of major vegetation regions of Kenya and the world**
  - (iv) **Discussing the significance of vegetation and explain their uses within the local environment**
1. a) Name **two** areas of the world with temperate grasslands.  
(b) Explain how the characteristics of the vegetation in climate **B** are adapted to the environmental conditions

2. The diagram below shows mountain vegetation zones, use it to answer the questions that follow.



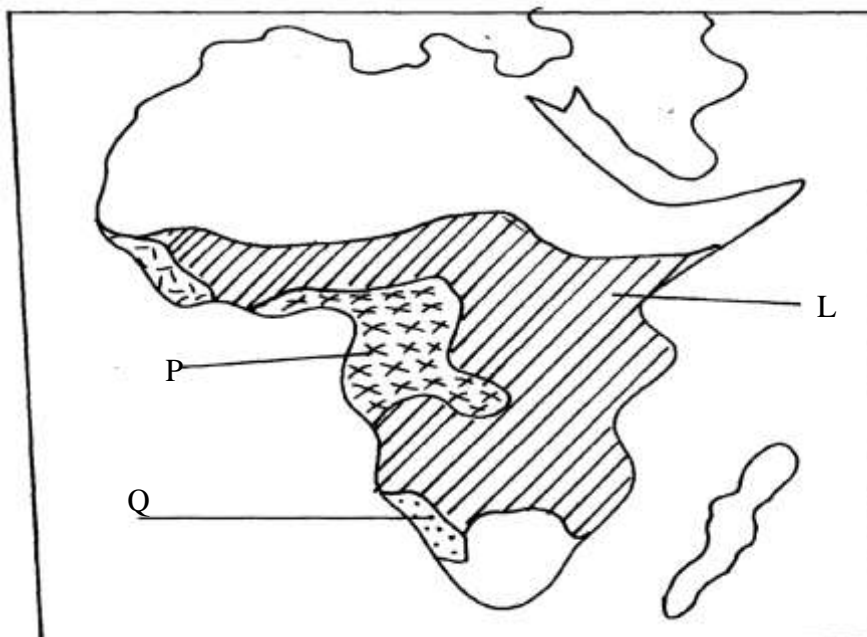
- (a) (i) Name the vegetation zone marked **X,Y,Z**.  
(ii) Give **four** characteristics of tropical savannah vegetations
- (b) Explain how the following factors influence vegetation:  
(i) Aspect  
(ii) Human activities
- (c) Name the specific countries of the world where the following grassland vegetation types are found:-  
(i) Velds  
(ii) Pampas  
(iii) Downs
- (d) Explain **three** factors that have led to a decline of natural grassland in Kenya
3. (a) (i) Define the term '**natural vegetation**'  
(ii) State **three** climatic factors influencing distribution of vegetation  
(b) (i) Give **two** zones of the temperate grasslands  
(ii) State **five** characteristics of coniferous forests  
(c) Explain **four** ways in which vegetation of the Nyika region of Kenya has adapted to the region of Kenya has experienced in the area  
(d) Give **five** factors that have led to a decline of the natural grasslands in Kenya
4. The map below shows major vegetation zones of the world. Use it to answer the questions that follow:



**X**

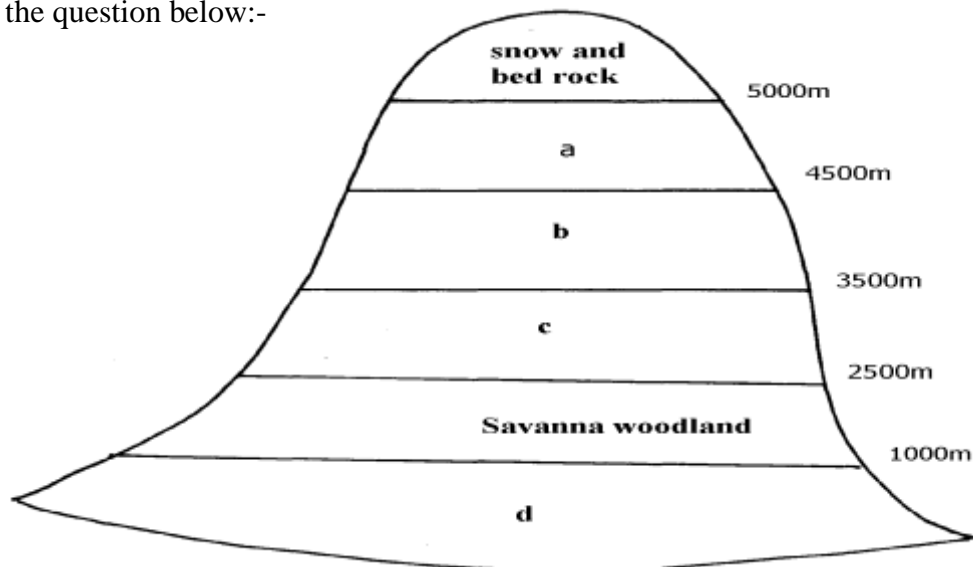
- (a) Identify the temperate grasslands marked **Y** and **Z**
- (b) Explain **four** ways in which desert vegetation are adapting to the extremely harsh conditions

5. The map below shows the location of some vegetation regions of Africa. Use it to answer the questions that follow:



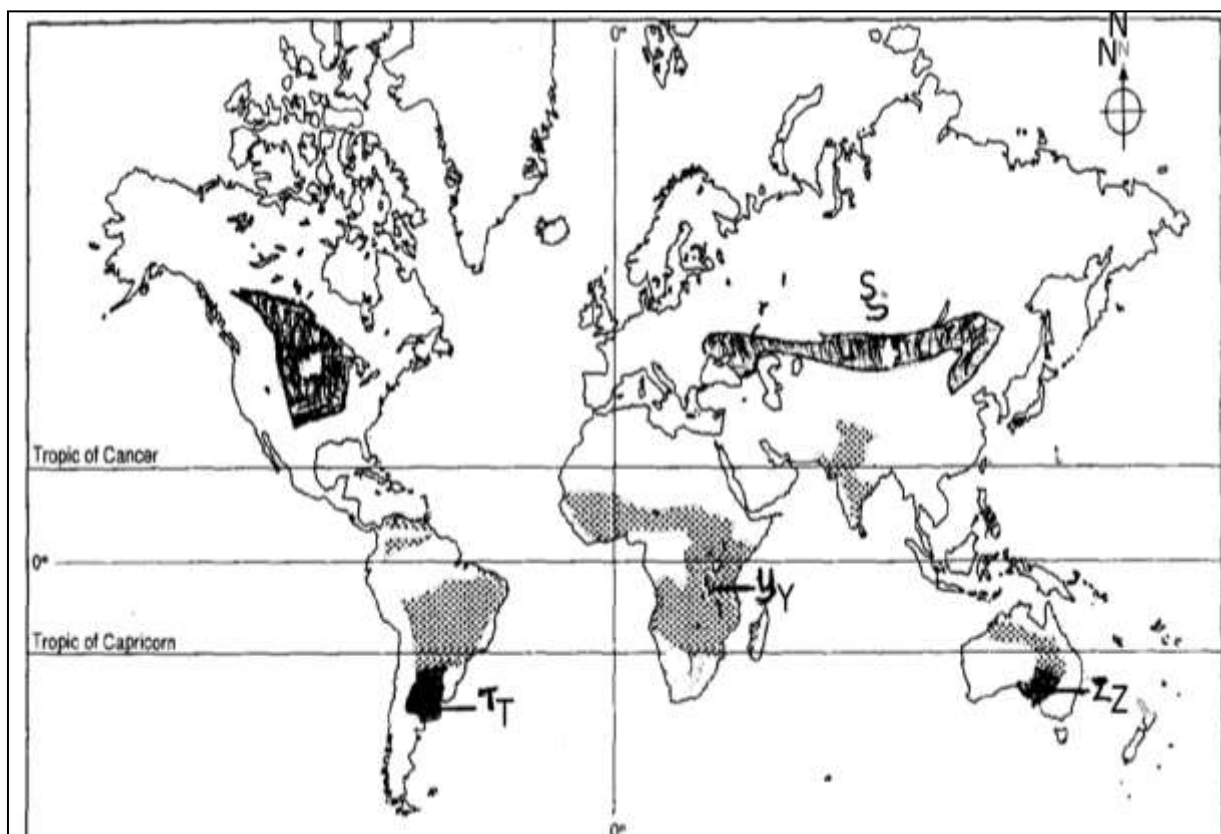
- 5. (a) i) Name the grassland region marked **L**  
ii) Describe the characteristics of the natural vegetation found in the shaded area **P**
  - b) i) Explain **four** ways in which the vegetation found in the area marked **Q** adapts to the environmental conditions of the region
  - c) i) Give **two** reasons why the mountain top has no vegetation  
ii) State **two** ways in which vegetation is of significance to the physical and human environments
6. (a) (i) Name **two** types of vegetation

- (ii) Give **two** physiographic factors influencing vegetation distribution
- (b) The diagram below shows vegetation zones of a S. Africa mountain. Use it to answer the question below:-



- (b) (i) Name the zones **a, b, c, d**
- (ii) Give **one** reason why there is no vegetation cover on to p of the mountain
- (c) (i) State the names given to temperate grassland vegetation in:-
- North America
  - Argentina
- (ii) Explain **three** uses of Savanna vegetation
- (d) Explain **four** characteristics of Tropical desert vegetation

7. (a) The map below shows the grasslands of the world. Use it to answer the questions that follow:-



- (i) Name the grasslands marked **S, T, Y** and **Z**.

- (ii) State any **four** characteristics of temperate grasslands.
- 8. (a) (i) What is meant by derived vegetation?  
(ii) Mention **three** factors that influence the vegetation of a place.
- b) 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
- 9. a) Explain **three** causes of the decline of the areas under forests in Kenya  
b) Explain **four** factors that limit the exploitation of tropical rain forests in Africa.

## **12. FORESTRY**

*The topic entails:-*

- (i) *Definition of forest and forestry*
- (ii) *Discussing factors influencing the distribution and types of natural forests.*
- (iii) *Discussing the significance of forests and forest products in Kenya*
- (iv) *Identifying and explaining problems facing forestry in Kenya*
- (v) *Discussing ways and means of managing and conserving forest.*
- (vi) *Comparing and contrasting softwood forests in Kenya and Canada.*
- (vii) *Demonstrating the ability to manage and conserve forests and forest resources.*

- 1. (a) Give **three** reasons for over-exploitation of hardwoods in Africa.  
(b) State **four** measures taken to conserve forests in Kenya.  
(c) (i) Name **two** major lumbering maritime provinces in Eastern Canada.  
(ii) Explain the factors that have favoured forestry in Canada.  
(d) Explain **three** differences between softwoods in Kenya and Canada.
- 2. (a) (i) What is agro-forestry?  
(ii) State **four** reasons why agro-forestry is being encouraged.
- 3. (a) (i) Distinguish between pure and mixed forests  
(ii) Show how natural forests differ from planted forests in Kenya  
(c) (i) State **three** measures that are being taken in Kenya to conserve forests  
(ii) Explain **three** factors favouring the exploitation of softwoods in Canada
- 4. (a) Define **agro forestry**  
(b) Outline **four** benefits of agro forestry  
(c) Explain how the following factors influence growth of forests;  
(i) Altitude  
(ii) Aspect  
(d) Explain **three** measures being undertaken to conserve forests in Kenya  
(e) Give **four** consequences of forest depletion in Kenya
- 5. (a) (i) Distinguish between indigenous and exotic forest  
(ii) Explain **four** ways in which natural forests differ from planted forests  
(b) Explain **three** factors that influence the distribution of forests in Kenya  
(c) State **three** measure that are being taken to conserve forests
- 6. (a) (i) What is **forestry**?  
(ii) Explain **three** factors that favour the growth of natural forests on the Kenya highlands  
(b) Explain **five** problems hindering the exploitation of tropical hardwood forests  
(c) (i) Explain **three** measures that the government of Kenya is taking to conserve forests

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in the country

(ii) State **three** factors that have led to the reduction of the area under forest in Mau forest

7. (a) (i) Distinguish between forestry and forest  
(ii) Discuss the influence of the following factors on the destruction of natural forests
  - a) Climate
  - b) Human activities
  - c) Topography
8. (a) Explain **three** measures which have been taken to manage forests in Kenya  
(b) Give the differences between the soft wood forests in Kenya and Canada, under the following headings:
  - (i) Species
  - (ii) Problems
  - (iii) Marketing  
(d) Your class intends to carry out a field study on the exotic trees of the Kenya highlands:-
  - (i) Name **two** types of tree species they are likely to observe
  - (ii) Identify **three** methods you will use to record the data in the field
9. (a) Define the term **agro-forestry**  
(b) Name **three** tropical hardwoods found in Kenya  
(c) Name **one** indigenous soft wood found in Kenya

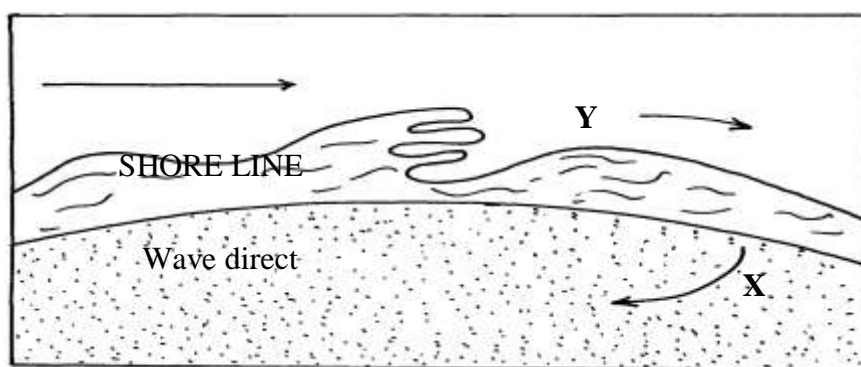
### **13. EXTERNAL LAND FORMING PROCESSES**

The topic entails :-

- (i) **Definitions of :**
    - a) *Weathering*
    - b) *Mass weathering*
    - c) *Hydrological cycle and action of rivers*
    - d) *Oceans, Seas and their Coasts*
    - e) *Action of wind and water in Arid areas*
    - f) *Action of water in Limestone areas*
    - g) *Glaciation*
    - h) *Lakes*
  - (ii) *Distinguishing between oceans and seas*
  - (iii) *Description of water movements in oceans and seas*
  - (iv) *Explaining the external land forming processes and the resultant features*
  - (v) *Identifying the sources of under ground water*
  - (vi) *Discussing the significance of the resultant physical features to the environment*
  - (vii) *Carrying out field work of land forms within the local environment*
- 
1. (a) Name **two** rivers in Kenya West of the Rift Valley that cause frequent flooding  
(b) State **three** factors that lead to frequent flooding in the Lake region of Kenya
  2. (a) i) Other than seif dunes, name two other types of sand dunes  
ii) Give **five** characteristics of seif dunes  
iii) State **four** factors that facilitate the formation of the sand dunes  
b) Describe how a desert rock pedestal is formed  
c) Explain **four** positive effects of desert features to human activities

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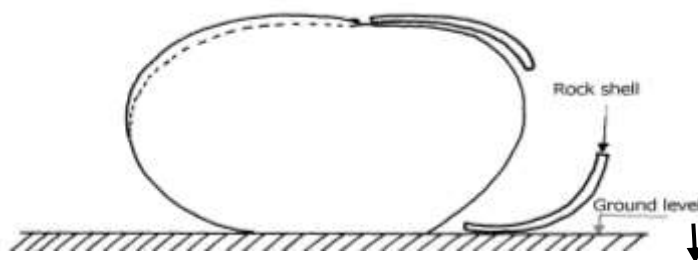
3. a) i) Give **three** reasons why there are no ice sheets in Kenya  
ii) Explain **three** factors that influence the movement of ice from the place of accumulation  
b) Describe the process through which the following features are formed.  
i) an arête  
ii) A crag and tail  
c) Explain **four** positive effects of glaciation in lowland areas
4. a) i) Give the dates in a year during which the number of hours of darkness is equal in both the north and the south poles  
ii) Why do the lengths of days and nights vary from one part of the earth to another?  
b) State **two** effects of the rotation of the earth on its axis
5. a) What is a **lake** ?  
b) State **three** ways through which lakes are formed
6. a) i) What is **desertification**  
ii) Differentiate between **wind deflation** and **wind abrasion**  
iii) Describe how wind transports its materials through the following processes:  
I) Saltation  
II) Suspension  
III) Surface creep  
b) Describe how the following features are formed  
i) Zeugens  
ii) Oasis
7. a) State **two** ways in which glacier moves  
b) State **three** differences between a young river valley and a glaciated valley
8. The diagram below represents the action of waves on the coastline. Use it to answer questions (a) and (b)



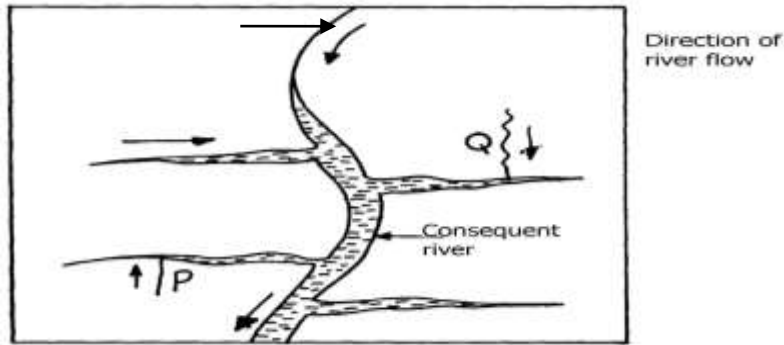
- a) Name the features marked **X** and **Y**.  
b) List **three** ways in which waves erode the coastline.
9. Name **two** sources of underground water.
10. a) i) What is chemical weathering  
ii) State **five** factors that affect the rate of chemical weathering in equatorial regions  
b) Explain the following chemical weathering process  
i) Carbonation  
ii) Hydrolysis  
c) Explain **four** economic importance of weathering to physical and human environments



11. a) Name **two** types of tides  
b) Give **three** ways in which the shape of the landmasses may influence movement of ocean waters  
c) State **four** sources of underground of water  
d) State **five** ways in which springs occur  
e) Account for **four** ways in which desert vegetation adopt to the climate of their environment
12. (a) Hamada and Erg  
(b) Explain **three** processes of wind erosion  
(c) With the aid of well labeled diagrams, describe the formation of:  
i) A Barchan  
(ii) Rock pedestal  
(iii) An oasis  
(d) Name **three** features resulting from water deposition in desert
13. State **three** reasons why wind erosion is predominant in desert areas.  
(b) Describe **three** processes by which wind erodes.  
(c) With aid of well labeled diagrams, describe the formation of the following desert features;  
(i) Rock pedestal.  
(ii) Zeugen.  
(d) State **four** ways in which desert land forms influence man's activities.
14. (a) Differentiate between oceans and seas.  
(b) Explain **three** sources of salinity in the oceans .  
(c) State **three** features on the ocean floor.
15. (a)(i) What is the difference between a sea and an ocean?  
(ii) Explain any **three** ways in which islands are formed.  
(b) (i) Describe how **Lake Victoria** was formed.  
(ii) Explain any **three** ways in which **Lake Victoria** has influenced the climate of surrounding areas  
(c) (i) Distinguish between aridity and desertification  
(ii) Explain any three physical causes of aridity and desertification
16. (a) (i) What is chemical weathering?  
(ii) Name any **three** surface features that result from carbonation.  
(b) The diagram below shows a feature resulting from weathering. Use it to answer the questions that follow:-

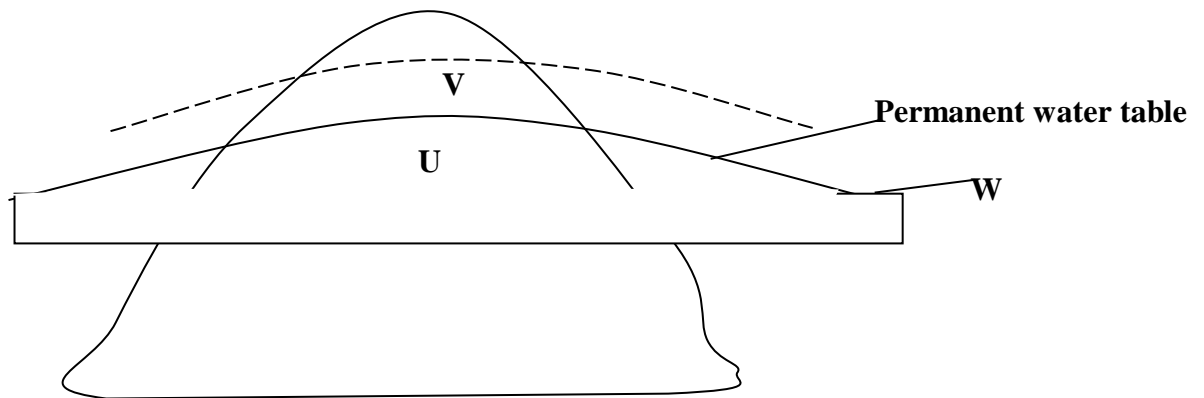


- (i) What is the name of the feature?  
(ii) Describe how the feature is formed.
17. (a) Differentiate between a river system and a river regime.  
(b) The diagram below shows a drainage pattern. Use it to answer the questions that follow:-



- (i) Name the drainage pattern.
- (ii) Name the parts labelled **P** and **Q**

- 18. (a) Name any **two** features deposited by glacier in lowland areas.
  - (b) Describe how a roche moutonnee is formed.
- 19. (a) The diagram below shows zones of underground water. Use it to answer the questions that follow:-



- (i) Name the parts labelled **U** and **V**.
- (ii) Name the surface water feature likely to form at the part labelled **W**.
- (b) Explain how the nature of underground rocks influences the existence of underground water

- 20. (a) (i) State **two** ways in which wind erodes the surface of the earth
  - (ii) Explain **three** ways thorough which wind transports its load
  - (b) Using well labeled diagrams, describe how the following desert features re formed:-
  - (i) Zeugen
  - (ii) Rock pedestal
  - (c)(i) Give the name given to rocky desert in the Sahara
  - (ii) Explain **three** positive effects of desert features to both human and physical environment
- 21. (a) What is a lake?
  - (b) (i) Name **two** types of lakes formed due to vulcanicity
  - ii) explaining how lake Victoria has influence the climate of the surrounding area
  - (c) (i) State **four** main reasons why lakes within the Rift valley are salty
  - (ii) Name any **three** fresh water lakes in Kenya which are within the rift valley
  - (d) Explain any **four** economic significance of lakes to Human activities
- 22. (a) Name three types of tides
  - (b) Differentiate between oceans and seas

23. (a) (i) Differentiate between aridity and desertification  
(ii) Describe **three** ways through which wind erodes the desert areas  
(b) Using well labelled diagrams describe how the following desert features are formed:  
(i) Rock pedestals  
(ii) Yardangs  
(c) State **five** uses of desert features
24. (a) State **four** factors which may cause a waterfall to form  
(b) (i) Describe how river braids are formed  
(ii) Name **three** features resulting from river rejuvenation  
(c) Describe how a river capture occurs  
(d) Give **two** reasons as to why Lake Naivasha is a fresh water lake
25. Give **three** ways through which rocks may be metamorphosed
26. (a) (i) State **two** processes through which the wind erodes the surface.  
(ii) Explain **three** ways through which wind transport its load  
(b) Describe how the following desert features are formed :  
(i) Oasis  
(ii) Zeugen  
(c) Explain **four** ways in which desert land forms are of significance to human activities
27. (a) (i) Name **two** ways in which ice moves  
(ii) State **two** factors which facilitate the movement of ice  
(b) Identify **two** erosional features in glaciated lowlands  
(c) Describe how the following features are formed:  
(i) Outwash plain  
(ii) Moraine-dammed lake  
(d) Explain **four** ways in which a glaciated landscape is of significance to human activities
28. (a) Differentiate between mechanical and chemical weathering  
(b) State **three** factors which influence weathering
29. a) Differentiate between a spring and well.  
b) With aid of a well labeled diagram, show the three Zones of ground water.  
c) List four candidates necessary for the formation of an artesian well.  
d) Explain **three** ways in which ground water is of significant to human activities.  
e) i) Define the term Karet scenery  
ii) Give **two** conditions for the development of Karet landscape  
iii) Outline the significance of Karet landscape to human activities.
30. (a) Use the diagram below to answer the following questions

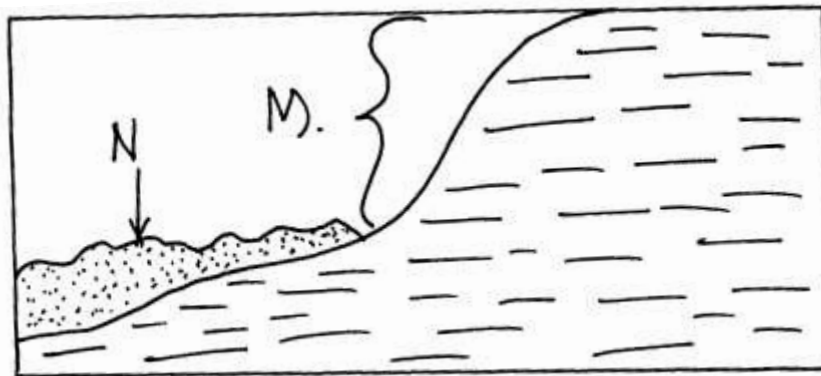


- (i) Name the parts labelled :-
- (ii) State **four** causes of river rejuvenation

31.     a i) Differentiate between denudation and mass wasting.  
          ii) Explain **two** reasons why chemical weathering is dominant in humid tropics.  
          b) Explain **three** factors that influence mass wasting.  
          c) With aid of a diagram, explain the process of solifluxion.  
          d) i) State **four** negative effects of mass wasting.

Name the:

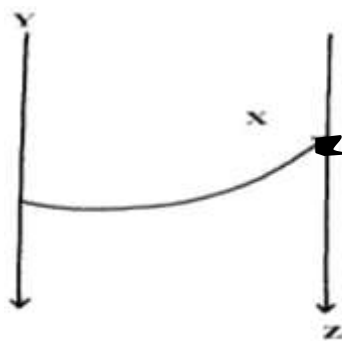
- i) Type of mass movement shown



- iii) Features M and N
- iv) State the factor that influenced the process above

32.     a) State **three** reasons why wind is a major agent of land sculpture in the desert.  
          b) Explain any **two** processes of wind erosion in deserts.  
          c) With and of well labeled diagram, explain how a deflation hollow is formed.  
          d) State **four** characteristics of a seif dune.
33.     a) State **two** causes of coastal submergence.  
          b) Name **three** conditions necessary for the growth of coral polyps.
34.     a) State **two** ways in which wind transport it's load

- b) Highlight the factors that influence the formation of a desert sand dune
35. a) Name **three** sources of lake water.  
b) State **three** factors that determine the size of a lake.
36. a) i) What is a **river**?  
ii) Distinguish between a river confluence and a river tributary  
b) Describe how a river erodes its channel by the following processes  
i) Hydraulic action  
ii) Abrasion
37. a) Describe the process of a river capture  
b) State **five** characteristics of a flood plain
38. a) i) Name **four** features resulting from water action in deserts  
ii) State **three** factors which contribute to the development of deserts  
iii) Name **three** types of deserts according to the nature of their surfaces  
b) i) Explain **three** factors which influence wind transportation in deserts  
ii) How is an oasis formed?
39. (a) What is the difference between swash and backwash  
(b) Why is wave cut platform and cliff line in Mombasa found above the sea level?
40. (a) Define the term river capture  
(b) The diagram below shows a river capture, name the features marked **X, Y, Z**



41. (a) Differentiate between **accordant** and **discordant** drainage systems  
(b) State **three** factors that facilitate formation of deltas
42. a) i) What is a desert  
ii) Name **three** types of desert landscapes  
b) i) Name **two** processes of wind erosion responsible for sculpturing desert landscapes  
ii) Using well labeled diagrams describe how a zeugen may be formed  
c) i) Name **four** desert landforms found in deserts associated with the action of water  
ii) What is the significance of desert landforms
43. (a) (i) Name **three** processes of wind erosion in desert  
(ii) State **three** factors which influence the rate of wind transportation  
(b) With the help of a well labeled diagram describe the formation of the following features:-

- (i) Rock pedestal
- (ii) Oasis
- (c) (i) List **three** external land forming processes which lead to the formation of lakes
- (ii) Explain **three** ways in which lakes influence the natural environment
- (d) (i) With the aid of a well labelled diagram, Describe how limestone pillars are formed in Karst scenery
- (ii) Explain **three** significance of resultant feature in limestone areas to human activities

## **14. SOILS**

*The topic entails:-*

- (i) *Definition of soil, soil profile, soil catena, soil degradation and soil erosion*
  - (ii) *Discussing the composition of soil and soil forming processes*
  - (iii) *Description of properties and characteristics of soils*
  - (iv) *Description of soil profile and soil catena*
  - (v) *Explaining soil degeneration*
  - (vi) *Classifying soils according to soil order*
  - (vii) *Discussing the significance of soils*
  - (viii) *Discussing ways and means of managing and conserving soils.*
  - (ix) *Identifying different types of soils and their uses within the local environment*
  - (x) *Demonstrating the ability to manage and conserve soils.*
- 
- 1.
    - a) Differentiate soil profile from soil catena
    - b) Name three types of soil types according to soil structure
    - c) i) Beside planting of trees state any other **three** measures that can be used to control desertification.
    - ii) Explain how trees help in the conservation of the soil.
  - 2.
    - a) i) What is soil?
    - ii) Differentiate between **soil catena** and **soil profile**.
    - b) i) Explain how the following factors influence soil formation;
      - Climate
      - Living organisms
    - ii) Give **three** factors that determine the colour of the soil.
  - 3.
    - a) Briefly explain the factors that influence the development of soil catena.
    - (b) (i) Define the term soil profile
    - (ii) Draw a simple diagram of soil catena
    - (iii) Give **any four** soil forming processes
    - (iv) State **four** causes of soil degeneration
  - 4.
    - a) i) Define the term soil
    - ii) Name three components of soils
    - b) i) Apart from living organisms state four other factors that influence soil formation
    - ii) Explain how living organisms influence soil formation
    - c)
      - i) Distinguish between soil air and soil texture
      - ii) Describe the process of podzolisation
      - iii) State the characteristics of soils in grassland areas
  - 5.
    - (a) Draw a diagrammatic representation of vegetation zones on a slope common in tropical land

- (b) (i) What is soil catena?
  - (ii) Draw a labeled diagram to show a well developed soil profile.
  - (iii) State **three** characteristics of the soils found in the arid regions of Kenya.
  - (b) Give **three** factors that determine the colour of soil.
  - (c) Describe how laterization occurs.
  - (d) Explain how the following farming practices cause soil erosion;
    - (i) Burning.
    - (ii) Continuous application of fertilizer on farm lands.
    - (iii) Monoculture.
6. (a) (i) Apart from latosols name any **two** other types of zonal soils
- (ii) Describe how lateritic soils are formed
  - (iii) State any **two** characteristics of azonal soils
- (b) (i) Explain any **three** ways in which rain water can lead to degeneration of soils.
- (ii) Apart from growth of plants, state any **three** other ways in which soils are beneficial to people
7. (a) (i) Differentiate between a soil profile and soil catena
- (ii) State **two** processes of soil formation
- (b) Explain how the following factors influence soil formation:
- (i) Climate
  - (ii) Living organisms
  - (iii) Topography
- (c) (i) What is soil degeneration
- (ii) Explain **three** ways through which vegetation naturally protects and prevent soil erosion
  - (iii) Give **two** sound farming methods that help conserve soil erosion
8. (a) (i) What is soil Catena?
- (ii) State **three** factors which influence the development of a soil catena
- (b) Explain **five** negative effects of soil erosion
- (c) Describe how podzolization occurs in soils
9. (a) Name **three** components of soil
- (b) Explain how the following factors influence the formation of soil :
- (i) Climate
  - (ii) Parent material
- (c) (i) Explain **three** ways in which human activities contribute to soil degeneration
- (ii) Draw a well labeled diagram to show a mature soil profile
10. a) What is a **lake**?
- b) State **three** ways through which lakes are formed
11. a) Define the term **“Soil”**
- b) Explain how the following factors influence the formation of soil
- i) Climate
  - ii) Topography
- c) i) State **two** ways in which humus improves the quality of soil
- ii) State **four** characteristics of desert soils
- d) Describe how the following types of erosion occur
- i) Sheet erosion
  - ii) Gulley erosion
  - iii) State **two** economic uses of soils

12. (a) What is soil conservation?;  
(b) State **three** methods that assist in soil conservation

## **15. AGRICULTURE**

**The topic entails:-**

- (i) *Definition of Agriculture*
  - (ii) *Discussion of factors influencing Agriculture*
  - (iii) *Explaining types of Agriculture*
  - (iv) *Location of major cash crops on the map of Kenya*
  - (v) *Discussing the selected crops in respective countries*
  - (vi) *Identifying and explaining similarities and differences between selected crop farming in Kenya and that of other parts of the world.*
  - (vii) *Discussing Pastoral farming in Kenya*
  - (viii) *Comparing and contrasting:*
    - (a) *Dairy farming in Kenya and Denmark*
    - (b) *Bee farming in Kenya and Argentina*
  - (ix) *Carrying out field work on agricultural activities in the local environment*
- 1 (a) (i) State the difference between land reclamation and land rehabilitation.  
(ii) Other than tree planting, give **three** other methods employed in rehabilitation of land.  
(b) (i) State **three** objectives that led to the establishment of Mwea Irrigation Scheme in Kenya  
ii) Explain **four** human problems that face irrigation farming in Kenya.
2. (a) Describe the stages followed in the reclamation of land from the sea in Netherlands  
(b) State **four** benefits of the delta plan to the Netherlands.
3. (a) (i) Name **two** districts in Rift valley where maize is grown in plantations.  
(ii) Describe maize production from planting to harvesting.  
(b) Outline the significance of maize growing in Kenya.
4. Explain **three** problems facing maize farmers in Kenya.
5. (a) Name **two** exotic breeds of dairy cattle reared in Kenya.  
(b) Give **three** reasons why the Kenya highlands are suitable for dairy farming.
6. (a) Name **two** horticultural crops grown in Kenya  
(b) State **three** reasons why horticulture is more developed in the Netherlands than in Kenya.
7. (a) Name **two** horticultural crops that are produced in Kenya  
(b) Explain **two** reasons why horticultural produce is exported by air
8. (a) (i) What is nomadic pastoralism?  
(ii) State **three** characteristics of nomadic pastoralism
9. a)i) Name **three** exotic breeds of dairy cattle kept in Kenya  
ii) Apart from milk name three other dairy products  
b)i) State **three** factors which favour the rearing of dairy cattle in Kenya highlands  
ii) Explain **four** problems facing dairy farmers in Kenya  
c) i) Compare dairy farming in Kenya and Netherlands  
ii) Name **two** dairy plants in Kenya



10. (a) Name **two** dairy breed found in the lowlands of Kenya  
(b) State **three** problems that have hindered the dairy activities in the Kenya highland
11. a) State **three** physical factors that favour wheat farming in Kenya  
b) Give **three** problems facing wheat farming in Kenya
12. (a) Name ;  
(i) **Three** provinces in Kenya where wheat is grown on commercial scale  
(ii) **Three** wheat producing provinces in Canada  
(b) Explain **three** conditions that favour wheat farming in Kenya  
(c) Explain **five** factors which enable Canada to produce more wheat than Kenya  
(d) State **three** importance of wheat to the economy of Canada
13. (a) Name **three** districts in Kenya where wheat is grown on large scale  
(b) Account for any **four** physical conditions needed for the growth of wheat  
(c) Describe the cultivation of wheat under the following:-  
(i) Processing of wheat  
(ii) Marketing of wheat  
(d) (i) Explain **two** problems facing wheat farmers in Kenya  
(ii) Give **two** reasons why Canada produces more wheat than Kenya (2mks)
14. (a) State **three** physical conditions that favour sugarcane cultivation in Western Kenya  
(b) Give **two** reasons why we need to encourage dairy farming in Kenya
15. (a) (i) Apart from Ghana name two other countries that produces cocoa in Africa  
(ii) State **three** physical conditions that favour large scale cocoa farming in Ghana  
(b) Outline the stages cocoa goes through from harvesting to the time it is ready for export  
(c) Explain **three** problems experienced by cocoa farmers in Ghana
16. (a) (i) What is horticulture  
(ii) Horticulture is more developed in the Netherlands is more developed in the Netherlands than in Kenya. Give **four** reasons for this  
(iii) Give **three** reasons why the growing of flowers in green house is preferred in Kenya
17. Give **four** physical factors favouring wheat –growing in Kenya
18. (a) State **two** physical conditions favoring dairy farming in the Kenya highlands  
(b) Compare dairy farming in Kenya and Denmark under the following headings:-  
(i) Feeding of the animals  
(ii) Marketing of the products
19. (a) Name **two** exotic breeds of beef cattle reared in Kenya  
(b) State **three** physical conditions that favour beef farming in Argentina
20. (a) The figure below shows wheat growing province of Canada



- (i) Name the provinces marked **X**, **Y** and **Z**
- (ii) State **two** physical factors favouring wheat farming in the named provinces above
- (b) Give **one** province where coffee is grown on large scale in Kenya

- 21.
  - a) Differentiate between horticulture and market gardening
  - b) State **three** factors that favour horticultural industry in Kenya
- 22.
  - a) Define **nomadic pastoralism**
  - b) Give **three** characteristics of pastoral farming in Kenya
- 23.
  - a) Give **four** reasons why there has been a steady increase of milk production in Kenya in the recent past
  - b) Give **similarities** between dairy farming in Kenya and Denmark
  - c) Explain **three** benefits of dairy farming in Kenya

- 24. The table below shows horticultural crop production in Kenya

Crop	Quantity in tonnes
flowers	42, 500
oranges	22, 600
tomatoes	20, 300
carrots	15, 400

- (a) (i) Draw a divided rectangle 15cm long to represent horticultural crop production in Kenya in the year 2000 using the data above.
    - (a) (i) Calculate the range of the above data
    - (ii) What is the percentage of horticultural crop with the lowest tonnage?
  - (b) (i) State **two** advantages of using divided rectangle to represent geographical information.
  - (ii) State **two** climatic conditions that favour horticultural crops in Kenya
  - (c) Explain **four** problems facing horticultural farming in Kenya
- 25.
    - (a) Name **three** main breeds of dairy cattle reared in Kenya
    - (b) State **three** benefits of dairy farming in Kenya
  - 26.
    - (a) Name **two** leading export commodities from Kenya
    - (b) State **three** problems facing trade in Kenya
  - 27.
    - (a) State any **three** roles played by livestock in the economy
    - (b) Identify any **two** solutions to problems facing pastoralists in the Northern part of Kenya

28. (a) List **two** economic factors that influence Agriculture  
(b) (i) List **two** uses of cocoa  
(ii) State **one** economic problem experienced in cocoa farming in Ghana
29. (a) Differentiate between **horticulture** and **market gardening**  
(b) Name **two** main types of flowers grown in Kenya  
(c) What problem do farmers in Kenya face in carrying out this activity?
30. (a) State **three** ways in which drought affect the agricultural sector in Kenya.  
(b) State **three** reasons why the government of Kenya is encouraging bee keeping in the country?
31. (a) List **three** social factors that influence Agriculture.  
(b) State **two** factors that favour mechanization of wheat farming in Canada.
32. (a) State **three** climatic factors that favour the growing of oil palm in Nigeria.  
(b) State any **two** products obtained from oil palm.
33. (a) Define the term pollution as used in Geography.  
(b) Dither their air pollution name **three** forms of pollution.  
(c) State physical conditions required for the growing of tea in Kenya.  
(d) Explain **four** problems experienced in small scale to production in Kenya.
34. (a) Name **two** exotic beef cattle breeds in Kenya.  
(b) State **three** steps taken by the government to improve beef farming in Kenya.  
(c) State **three** problems facing beef farming in Kenya.  
(d) (i) Explain **three** physical conditions that favour beef farming in Argentina.  
(ii) Explain **two** ways in which beef farming contribute to the economy of Argentina.

## **16. LAND RECLAMATION AND REHABILITATION**

**This topic entails :-**

- (i) **Definition of land reclama;tion and land rehabilitation**
  - (ii) **Discussing:**
    - (a) **The factors that influence the location of the selected irrigation schemes in Kenya**
    - (b) **The significance of irrigation of farming in Kenya**
    - (c) **The problems experience in irrigation farming in Kenya**
  - (iii) **Description of the methods used in land reclamation and rehabilitation in Kenya**
  - (iv) **Comparing the methods of land reclamation in Kenya and the Netherlands**
- 
1. (a) Apart from Mwea, name **three** other large irrigation schemes in Kenya  
(b) (i) Explain **four** conditions that made Mwea-Tebere a suitable location for an irrigation scheme  
(ii) Explain **four** problems facing farmers in Mwea irrigation scheme  
(c) State **six** benefits which Kenya derives from irrigation farming
  - 2 (a) A part from draining swamps, state **two** other methods used to reclaim land in Kenya.  
(b) State **three** benefits that resulted from the reclamation of Yala Swamp.
  3. (a) (i) Distinguish between **land reclamation** and **land rehabilitation**

- (ii) Name any **three** methods of irrigation.
  - (iii) State **two** advantages of irrigation over natural water supplies
  - (b) (i) Why was Mwea Tebere irrigation scheme initiated?
  - (ii) Explain **four** physical conditions that favoured the establishment of Mwea Irrigation Scheme
  - (iii) Give **three** problems that are faced in Mwea Irrigation Scheme
  - (c) (i) What is a **polder**.
  - (ii) Describe how land is reclaimed and prepared in the Netherlands
  - (iii) Give any **three** benefits of the delta plan
  - (d) How does the above activity differ from that in Denmark?
4. Explain **three** problems caused by a large aging population
5. a) i) Apart from rice name two other crops grown under irrigation at mwea Tabere irrigation scheme
- ii) Explain **four** factors that favoured establishment of Mwea Tabere irrigation scheme
- b) Give **four** problems associated with irrigation farming on R.Thiba & Nyamindi
- c) Explain **three** benefits of Mwea Tabere irrigation scheme
- d)i) Name **two** other irrigation schemes in Kenya apart from Mwea Tabere
- ii) State **three** benefits of rice farming
6. (a) Differentiate between **land reclamation** and **land rehabilitation**
- (b) Explain **four** methods of land reclamation in Kenya
- (c) Explain any **two** methods used in land reclamation and rehabilitation in Netherlands
- (d) State **four** factors which influenced the establishment of Perkerra Irrigation Scheme
7. (a) Explain **two** significance of irrigation farming in Kenya
- (b) State **three** benefits of syader see projects
8. (a) Name any **three** crops grown under irrigation farming in Kenya
- (b) (i) Explain **four** conditions that made Mwea Tebere a suitable location for irrigation farming
- (ii) Outline **two** aims of the tsetseflies control project in the Lambwe valley of Kenya
- (iii) State **four** efforts being made to conserve water catchment areas of Kenya
9. (a) (i) What is a **polder**
- (ii) Name **three** crops grown in the polders.
- (b) Describe the stages involved in the reclamation of land from the sea in the Netherlands
- (c) Explain **four** ways that the Netherlands benefited from the delta plan project
- (d) State **six** problems experienced in irrigation farming in Kenya
10. a) A part from Mwea name three other large irrigation schemes in Kenya
- b) Explain **four** conditions that made Mwea a suitable location for irrigation scheme
- c) Explain **four** ways through which tenants have benefited from Mwea irrigation scheme
- d) Explain **three** problems faced by farmers in Mwea Tabere irrigation scheme
11. (a) (i) Differentiate between land reclamation and land rehabilitation
- (ii) Name **two** methods of rehabilitating land in Kenya
- (b) (i) What is a polder
- (ii) Name **two** crops grown in the polders
- (c) Describe the stages of reclamation of land from the sea in the Netherlands
- (d) (i) State **three** physical factors that influence the establishment of Pekerra irrigation scheme
- (ii) Explain **four** significance of irrigation farming in Kenya

12. (a) (i) Differentiate between land reclamation and land rehabilitation  
(ii) List **three** ways in which tsetse fly menace was controlled in the Lambwe valley  
(b) (i) Name **two** areas in Kenya where swamps have been reclaimed  
(ii) State **four** factors which influenced the establishment of Perkerra irrigation scheme  
(c) Explain **three** problems facing irrigation farming in Kenya  
(d) List **four** benefits of the Delta plan project in Netherlands
13. (a) State **two** methods used to reclaim land in Kenya  
(b) Outline the stages through which land is reclaimed from the sea in the Netherlands
14. (a) List **four** types of wasteland that can be reclaimed  
(b) Give **two** advantages of irrigation farming compared to rain fed farming

## 17. FISHING

The topic entails:

(i) *Definition of fishing and fisheries.*

(ii)

(iii)

(iv)

(v)

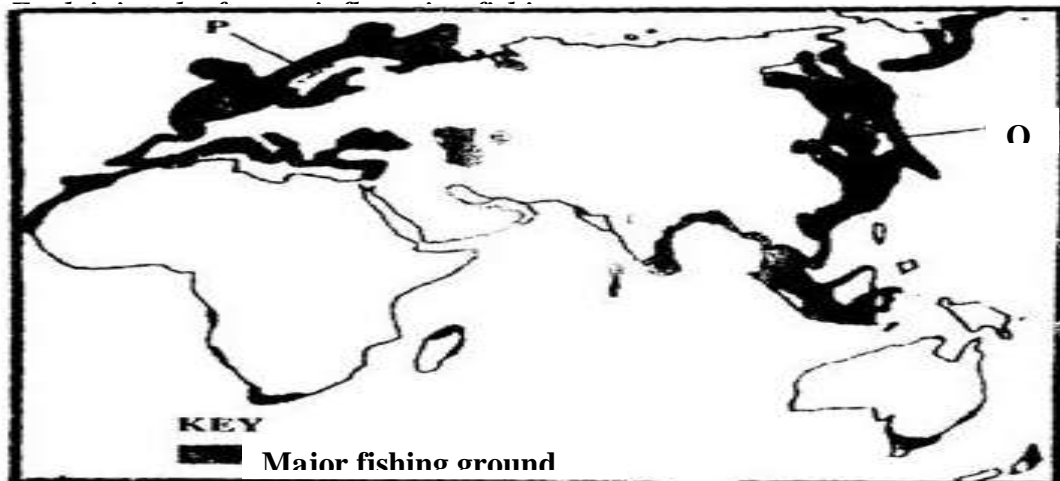
(vi)

(vii)

(viii)

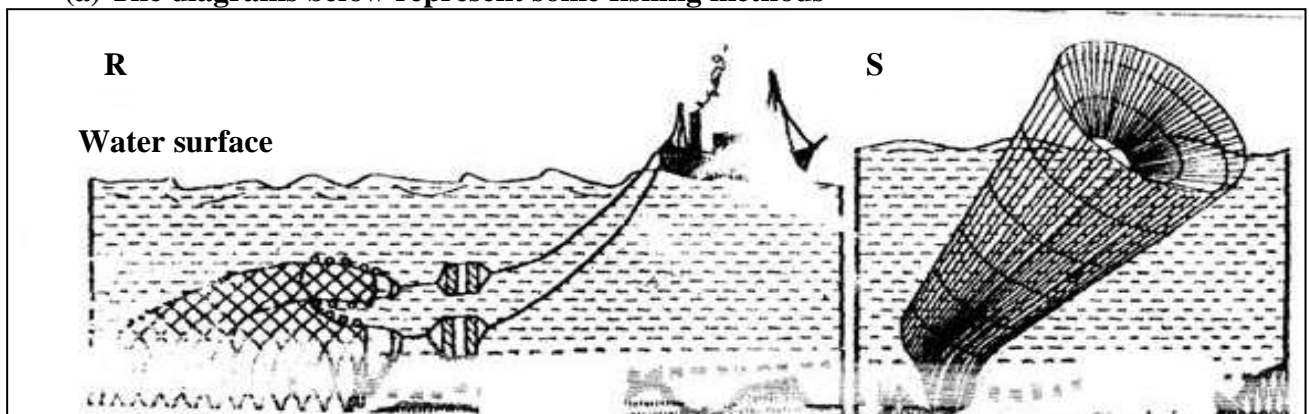
(ix)

The map

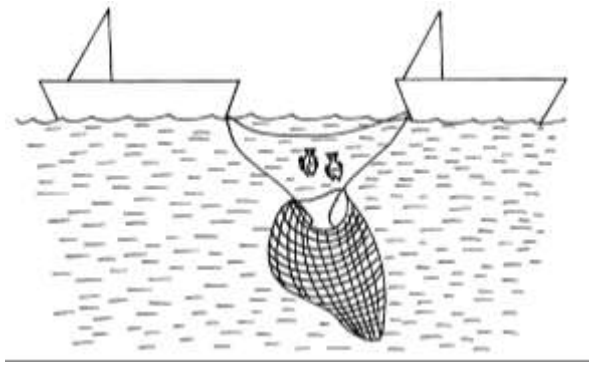


fisheries.  
below:

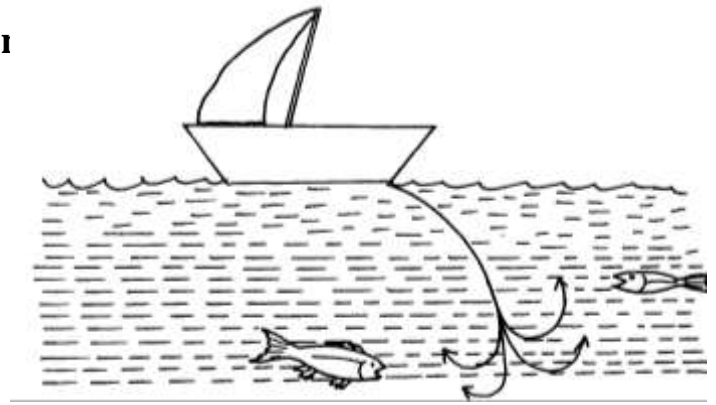
1. (a) (i) Name the countries marked **P** and **Q**  
(ii) Explain **four** conditions that favour fishing in the shaded coastal water
2. (a) The diagrams below represent some fishing methods



- (a) (i) Name methods **R** and **S**
  - (b) Describe how each of the two methods are used in fishing
  - (c) Explain **three** measures used to conserve fish in Kenya
3. (a) (i) What is fish farming?
- (ii) Explain **three** measures that have been undertaken by the government of Kenya to encourage fish farming.
- (b) Explain **four** problems which face marine fishing in Kenya.
- (c) (i) Name **three** fishing grounds in the Northern Hemisphere.
- (ii) Explain **three** physical factors that favour fishing in Japan.
4. (a) Differentiate between veins and lodes.
- (b) State the effects of dereliction
5. (a) (i) Name **two** methods of fishing.
- (ii) Name **two** types of fish caught along the Eastern Coast of Canada.
- (b) Explain how the following factors favour fishing:-
- (i) Indented Coastline
- (ii) Ocean Currents
- (c) Explain **four** ways in which fisheries in Kenya can be conserved.
6. (i) Give **three** methods used to preserve fish.
- (ii) Explain **three** problems experienced by fishermen in Lake Victoria.
7. State **four** reasons why marine fisheries in Kenya are under-developed
8. (a) (i) Name **three** types of nets used in modern fishing
- (ii) Identify the **two** main fishing grounds of the Pacific Ocean
- (b) Explain any **four** problems facing fishing in East Africa
- (c) Explain any **four** ways in which fishing is significant to Kenya
- (d) Name **four** areas where fish farmers in Kenya can obtain fingerlings
9. a) i) State the **three** categories of fish communities
- ii) Explain **four** reasons why North East Atlantic is one of the most extends
- iii) State **four** measures taken by the Kenyan government in the management and conservation of fisheries
10. (a) Apart from trawling, name **two** other modern methods of fishing
- (b) State **two** reasons why the Western Coast of Africa has high concentration of fish than the Eastern Coast.
11. (a) Name **two** commercial fishing methods commonly used in Atlantic fishing ground
- (b) State **three** problems Kenyan fishermen face while fishing in Lake Victoria
12. (a) State **two** measures that have been taken to conserve fish in Kenya
- (b) Give **three** reasons why Norway is a great fishing nation
13. (a) Name commercial methods of fishing shown in the diagrams below:



blisher



(b) State **three** reasons why marine fisheries in Kenya are underdeveloped

14. (a) Differentiate between **pelagic fish** and **demersal fish**?  
 (b) Identify **two** problems facing the fishing industry in Kenya.

## 18. WILDLIFE AND TOURISM

This topic entails:

- (i) *Definition of wildlife, tourism and ecotourism*
- (ii) *Distinction between:*
  - (a) *Game reserves, National Parks, and Sanctuaries*
  - (b) *Domestic tourism and International tourism*
- (iii) *Explaining factors influencing;*
  - (a) *The distribution of wildlife in East Africa.*
  - (b) *Tourism in Kenya*
- (iv) *Location of national parks, major game reserves and sanctuaries on a map of East Africa.*
- (v) *Identification and discussion of tourist attractions in Kenya.*
- (vi) *Discussion of the significance of wildlife in East Africa.*
- (vii) *Discussion of:-*
  - (a) *Problems facing wild life in East Africa.*
  - (b) *Problems facing and associated with tourism in Kenya.*
- (viii) *Discussion of the management and conservation of wildlife in East Africa.*
- (ix) *Discussion of the future of tourism in Kenya.*
- (x) *Comparison and contrast between tourism in Kenya and Switzerland.*

Use the map of East Africa below to answer questions (a) (i)

### MAP OF EAST AFRICA

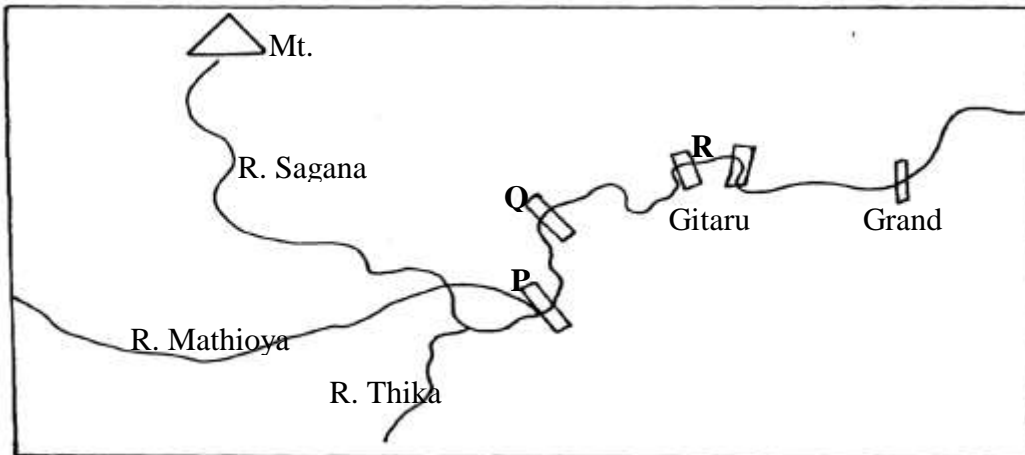


- i) Name the national parks marked **P**, **Q**, and **R**
2.
  - (a) State **two** differences between a National Park and a Game Reserve
  - (b) State **three** measures being taken to conserve wildlife in Kenya
3.
  - (a) Differentiate between game reserves and game parks
  - (b) State **three** ways in which human activities are a threat to wildlife
4.
  - (a) What is balance of payment?
  - (b) Identify **three** problems that face traders dealing with primary goods
5.
  - (a) Why are some parts of Kenya not developed for tourism?
  - (b) State **two** factors that hinder domestic tourism in Kenya.
6.
  - (a) State **three** problems facing wildlife conservation in Kenya.
  - (b) State **two** human factors that have made Switzerland a major tourist destination.

## 19. ENERGY

This topic entails:

- (i) *Definition of energy*
  - (ii) *Discussion of sources and types of energy.*
  - (iii) *Discussion of the development of electric power projects in Kenya and Uganda.*
  - (iv) *Identifying and locating other power projects in Africa*
  - (v) *Ex*
  - (vi) *Ex*
  - (vii) *Di*
  - (viii) *Ide*
1.
  - (a) Na
  - (b) Giv
2.
  - (a) Wh
  - (b) Na
3.
  - (a) (i)
  - (ii) State **three** disadvantages and three advantages of wind as source of energy
- (b) (i) What is geothermal power?
  - (ii) Name **two** areas in Kenya which have a potential for producing geothermal power
- (d) Explain **three** measures taken by the Kenyan government to conserve energy
4.
  - a) i) What is energy crisis
  - ii) State **four** causes of energy crisis
  - b) i) Name three non- renewable sources of energy
  - ii) Apart from seven forks Dam project name two other hydro electric plants in Kenya
  - iii) Explain **four** factors that favoured the establishment of seven forks dam project
  - c) State **two** effects of energy use on environment





5. (a) Give **three** advantages of using solar energy  
(b) Identify the hydro-power stations marked **P**, **Q** and **R** in the diagram
  
- (c) Explain any **five** ways in which energy contributes to the growth of the economy  
(d) (i) Explain any **three** problems associated with energy crisis  
(ii) Suggest any **three** ways to minimize energy wastage
  
6. (a) Define the term renewable sources of energy.  
(b) (i) Explain **four** physical factors influencing the generation of hydro-electric power.  
(ii) Outline **three** limitations in the production of geothermal power in Kenya.  
(c) (i) Explain any **four** negative effects of the energy crisis in the world.  
(ii) State **four** possible methods that the government of Kenya can use to conserve energy.
  
7. (a) Explain the impact of the oil crisis to Kenya  
(b) What measures has the Kenyan government carried out to conserve energy
  
8. a) What is energy crisis?  
b) State **three** environmental impact of energy crisis in Kenya
  
9. (a) Name **two** sources of thermal electricity  
(b) Explain **four** benefits Kenya would get by striking oil in Isiolo  
(c) Explain **three** measures taken by the Kenya government to manage and conserve energy  
(d) Form **four** students of Nyabisawa Girls carried out a field study at Olkaria Geothermal power stations
  
10. (i) State **three** preparation they made prior to the study  
(ii) State **three** methods of data collection they could have used  
(iii) State **three** uses of Geothermal energy they learnt
  
11. (a) (i) Name **two** non-renewable sources of energy  
(ii) Explain **four** physical factors that influence the location of hydroelectric power station  
(b) (i) What is energy crisis?  
(ii) State **three** causes of energy crisis  
(iii) Explain **two** effects of energy crisis
  
12. (a) List **two** renewable fossil fuels  
(b) Identify any **three** functions of hydro power reservoir other than power generation  
(c) State **three** reasons why Kenya spent so little on importing maize during the year 2002  
(d) (i) Name **two** provinces in Kenya where maize is grown on large scale  
(ii) State any **two** uses of maize

13. (a) Name the dams marked **E, F** and **G**

(b) Differentiate between renewable and non-renewable sources of energy.

(c) Explain **three** factors that influenced the location of Owen falls dam in Uganda

(d) Explain **four** problems that hinder development of Hydro-electric power projects in Africa

## **20. INDUSTRY**

**This topic entails :-**

- (i) *Definition of industry and industrialization*
- (ii) *Explaining the factors that influence the location and development of industries*
- (iii) *Describing types of industries*
- (iv) *Accounting for the distribution of industries in Kenya*
- (v) *Explaining the significance of industrialization to Kenya*
- (vi) *Discussing the problems of industrialization and possible solutions*
- (vii) *Comparing and contrasting aspects of industrialization in selected countries.*
- (viii) *Carrying out field work on an industry in the local environment.*

1. Give **five** effects of liberalization of the oil industry in Kenya.
2. (a) Define the term “**industrial inertia.**”  
(b) State **three** factors that make industrialists prefer to locate their plants near already established industries.  
(c) Explain **three** benefits that would result from rural electrification in Kenya
3. (a) Define the term industrial inertia  
(b) State **three** negative effects of industrialization
4. (a) Differentiate between a factory and industry  
(b) Name any **three** types of tertiary industry

## **21. TRANSPORT AND COMMUNICATION**

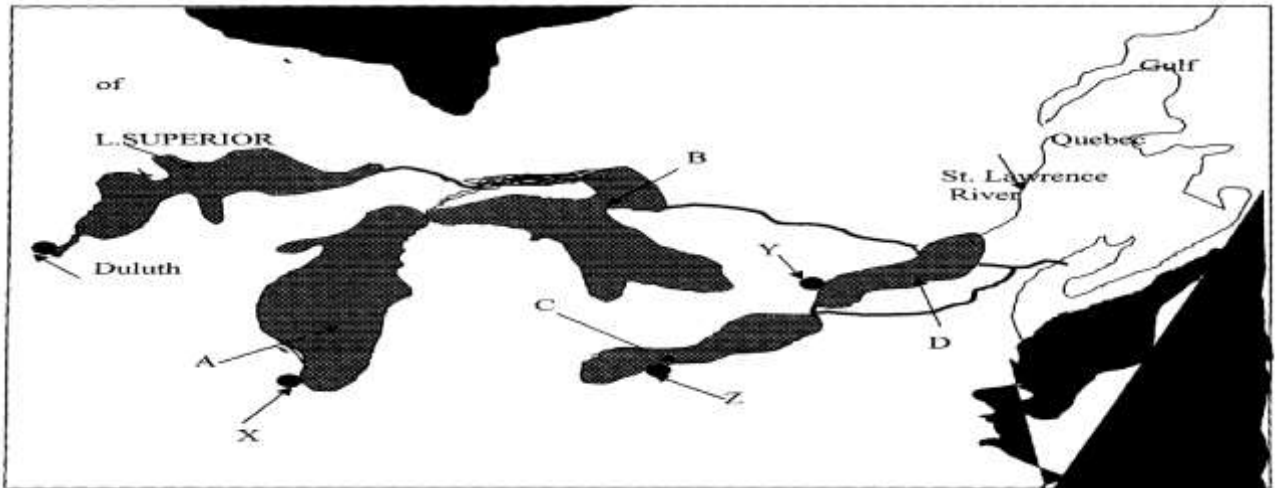
**This topic entails :-**

- (i) *Definition of transport and communication*
- (ii) *Identifying modes of transport and types of communication.*
- (iii) *Location of major lines of transport in Africa.*
- (iv) *Outlining the role of transport and communication in economic development of Africa.*
- (v) *Discussing problems facing transport and communication in Africa and the efforts being made to solve them.*
- (vi) *Explanation of the role of the Great Lakes and the St. Lawrence Sea Way in the economies of USA and Canada.*

1. (a) (i) State **four** factors that influence transport and communication

(ii) State **three** problems facing transport and communication in Africa

(b) The diagram below shows the Great Lakes & St Lawrence Seaway:



(i) Name the lakes marked **A, B, & C** .

(ii) Why was the St. Lawrence Sea way constructed between the Great Lakes and the Pacific Ocean?

(iii) Identify the problems that initially existed along the seaway and how they were solved

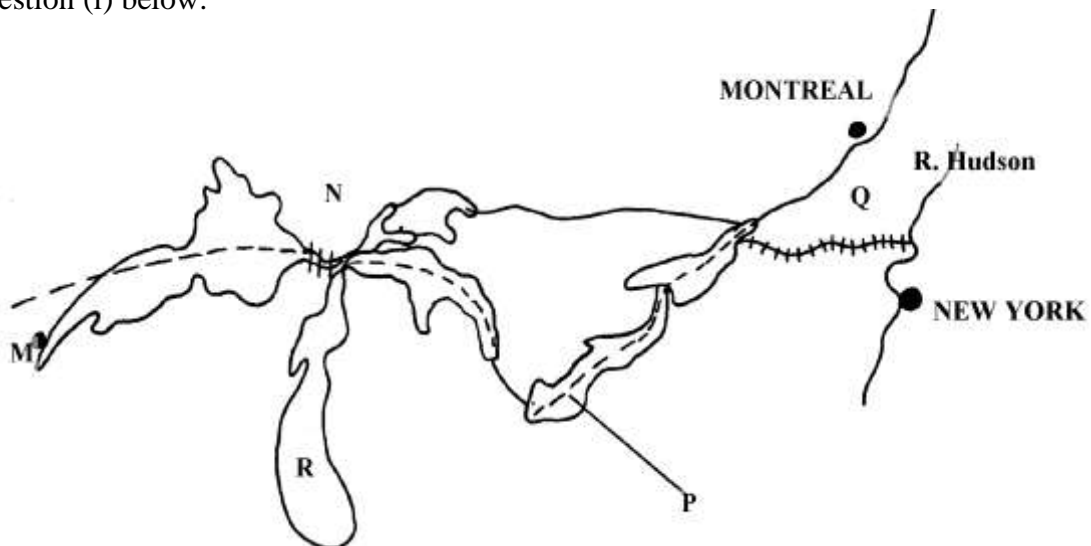
(c) State **four** advantages of the Mombasa-Nairobi pipeline.

(d) Discuss the role of transport and communication in development

2. (a) (i) What is transport?

(ii) Name **three** forms of land transport commonly used in Kenya

(b) Below is a sketch map of the Great Lakes and St. Lawrence Sea Way. Use it to answer question (i) below:



(i) Name;

- The Canals marked **N** and **Q**
- The lakes marked **R** and **P**
- The port marked **M**

(ii) Explain **four** ways in which the Great lakes and St. Lawrence Seaway has contributed to the economies of U.S.A and Canada

(c) State **four** ways in which communication has contributed to economic development of Kenya

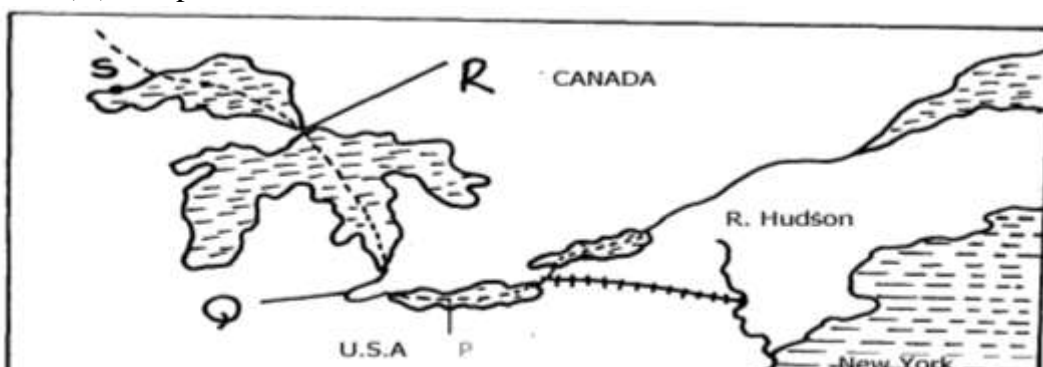
(d) State any **four** problems facing air transport in Africa

3. (a) Define the term **communication**  
 (b) State **two** recent developments that have taken place in Kenya to improve communication  
 (c) State **two** problems facing telephone as a means of communication in Kenya
4. a) State **three** benefits that Kenya would derive from road linkage with the rest of East African countries  
 (b) Give **two** major problems experienced by users of Kenyan roads
5. (a) (i) Give **two** forms of land transport  
 (ii) State any **four** disadvantages of water transport  
 (b) Explain any **five** ways in which transport and communication is important to the economy  
 (c) Explain **three** attempted solution to African transport and communication problems  
 (d) (i) Define canal transport  
 (ii) Name the **two** major canals of the world

6. The table below shows the number shows the number of passengers that used railway transport in selected countries in 1966 and 1977. Use it to answer questions (a) and (b)

COUNTRY	PASSENGERS IN MILLIONS	
	1966	1977
CANADA	4,800	6,000
U.S.A	27,800	16,600
ARGENTINA	14,100	12,000
INDIA	96,000	160,800
JAPAN	258,400	310,900

- (a) (i) Using a scale of 1cm to represent 20,000 million passengers, draw comparative bar graphs based on the data above  
 (ii) State **two** advantages of using bar graphs in representing data  
 (b) Calculate the percentage increase in railway passenger transport in Canada between 1966 and 1977  
 (c) Explain **three** factors that hinder the development of railway links among African countries  
 (d) One of the problems facing road transport is the high frequency of accidents. Explain **three** conditions of roads in Kenya that may lead to accidents
7. (a) (i) Name **three** types of communication mainly used in Kenya  
 (ii) State **two** advantages of pipelines as a means of transport  
 (b) (i) Why is air transport not very commonly used in Kenya?  
 (ii) Explain **four** roles of transport and communications in the economic development of Africa  
 (c) (i) State **three** objectives of constructing the St. Lawrence Seaway  
 (ii) Name **two** canals on the St. Lawrence Seaway
8. Below is a sketch map of the great lakes and St. Lawrence sea way. Use it to answer question (a)  
 (a) Name:- (i) The Lake marked **P**  
 (ii) River marked **Q**  
 (iii) Canal marked **R**  
 (iv) The port marked **S**



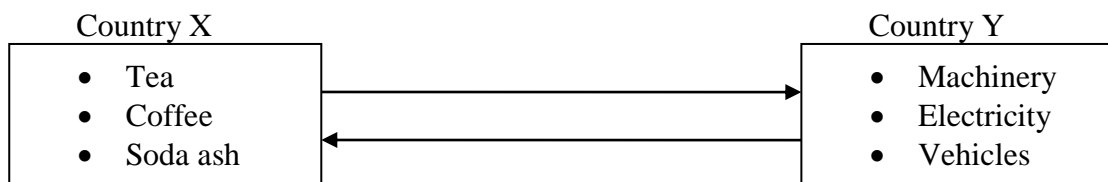
- (b) Explain **three** ways in which the great Lakes and St. Lawrence seaway has contributed to the economy of Canada and United States of America (U.S.A)
  - (c) Explain the factors that hinder the development of river transport in Africa
  - (d) (i) State **three** recent developments that have taken place in Kenya to improve communication
  - (ii) Explain **three** problems facing telephone as a means of communication in Kenya
9. (a) Define the term **containerization**
- (b) State **three** advantages of containerization
10. (a) (i) Explain **three** economic importance of using mobile phones
- ii) State **four** problems associated with the use of mobile phones in Kenya
- b) Give **four** reasons why water transport is poorly developed in Africa
- c) Explain **three** measures that have been taken to solve transport problems in Africa

## 22. TRADE

This topic entails :-

- (i) Identifying and defining types of trade*
- (ii) Discussing factors influencing trade*
- (iii) Identifying major exports and imports of Kenya*
- (iv) Discussing significance of trade to Kenya*
- (v) Discussing problems facing trade in Kenya*
- (vi) Role played by selected trading blocks in the economies of their respective regions.*

1. Use the diagram below to answer question 5a and 5b



- a) Identify the type of trade shown above
- b) State problems country **X** is likely to face in the trade shown above
2. (a) Give **two** types of international trade
- (b) State **two** reasons why there is less trade between Kenya and other African countries
3. (a) State **two** problems facing trade in Kenya.
- (b) Give **three** benefits of regional trading blocs.
4. (a) Outline **two** objectives of the common market for Eastern and Southern Africa (COMESA)
- (b) State **two** efforts made by the Kenya government to enhance external trade

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5. a) i) Differentiate between visible and invisible exports  
ii) Name **three** invisible exports from Kenya  
b) i) Apart from the Economic Community of West African States (ECOWAS) name two other regional trading blocks in Africa  
ii) Identify **three** member countries of ECOWAS  
iii) Explain **five** economic benefits of the Economic Community of West Africa states (ECOWAS)
6. (a) What is balance of payment?  
(b) Identify **three** problems that face traders dealing with primary goods
7. (a) Distinguish between visible and invisible export.  
(b) State **three** negative effects of a country over relying on import goods.

## **23. POPULATION**

**This topic entails :-**

- (i) Definition of population**
- (ii) Explaining the factors influencing population distribution in East Africa**
- (iii) Explaining the factors influencing population growth.**
- (iv) Prescribing population structure**
- (v) Analysis of the consequences of population growth and structure**
- (vi) Comparing and contrasting population trends between Kenya and Sweden.**
- (vii) Presentation of population data using relevant statistical graphs.**

1. The table below shows the population of a county in Western Europe in 1000. use it to answer part a-c

<b>Age group</b>	<b>male</b>	<b>female</b>
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

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

above country

- (d) (i) What is mortality rate?  
(ii) State **five** measures that have been taken in Kenya to reduce infant mortality in Kenya
2. a) Name **two** primary sources of population data  
b) Explain **four** reasons that led to rapid population growth in Kenya in the 1980's  
c) State **four** reasons for increased infertility in Kenyan women today  
d) Give measures taken by the government to combat child mortality
3. (a) Distinguish between **population distribution** and **population density**  
(b) State any **three** problems associated with high population growth rate in Kenya
- 4 (a) (i) What is life expectancy?  
(ii) Give **three** types of information which can be derived from a population pyramid.  
(b) (i) Describe **three** ways in which population of Sweden differs from that of Kenya.  
(ii) Explain **four** causes of rural-rural migration in Kenya.  
(c) Explain **three** problems which result from the high population growth rates in the East African countries
5. (a) Define the term secondary fertility  
(b) (i) Apart from **HIV/AIDS** give two other causes of mortality in East Africa  
(ii) State **two** ways in which the spread of **HIV/AIDS** in Kenya may slow down economic development  
c) State **five** problems facing regional trading blocks in Africa
6. a)i) What is dependency ratio?  
ii) State **three** causes of a high dependency ratio in a population  
b) i) Explain **four** factors that have led to the high population density around Lake Victoria  
ii) Explain **three** problems associated with high population growth rate in Kenya  
c) Give **three** reasons for the low birth rate in Sweden
7. a) What is population census  
b) State **three** reasons why countries conduct population census
8. (a) Differentiate between immigration and emigration  
(b) State **three** effects of rapid population increase in Kenya
9. (a) Define the term **population explosion**  
(b) State **three** reasons why countries conduct population census.  
(c) Give **two** measures the Kenya government has taken to check on high population growth.

## **24. SETTLEMENT**

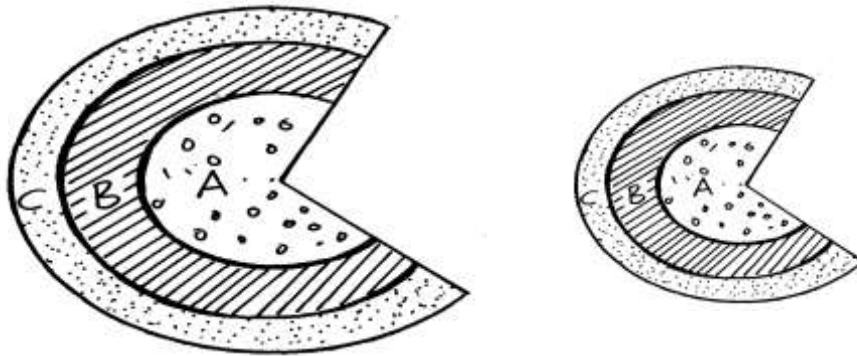
**This topic entails :-**

- (i) Definition of settlement and urbanization*
- (ii) Explaining the factors influencing settlements and settlement patterns*
- (iii) Accounting for the distribution and functions of selected towns in Kenya*
- (iv) Explaining the growth and functions of selected towns in Kenya*
- (v) Comparing and contrasting selected urban centres in Kenya with those of other parts of the world.*
- (vi) Discussing the effects of urbanization*

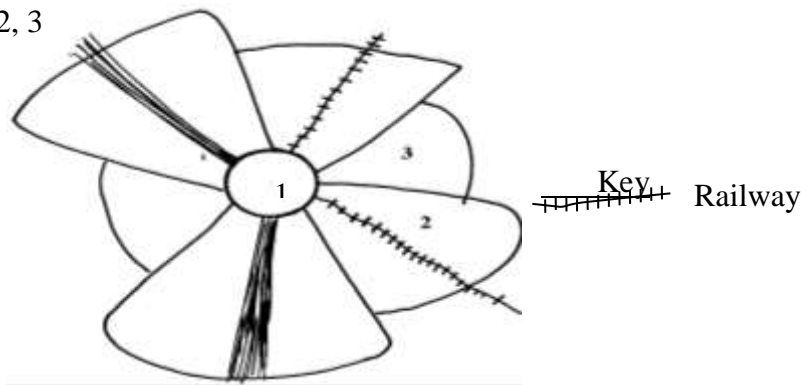
1. The diagram below shows part of the urban set up. Use it to answer part (a) and (b)

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- (a) Name the parts labeled **ABC**  
(b) Give **three** characteristics of the part labeled **A**



- 2 a) Name **two** settlement patterns common in rural areas in Kenya  
b) The diagram below shows the internal structure of an urban centre. Name the sectors labeled 1, 2, 3



## 25. MANAGEMENT AND CONSERVATION OF THE ENVIRONMENT

This topic entails :-

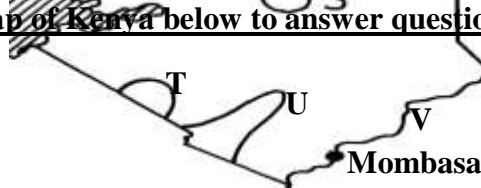
- (i) *Definition of management and conservation*
- (ii) *Explaining why it is necessary to manage and conserve the environment*
- (iii) *Naming/identifying environment hazards*
- (iv) *Assessing the impact of selected environmental hazards and suggesting measures for combating them.*
- (v) *Discussing the measures taken in managing and conserving the environment.*

1.
  - i) Define the term **land pollution**
  - ii) Explain **four** causes of land pollution
  - iii) Explain **four** effects of land pollution
2.
  - a) Reasons why National parks are located in marginal areas.
  - (b) Explain **three** ways in which water pollution affect wildlife
  - (c)
    - (i) State **three** causes of floods in Kenya
    - (ii) Explain **two** methods used to control flooding in Kenya
  - (d) State **six** reasons why it is important to manage and conserve environment
3.
  - (a) Give **three** causes of sound pollution
  - (b) State **two** major health effects caused by sound pollution
4.
  - (a) Apart from flooding, name three other environmental hazards experienced in Kenya
  - (b)
    - (i) Name **two** rivers to the west of Rift valley which causes large scale flooding

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- (ii) Explain **four** problems caused by floods  
 (c) Explain **three** effects of land pollution on the environment  
 (d) (i) State **three** ways through which land pollution can be controlled  
 (ii) Give **three** effects of wind as an environmental hazard in Kenya
5. Use the map of Kenya below to answer question (a)



- (a) (i) Name the wildlife conservation areas marked **S**, **T**, and **U**  
 (ii) Identify the Marine National Park marked **V**
- (b) (i) Apart from Marine and Wildlife name **three** other tourist attractions along the coastal strip of Kenya  
 (ii) Give **four** reasons for wildlife conservation in Kenya  
 (iii) Explain **four** problems facing wildlife conservation in Kenya
6. (a) Give **three** reasons why it was necessary to conduct a pre-visit before the actual study (3mks)  
 (b) State **three** measures that they could propose to be taken to promote domestic tourism in Kenya (3mks)
7. (a) Apart from floods, name any other environmental hazard experienced in Kenya  
 (b) State **two** causes of desertification  
 (c) Give **two** reasons why it is necessary for Kenya to conserve her environment
8. (a) Differentiate between management and conservation of the environment.  
 (b) Give **four** reasons why we need to manage and conserve the environment.  
 (c) Explain **four** effects of air pollution on the environment.  
 (d) (i) Give **five** measures that can be put in place to combat pollution.  
 (ii) Identity **three** human characteristics you may learn from the garbage;
9. (a) Define the term pollution as used in Geography.  
 (b) Dither their air pollution name **three** forms of pollution.
10. Apart from desertification, name **two** other environmental hazards experienced in Kenya

# For marking schemes

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