



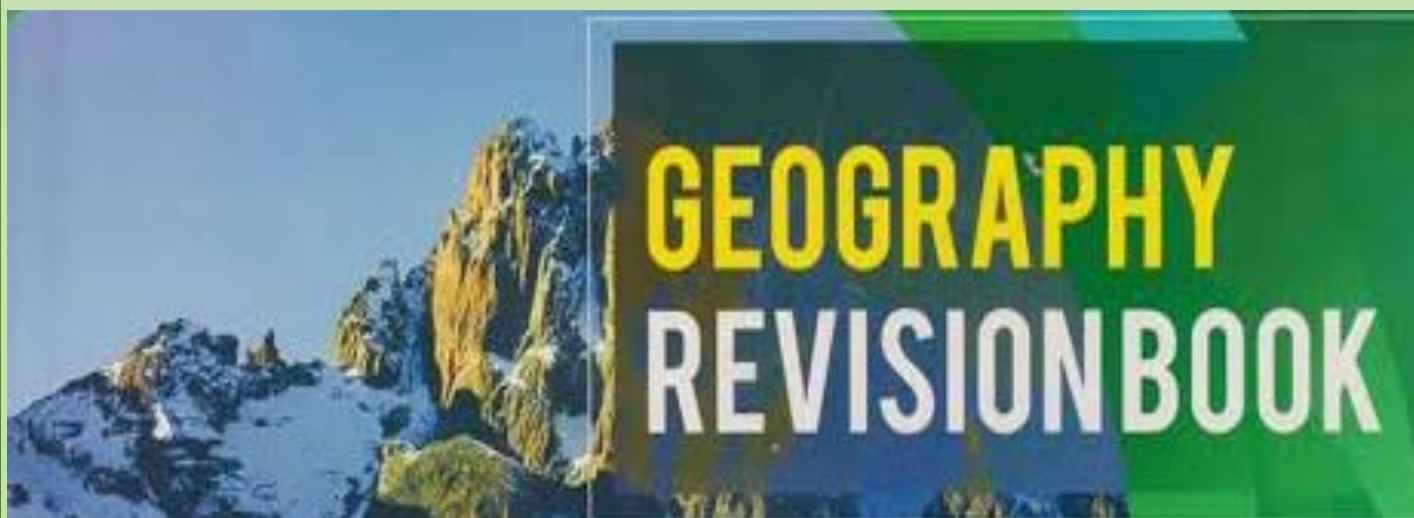
GOLDLITE ONLINE EDUCATIONAL SERVICES
KCSE SMARTFOCUS QUICK REVISION SERIES



Geography

PAPER 1 AND 2

SERIES 1-30



2025 EDITION
FOR MARKING SCHEMES INBOX
0724351706 or visit our website
www.goldlitekcserevision.co.ke

SERIES 1
PAPER 1
SECTION A

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

1. (a) The local time at Helsinki, Finland (60° North, 28° East) is 9.40 a.m. Calculate the local time at New Orleans, USA (45° South, 90° West). (3 marks)
(b) Differentiate between a solstice and an equinox. (2 marks)
2. (a) How does isostatic adjustments of the crustal rocks cause earth movements? (2 marks)
(b) Name **three** major plate boundaries of the earth. (3 marks)
3. The figure below shows some of the world's ocean currents. Use it to answer the question (a).



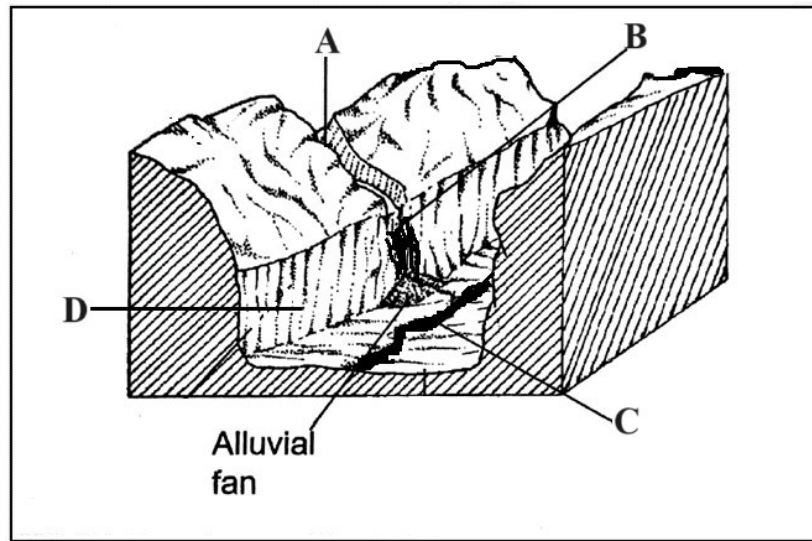
- (a) Name the ocean currents marked **A** and **B**. (2 marks)
(b) State **two** factors that influence the growth of coral polyps. (2 marks)
4. (a) Give **two** fold mountain orogenies. (2 marks)
(b) State **three** effects of fold mountains on climate. (3 marks)
5. (a) State **three** problems of volcanoes. (3 marks)
(b) Give **three** life cycles of a volcano. (3 marks)

SECTION B

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

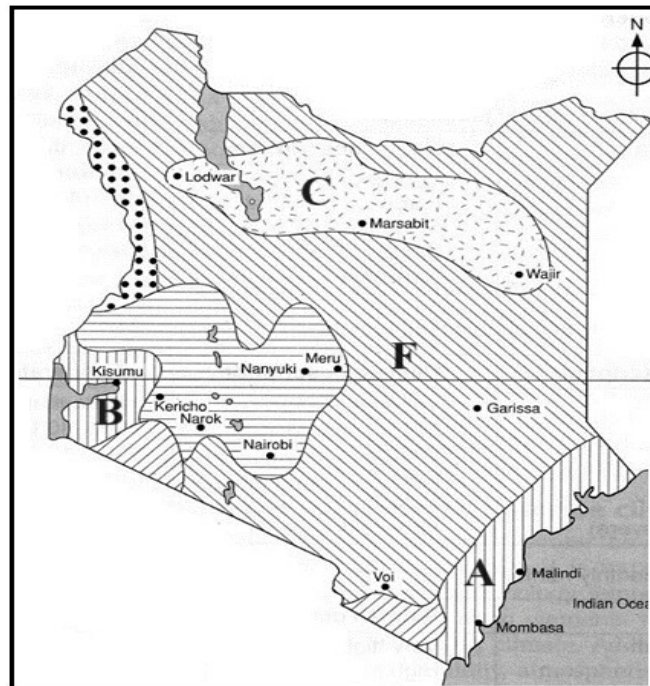
6. Study the map of Mumias, East Africa 1:50,000 (Kenya) (sheet 101/2) provided and answer the following questions.
- (a) (i) Give **two** scales used in the map extract. (2 marks)
- (ii) What is the altitude of the lowest point covered by the map? (2 marks)
- (b) (i) Describe the drainage of the area covered by the map. (4 marks)
- (ii) Give two indices to adjoining sheets to the eastern part Mumias. (2 marks)
- (c) (i) Giving evidence, state **four** relief features found in the area covered by the map. (4 marks)
- (ii) Calculate the area of the land bound between the River Nzoia and the Regional boundary to the south of northing 30. (2 marks)
- (d) (i) Reduce by 50% the area bound by eastings 53 and 61 and northing 36 and 44. (2 marks)
- (ii) On the frame, mark and name the following:
- Riverine vegetation; (1 mark)
 - Loose surface road; (1 mark)
 - River Lairi. (1 mark)
- (e) Citing evidence from the map, identify **four** social activities offered area covered by the map. (4 marks)
7. (a) (i) Apart from the Rift Valley name **two** other relief features that were formed as result of faulting. (2 marks)
- (ii) With the aid of a well labeled diagram, describe how a Rift Valley is formed by compressional forces. (8 marks)
- (b) Explain **four** effects of faulting on human activities. (8 marks)
- (c) Students are planning to carry out a field study of an area affected by faulting
- (i) State **four** reasons why it is important for the students to have a pre-visit of the area. (4 marks)
- (ii) One of the ways they would use to collect data is through direct observation. State **three** disadvantages of direct observation in the study of such an area. (3 marks)
8. (a) (i) Define the term glaciation. (2 marks)
- (ii) Name **three** ways in which ice moves outwards from its area of accumulation. (3 marks)
- (b) State **three** factors that influence glacial erosion. (3 marks)

- (c) The diagram below shows some features of glaciation erosion. Use it to answer the questions that follow.



- (i) Name the parts labeled **A**, **B** and **C**. (3 marks)
- (ii) Describe how the part labeled **D** is formed. (5 marks)
- (d) List **three** depositional features of glaciation in lowland areas. (3 marks)
- (e) Explain **three** problems of glaciation in the environment. (6 marks)

9. (a) (i) Define the term micro climate. (2 marks)
- (ii) State **five** ways in which human activities influences the climate of a given place. (5 marks)
- (b) The map below shows the climatic regions of Kenya. Use it to answer the questions that follow.



- (i) Give the features responsible for the climatic types labeled **B** and **F**. (2 marks)

- (ii) Name the climatic types marked **A** and **C**. (2 marks)
 - (c) Describe the characteristics of equatorial climate. (5 marks)
 - (d) (i) State **three** possible solutions to aridity and desertification. (3 marks)
 - (ii) Explain **three** effects of climate change in the world today. (6 marks)
10. (a) Give **three** processes that lead to formation of lakes (3 marks)
- (b) (i) Describe the formation of Lake Victoria (5 marks)
- (ii) State **four** ways how Lake Victoria influences the climate of the surrounding areas. (4 marks)
- (c) (i) Explain **three** causes of salinity in Lake Magadi. (6 marks)
- (ii) Apart from Lake Magadi, name **two** other lakes in Kenya that are saline. (2 marks)
- (d) Members of your class plan to conduct a field study of Lake Naivasha
- (i) Why would they need a route map to the lake? (2 marks)
- (ii) State **three** problems affecting the lake they may observe during the study. (3 marks)

PAPER 2
SECTION A

Answer all questions in this section.

1. (a) Name **two** oil producing countries in the Middle East. (2 marks)
(b) Mention **three** uses of copper. (3 marks)
2. (a) What is agro-forestry? (2 marks)
(b) Give **three** characteristics of coniferous forests in Canada. (3 marks)
3. (a) State **two** physical conditions that favour tea growing in the Kenya highlands. (2 marks)
(b) Outline **three** problems facing oil palm farming in Nigeria. (3 marks)
4. (a) Identify **two** dairy cattle breeds kept in Denmark. (2 marks)
(b) Highlight **three** similarities of commercial beef farming in Kenya and Argentina. (3 marks)
5. (a) Name **two** towns in Kenya that started as agricultural collection centres. (2 marks)
(b) State **three** characteristics of Central Business District Zone of an urban centre. (3 marks)

SECTION B

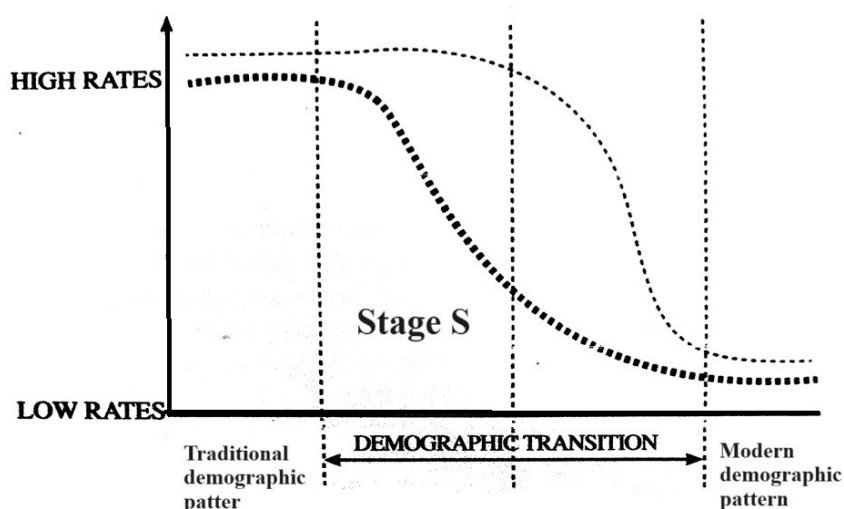
Answer Question 6 and any other two question from this section.

6. (a) The table below shows the value of export crops from Kenya between 2019 and 2022 in million Ksh.
Use it to answer questions below.

Crop /year	2019	2020	2021	2022
Maize	224	210	360	286
Coffee	168	190	267	310
Tea	320	280	299	388
Horticultural	200	240	315	461
Total	912	920	1241	1445

- (i) Calculate the total export value for tea. (2 marks)
 - (ii) Using a scale of 1cm to represent Ksh.100 million, draw a cumulative bar graph to represent the data above. (10 marks)
 - (b) Distinguish between the following terms Balance of trade and Balance of payment. (2 marks)
 - (c) Highlight **three** common problems facing the African regional trading blocs. (3 marks)
 - (d) Explain how the future of international trade can be improved in Kenya. (8 marks)
7. (a)(i) Differentiate between land reclamation and land rehabilitation. (2 marks)
- (ii) Give **five** objectives of tsetse fly control in Lambwe Valley in Homabay County. (5 marks)
 - (b) Give **four** methods used to reclaim land in Netherlands. (4 marks)
 - (c) Describe the stages followed in reclaiming and preparing land from the sea for agricultural use in Netherlands. (6 marks)

- (d) Explain **four** differences between land reclamation in Kenya and Netherlands. (8 marks)
8. (a) State **four** ways in which game reserves are of benefits to the communities living near them. (4 marks)
- (b) State **five** difficulties that African counties face in the conservation of forests. (5 marks)
- (c) Explain the significance of conserving the environment. (8 marks)
- (d) (i) Define the term game ranching. (2 marks)
- (ii) Explain **three** differences between tourism in Kenya and Switzerland. (6 marks)
- 9 (a) (i) Distinguish between industry and industrialization. (2 marks)
- (ii) State **five** factors that have influenced industrial development in Thika. (5 marks)
- (b) Explain **four** factors that have led to the rapid development of automobile (car) industries in Japan. (8 marks)
- (c) Give **four** factors that hinder expansion of geothermal power production in Kenya. (4 marks)
- (d) Explain **three** benefits of rural electrification. (6 marks)
10. The diagram below shows the demographic transition of a given region. Use it to answer the questions that follow.

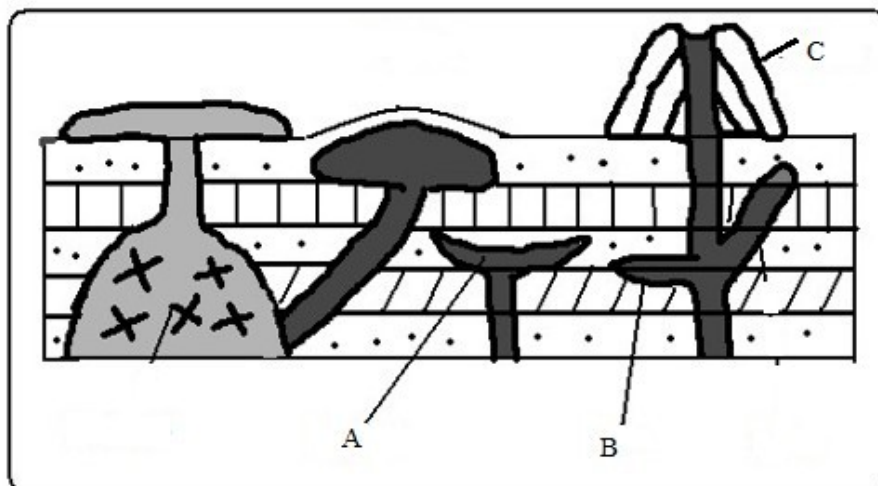


- (a) (i) Give **three** characteristics of stage S. (3 marks)
- (ii) State **three** reasons for the high death rates in the traditional stage. (3 marks)
- (b) Highlight **four** problems that arise from population decline. (4marks)
- (c) Outline **three** ways in which climatic factors have influenced the distribution of population in Sweden. (3 marks)
- (d) Explain **four** effects of rural-rural migration to the receiving areas. (8 marks)
- (e) Compare population characteristics in Kenya and Sweden under the following sub headings.
- (i) Age structure. (2 marks)
- (ii) Fertility rate. (2 marks)

SERIES 2
PAPER 1
SECTION A

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

1. (a) Give **two** kinds of rock metamorphism. (2 marks)
 (b) State **three** characteristics of metamorphic rocks. (3 marks)
2. (a) Define the term precipitation. (2 marks)
 (b) State **three** conditions that are necessary for the formation of fog. (3 marks)
3. The diagram below shows some features of vulcanicity. Use it to answer the questions that follow.

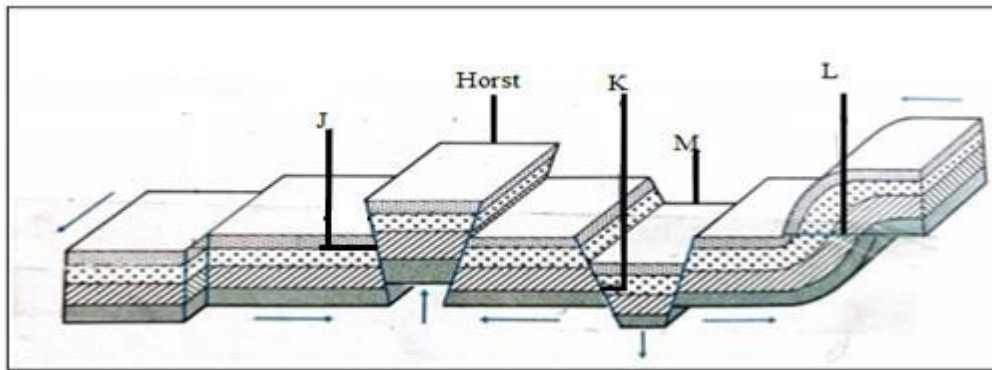


- (a) Identify the features marked **A** and **B**. (2 marks)
 (b) Name **three** examples of the feature marked **C** found in the Kenyan rift valley. (3 marks)
4. (a) Give **two** processes of wind erosion in deserts. (2 marks)
 (b) State **three** physical factors which contribute to the development of deserts. (3 marks)
5. (a) Name **two** types of soil according to texture. (2 marks)
 (b) State **three** ways in which soil erosion can be controlled. (3 marks)

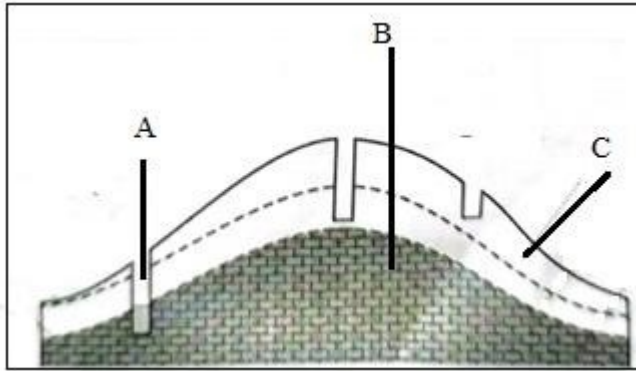
SECTION B

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

6. Study the map of Meru (1:50,000) provided and answer the following questions.
 - (a) (i) Give the latitudinal extent of the area covered by the map. (2 marks)
 (ii) What is the approximate height of Ol Doiyo Sabu hill in feet? (2 marks)
 (iii) Identify **three** physical features found in grid square 4120. (3 marks)
 - (b) (i) Calculate the area of Meru Forest to the east of easting 50. (2 marks)
 (ii) What is the length in kilometres of the road E807 in the southern part. (2 marks)
 (iii) Apart from forest, give **three** other types of natural vegetation in Meru area. (3 marks)
 - (c) Describe the drainage of the area covered by the map. (5 marks)
 - (d) Citing evidence from the map, identify **three** social services offered in Meru municipality. (6 marks)
7. (a) What is faulting? (2 marks)
 (b) The diagram below shows some faults and associated features.



- (i) Identify the faults marked **J**, **K** and **L**. (3 marks)
- (ii) Name the feature labeled **M**. (1 mark)
- (iii) Describe how a horst is formed by tensional forces. (4 marks)
- (c) (i) Name **three** major faulted areas of the world. (3 marks)
- (ii) State **four** ways in which faulting influence drainage. (4 marks)
- (d) Explain **four** negative effects of faulting on the environment. (8 marks)
8. (a) Apart from water vapour, name **two** other substances that are suspended in the atmosphere. (2 marks)
- (b) (i) Give **two** factors that are considered when classifying clouds. (2 marks)
- (ii) Name **two** types of clouds that give rise to rainfall in tropical regions. (2 marks)
- (c) Explain how the following factors influence climate.
- (i) Altitude (4 marks)
- (ii) Distance from the sea (4 marks)
- (d) Explain **three** effects of climate change on the physical environment. (6 marks)
- (e) Members of your class visited a nearby weather station to study recording of weather elements.
- (i) State **two** features of a Stevenson screen you observed during the study. (2 marks)
- (ii) Identify **three** types of data you likely collected during the study. (3 marks)
9. (a) What is mechanical weathering? (2 marks)
- (b) (i) Apart from living organisms, give **two** other factors that influence rate of weathering. (2 marks)
- (ii) Explain **three** ways in which plants cause weathering. (6 marks)
- (c) Describe how the following processes of mass wasting occur.
- Earth flow (4 marks)
 - Avalanche (3 marks)
- (d) Explain **four** effects of mass wasting on the environment. (8 marks)
10. (a) The diagram below shows a sectional view of wells sunk into the side of a hill.

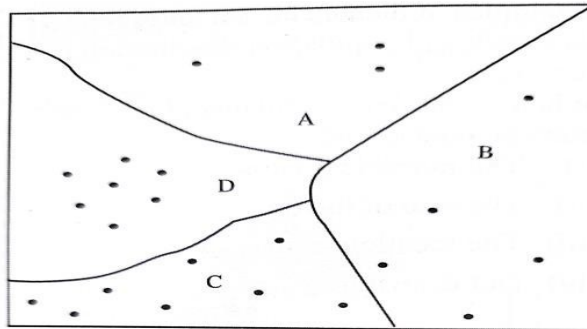


- (i) Identify the features marked **A**, **B** and **C**. (3 marks)
- (ii) Give **three** factors that influence occurrence of ground water. (3 marks)
- (b) Explain **three** factors which influence formation of features in limestone areas. (6 marks)
- (c) Describe how the following limestone features are formed. (4 marks)
- Cavern (4 marks)
 - Clints (4 marks)
- (d) You are supposed to carry out field study on a karst landscape. (3 marks)
- (i) State **three** reasons why you would need a map of the area of study. (3 marks)
- (ii) Give **two** characteristics of karst landscape you're likely to identify. (2 marks)

PAPER 2 SECTION A

Answer all questions in this section

1. (a) Define the term environment? (2 marks)
- (b) List three sub branches of human geography. (3 marks)
2. (a) Apart from dot maps, name any other type of statistical map (1 mark)
- (b) Study the dot map below and use it to answer question 2(b).

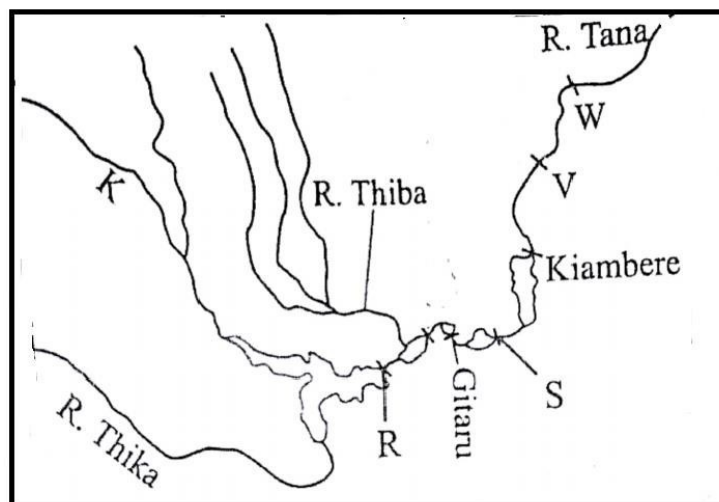


Dot value. 1 dot represent 31,000 cows

Area of division C is 25,531.23km²

Calculate the population density of division C. (3 marks)

3. (a) Name **two** major varieties of wheat grown in Kenya. (2 marks)
- (b) Give **three** reasons for using a combine harvester in wheat harvesting. (3 marks)
4. (a) Define the term urbanization. (2 marks)
- (b) State **four** factors that lead to development of dispersed settlement (4 marks)
5. (a) Identify **two** categories of energy sources (2 marks)
- (b) The sketch map below shows Hydro electric power stations along river Tana. Use it to answer question b (i) and (ii) (3 marks)



- (i) Name the river marked K (1 mark)
- (ii) Name the power station marked R and S (2marks)

SECTION B

For marking schemes and more papers inbox 0724351706 or visit www.goldlitekcserevision.co.ke

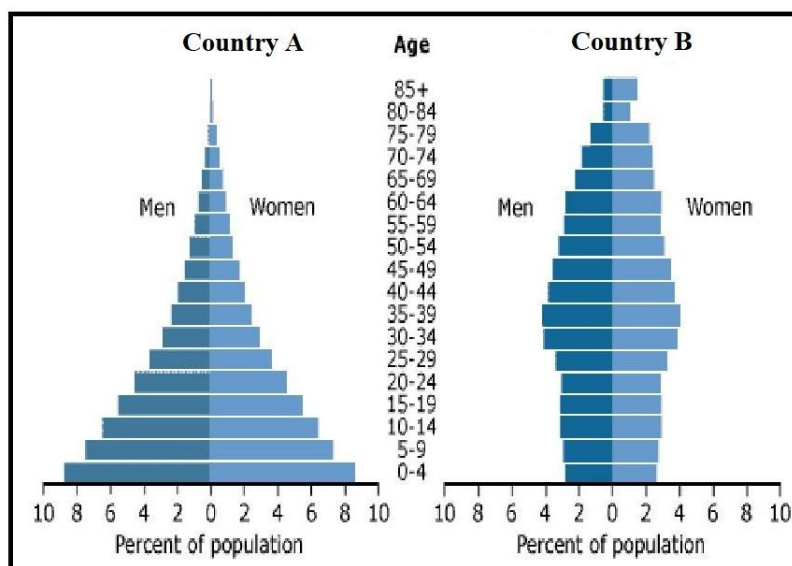
Answer **question 6** and any other **two** questions from this section.

6. (a) The table below shows displaced persons by floods in Kenya in April to May 2024 long rain season in different counties. Study it and use it to answer question 6 (a) (i) and (ii)

County	Number of displaced persons
Kisumu	41923
Busia	16645
Nairobi	34125
Tanariver	18678
Garissa	62890

- (i) Draw a divided rectangle measuring 12cm to represent the above data. (8 marks)
- (ii) State **two** conclusions that can be made from the divided rectangle drawn above. (2 marks)
- (b (i) A part from floods, mention **two** other climatic hazards experienced in Kenya. (2 marks)
- (ii) Name **two** rivers in Western Kenya that cause large scale flooding (2 marks)
- (iii) Explain **three** human factors that lead to frequent flooding in Kenya. (6 marks)
- (c) (i) What is water pollution? (2 marks)
- (ii) Identify **three** legislative actions that have been taken by the Kenyan government to combat pollution of water sources. (3 marks)

7. (a) (i) Differentiate between population and demography. (2marks)
- (ii) Give **three** factors that influence population growth. (3 marks)
- (b) Study the figure below and use it to answer questions b(i) and (ii)



- (i) Identify the stages of demographic transition for country A and country B. (2 marks)
- (ii) State **three** characteristics of the population represented by pyramid B. (3 marks)

(c) (i) Differentiate between emigration and immigration (2 marks)

(ii) Explain **three** factors that cause urban to rural migration in Kenya (6 marks)

(d) Explain how the following factors have influenced population distribution in Kenya and Sweden

- Mountains (2 marks)
- Mining (2 marks)

(e) Give **three** differences between population trends in Kenya and Sweden. (3 marks)

8. (a) (i) Name **two** forms of internal trade in Kenya. (2 marks)

(ii) Name **two** major imports to Kenya from European Union. (2 marks)

(b) Explain how the following factors influence trade in Kenya.

- Transport (2 marks)
- Demand for goods (2 marks)

(c) State **three** problems facing internal trade in Kenya. (3 marks)

(d) Explain **four** ways in which Kenya will benefit from the renewed East African Community. (8 marks)

(e) Explain how trade restrictions have influenced external trade in Kenya. (6 marks)

9. (a) Define the term industrialisation. (2 marks)

(b) (i) Identify **two** industries located in the Ruhr region of Germany. (2 marks)

(ii) Explain how the following factors that led to the growth of industries named in b(i) above.

- Availability of capital (2 marks)
- Central geographical location. (2 marks)

(c) Explain **three** ways in which Kenya has benefitted from assembling vehicles locally. (6 marks)

(d) State **three** problems that face industrial development in Kenya. (3 marks)

(e) You intend to carry out a field study on jua kali sheds in Kisumu;

- (i) Construct a one day work schedule for the study. (4 marks)
- (ii) State **two** reasons why you would conduct a pre-visit. (2 marks)
- (ii) State **two** characteristics of jua kali industries you are likely to identify. (2 marks)

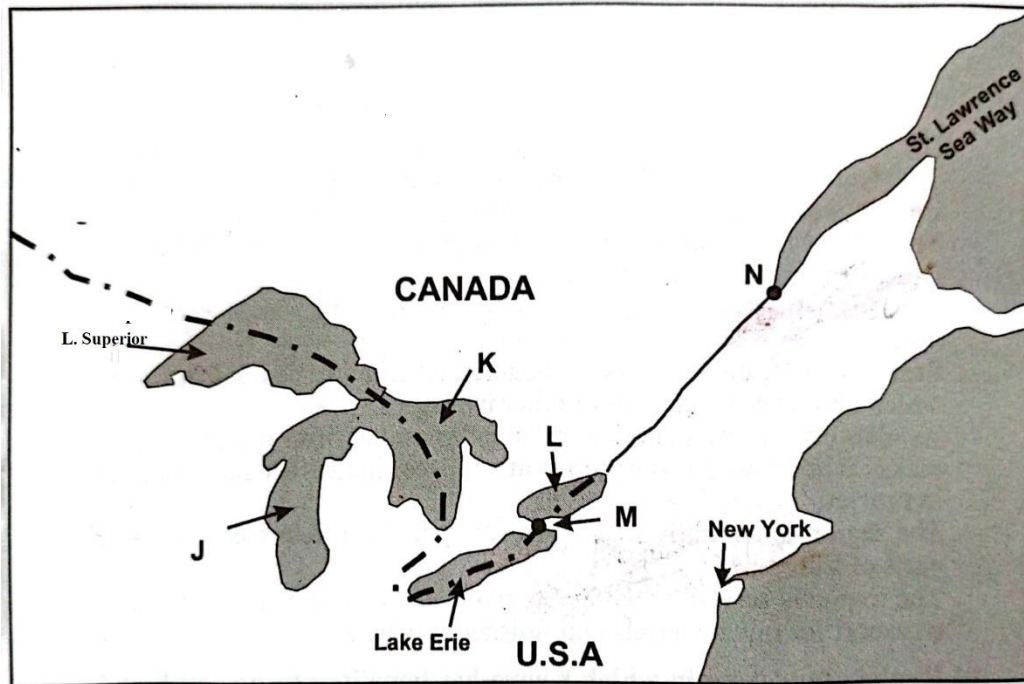
10. (a) (i) Define communication? (2 marks)

(ii) State **three** recent developments that have taken place to improve mobile phone services in Kenya. (3 marks)

(b) (i) Apart from canals, give other **three** waterways in Africa. (3 marks)

(ii) Give **three** reasons why the Suez canal is commonly used waterway in Africa. (3 marks)

(c) Study the map of the Great Lakes and the St. Lawrence Sea way below and name features marked J, M and N. (3 marks)



- (d) Explain **three** ways in the Great Lakes and St. Lawrence Sea way route has contributed to industrial development in the region (6 marks)
- (e) State **five** measures the government has taken to reduce road accidents in Kenya. (5 marks)

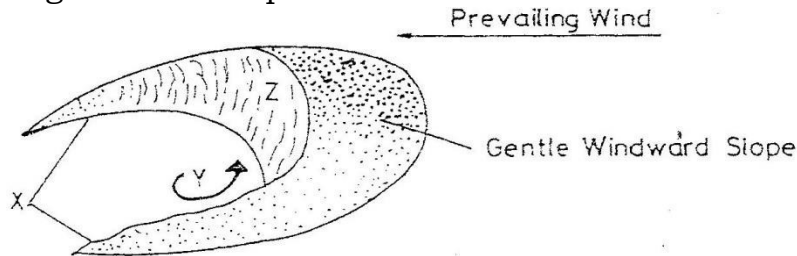
SERIES 3

PAPER 1 SECTION A:

Answer all the questions.

1. (a) How does a land breeze occur? (2mks)
(b) (i) Name two ocean currents found on the coasts of West Africa. (2mks)
(ii) State one effect of warm ocean current on the adjacent coastlands. (1mk)

2. (a) The diagram below represents a barchan. Use it to answer question (a)

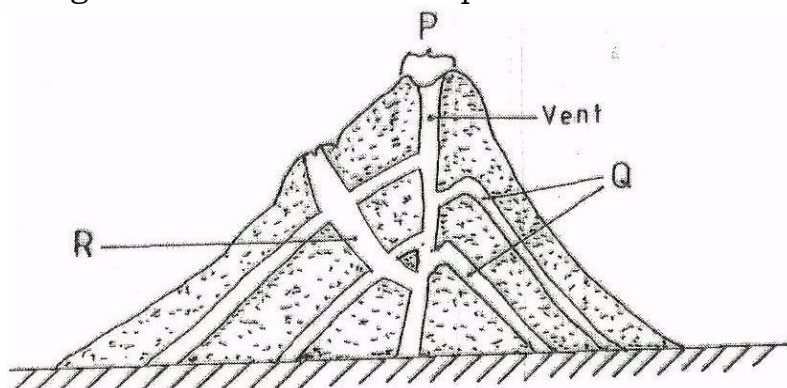


Name;

- i) The feature marked X. (1mk)
ii) The air current marked Y. (1mk)
iii) The slope marked Z. (1mk)

- (b) Give two ways in which wind transports its load. (2mks)

3. The diagram below shows a composite volcano.



- a) Name the features marked P, Q and R. (3mks)
b) Give two ways in which vulcanicity influences human activities. (2mks)

4. (a) What is the difference between an ice sheet and an iceberg? (2mks)
(b) Name three types of glacial moraines. (3mks)

5. (a) Give two components of the solar system. (2mks)
(b) State three effects of the movement of the earth around the sun. (3mks)

SECTION B:

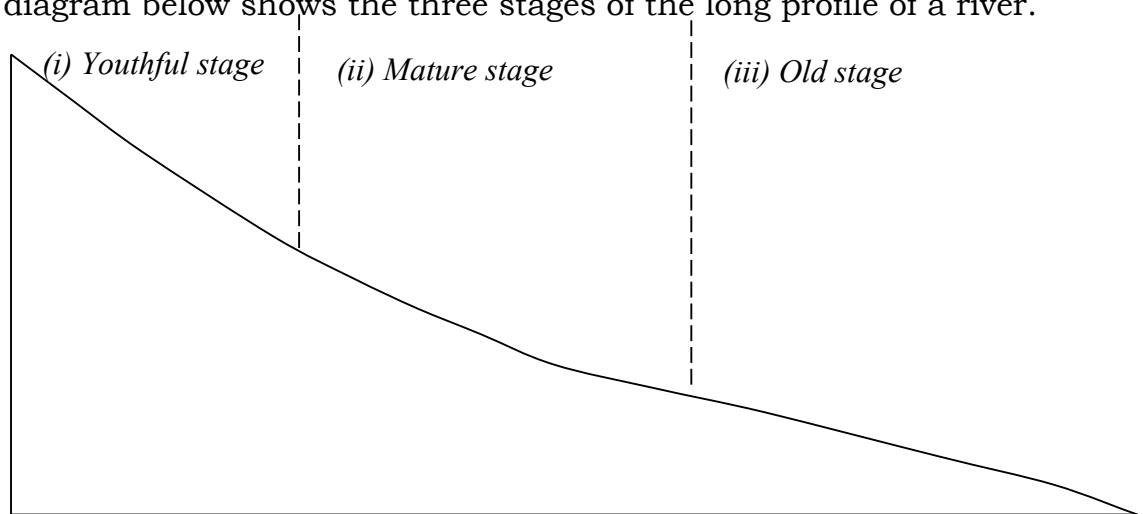
Answer question 6 and any TWO other questions from this section.

6. Study the map of Oyugis 1:50,000 (sheet 130/1) provided and answer the following questions.
a) (i) What is the four figure grid reference of the Kokungu dam? (2mks)
(ii) What is the magnetic variation of the map? (1mk)

- (iii) Calculate the area covered by Koderia Forest. Give your answer in square kilometers. (2mks)
- b) Draw a square 10cm by 10cm to represent the area enclosed by Eastings 84 and 94 and Northings 28 and 38. (1mk)

On the square, mark and name;

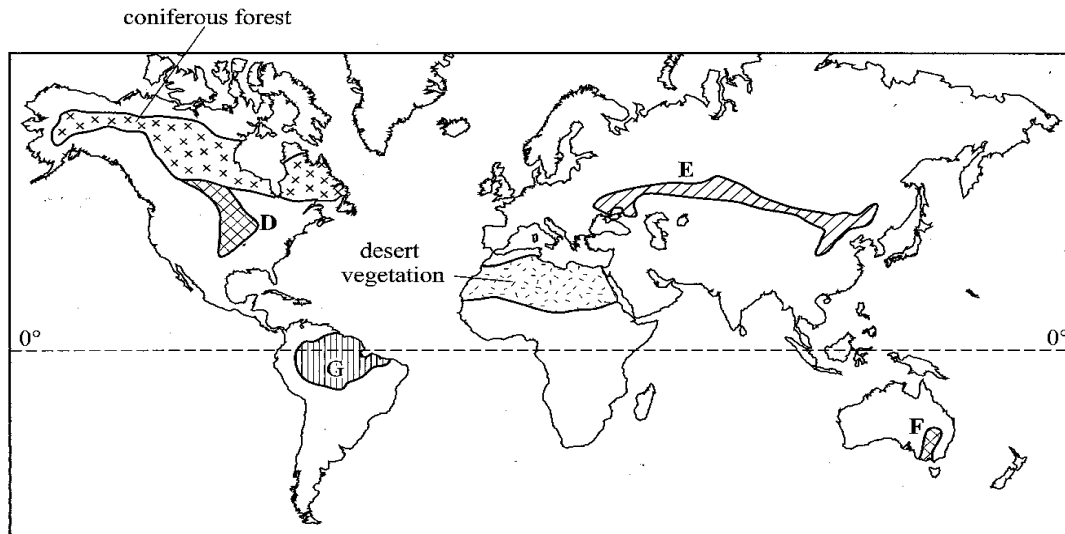
- i) Forest. (1mk)
 - ii) Swamp. (1mk)
 - iii) District boundary (1mk)
 - iv) Range. (1mk)
- c) Describe the relief of the area covered by the map. (6 mks)
- d) Identify three social services of Kamagambo trading centre. (3mks)
- e) Citing evidence from the map, explain three factors that favour coffee growing in the area covered by the map. (6mks)
7. (a)(i) Difference between a tributary and a confluence. (2mks)
- (ii) The diagram below shows the three stages of the long profile of a river.



- a. Give one activity that takes place in each stage. (3mks)
 - b. State two features formed at the mature stage. (2mks)
 - c. Describe three processes by which a river transports its load. (6mks)
 - d. With the aid of a well labeled diagram, describe the process of a river capture. (7mks)
 - e. You are required to carry out a field study on the materials deposited by a river.
 - i) State three methods you would use to collect data. (3mk)
 - ii) State two advantages of studying the work of rivers through fieldwork. (2mks)
8. (a)(i) Apart from the Rift Valley, name three other relief features formed as a result of faulting. (3mks)
- (ii) With the aid of diagrams, describe how the Rift Valley may have been formed by tensional forces. (8mks)
- (b) Explain three ways in which faulting influences drainage systems. (6mks)

(c) Explain four ways in which features resulting from faulting are of significance to the economy of Kenya. (8mks)

9. The map below shows some vegetation regions of the world. Use it to answer questions (a) and (b)



- a)
 - (i) Name the temperate grasslands marked D, E and F. (3mks)
 - (ii) Describe the characteristics of the natural vegetation found in the shaded area marked G. (6mks)
- b) Explain how the following factors influences existence of various vegetation types.
 - Altitude:- (2mks)
 - Aspect: - (2mks)
 - Precipitation :- (2mks)
 - Drainage: - (2mks)
- c) You are required to carry out a field study of the natural vegetation within your local environment.
 - i) State three activities that are necessary before undertaking the study. (3mks)
 - ii) State two methods that you would use to record the data collected. (2mks)
 - iii) State three follow up activities you are likely to undertake. (3mks)

10.

- (a)(i) Differentiate between weathering and mass wasting. (2mks)
- (ii) Give two processes of slow mass wasting. (2mks)
- (iii) State two physical conditions that may influence landslides. (2mks)
- (b) Explain the following processes of weathering.
 - i) Frost action. (2mks)
 - ii) Oxidation. (2mks)
 - iii) Hydration. (2mks)
- (c) Describe how an exfoliation dome is formed. (6mks)
- (d) State four indicators of occurrence of soil creep in an area. (4mks)
- (e) Name three human activities influenced by weathering. (3mks)

PAPER 2 SECTION A

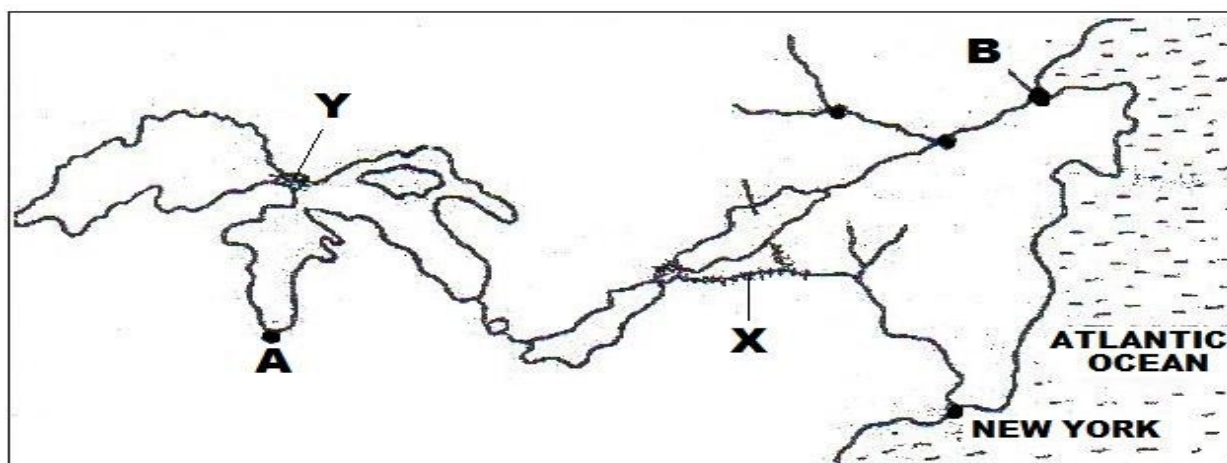
Answer all questions from this section.

1. a) Differentiate between indigenous forests and exotic forests. (2marks)
b) State three physical factors which favour the growth and distribution of softwood forests in Kenya. (3marks)
2. a) The table below shows Kenya's domestic tangible exports and tangible imports by value in **KSh million** to and from major regions of the world in year 2016.

REGION	EXPORTS	IMPORTS
Africa	234,673	140,241
Europe	414,533	265,323
Asia	140,536	956,679
Americas	52,891	65,190
All other areas	8,433	4,311
TOTAL	578,066	1,431,744

Source: Kenya National Bureau of Statistics

- a) i) What is the difference in value of the exports to and imports from Asia? (1mark)
ii) Calculate Kenya's balance of trade for year 2016 (2marks)
- b) Give two statistical methods that can be used to present the data in the table. (2marks)
3. a) Name two methods used in alluvial mining (2marks)
b) State three effects of limestone mining at Bamburi in Mombasa county (3marks)
4. The diagram below shows the Great lakes and St. Lawrence Seaway.



- a) Name (i) The canal marked X and Y (2marks)

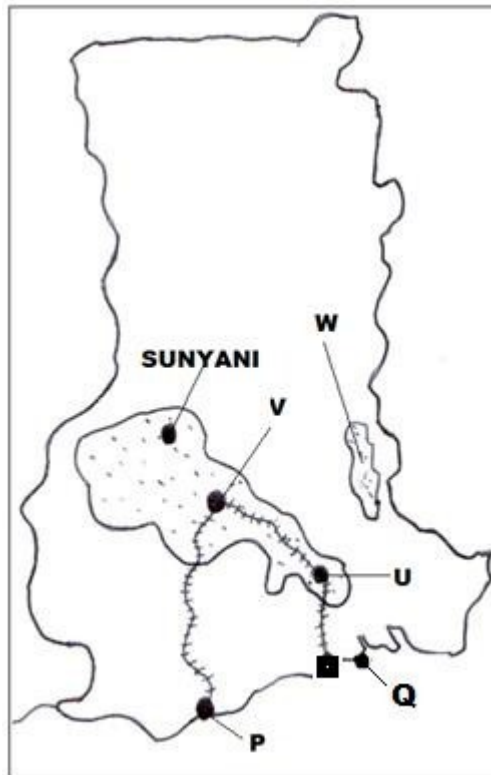
- ii) The ports marked A and B (2marks)
- b) State two objectives of constructing the St. Lawrence Seaway (2marks)
5. State four causes of an energy crisis. (4marks)

SECTION B

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

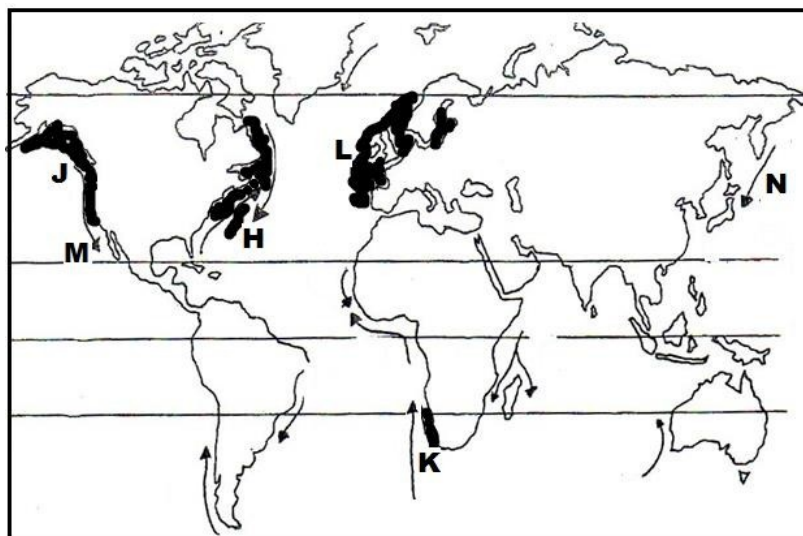


- a) i) Name the type of photograph shown above (1mark)
- ii) What time of the day was the photograph taken? (1mark)
- iii) Name three specific places in Kenya where the photograph is likely to have been taken. (3marks)
- b) i) Citing evidence from the photograph, explain three conditions necessary for the economic activity shown that can be observed from the photograph (6marks)
- ii) Using evidence from the photograph, explain two health problems that the people practicing this economic activity would experience. (4marks)
- c) Apart from the method shown on the photograph, give four other methods used to reclaim land in Kenya (4marks)
- d) Give three differences between land reclamation in Kenya and land reclamation in Netherlands (6marks)
7. Study the sketch map of Ghana below and use it to answer the following questions



- a) Name (i) The cocoa growing areas marked U, V and W (3marks)
- ii) The port cities marked P and Q (2marks)
- b) State five physical conditions favoring cocoa growing in Ghana (5marks)
- c) Describe the stages involved in cocoa processing in Ghana. (7marks)
- d) Explain four economic problems facing cocoa farmers in Ghana (8marks)

8. a) What is demersal fishing? (1mark)
- b) The world map below shows some ocean currents and fishing grounds



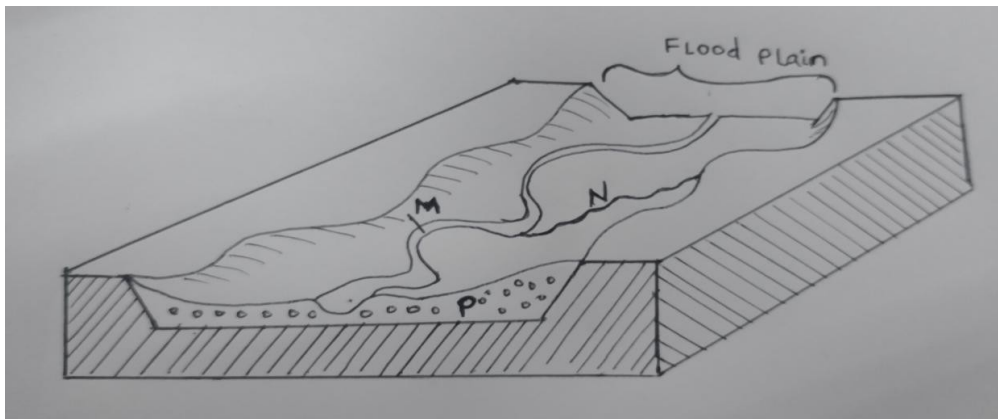
- i) Name the fishing grounds marked J,K and L (3marks)
 - ii) Identify the ocean currents marked M and N (2marks)
 - iii) Mention three main fish species caught in the fishing ground marked H (3marks)
 - c) Explain four physical factors that have made Japan a great fishing nation (8marks)
 - d) Explain four problems facing the fishing industry in Kenya (8marks)
- 9.
- a)
 - i) Differentiate between industry and industrialization (2marks)
 - ii) State the benefits of industrialization to Kenya (5marks)
 - b) Explain three causes of the decline in the textile industry in Kenya (6marks)
 - c) State four ways in which the Kenyan government assists Jua kali industries. (4marks)
 - d) Explain four factors that have led to the growth of the iron and steel industry in the Ruhr region of Germany (8marks)
- 10.
- a)
 - i) What is a Census? (2marks)
 - ii) State four reasons why a census is important to Kenya (4marks)
 - b) Explain four effects of migration at the place of origin (8marks)
 - c) Explain three causes of a reduced fertility rate in Kenya (6marks)
 - d) State five differences between Kenya's population and that of Sweden (5marks)

SERIES 4

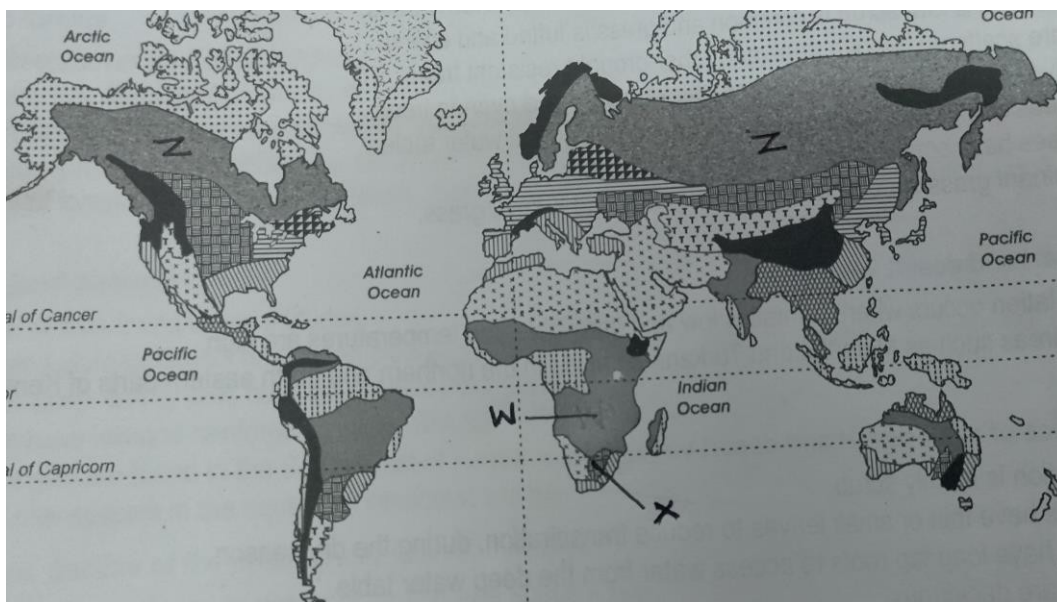
PAPER 1 SECTION A: (25 MARKS)

Answer all questions.

1. (a) Give **two** areas studied under practical geography (2 marks)
 (b) Describe the relationship between geography and the following disciplines
 (i) Biology (2 marks)
 (ii) Medicine (2 marks)
2. Describe the passing star theory (5 marks)
3. (a) (i) Give **two** examples of plutonic rocks (2 marks)
 (b) State **three** ways in which rocks are classified (3 marks)
4. Study the diagram of the flood plain provided and answer the questions that follow



- (a) Identify the parts labelled M, N and O (3 marks)
 (b) Apart from a flood plain name **three** other river depositional features (2 marks)
5. Study the map of the world provided and answer the questions that follow



- (i) Name the vegetation types marked W, X and Z (3 marks)
 (ii) State **two** characteristics of desert vegetation (2 marks)

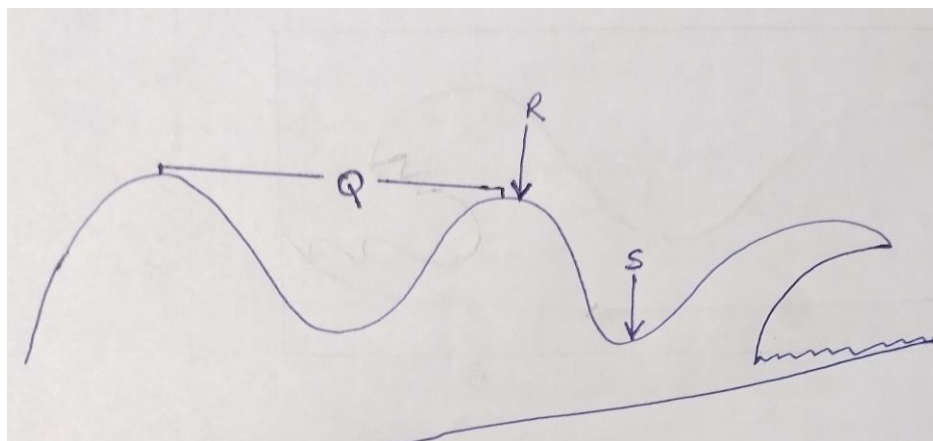
SECTION B: (75 MARKS)

Answer question 6 and any other two questions from this section

6. Study the map of **Mumias** 1: 50,000 (Sheet 101/2) provided and answer the following questions .
 (a) (i) What information is contained on the sheet title (2 marks)
 (ii) Measure the distance of river Lusimu from the junction of river Nzoia to the bridge. **Give your answer in kilometres and metres.** (2 marks)

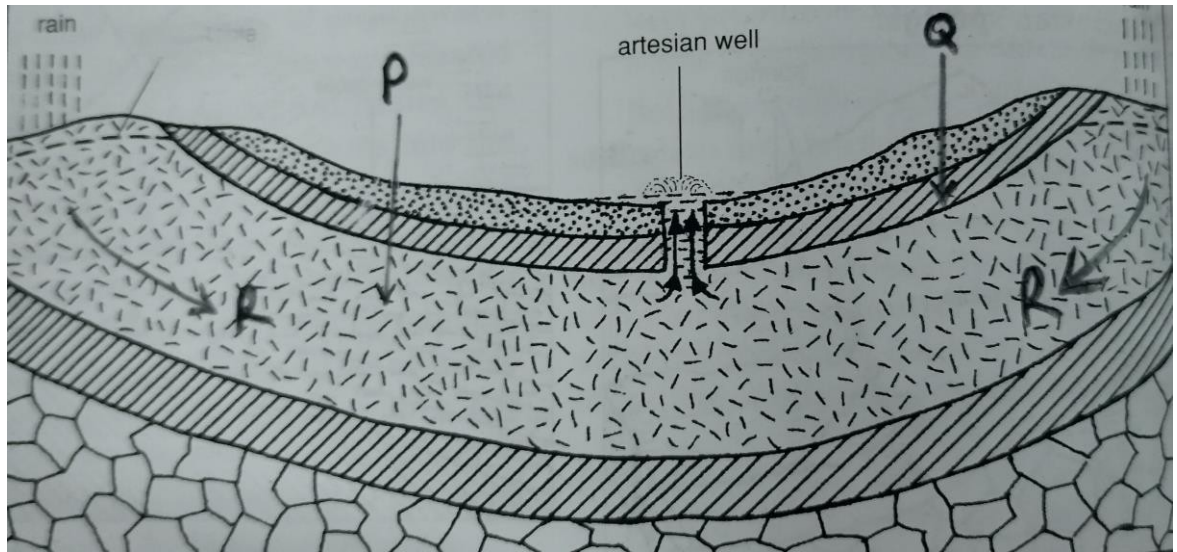
For marking schemes and more papers inbox 0724351706 or visit www.goldlitekcservevision.co.ke

- (iii) Name **two** drainage patterns found in the area covered by the map. (2 marks)
- (iv) Identify **two** types of natural vegetation to the south of northing 36 (2 marks)
- (b) Describe the distribution of settlement in the area covered by the map (6 marks)
- (c) Citing evidence explain **three** factors that would favour cattle rearing in Mumias. (6 marks)
- (d) Describe the relief of the area covered by the map (5 marks)
- 7 (a) (i) Apart from the rift valley name **two** other resultant features of faulting. (2 marks)
- (ii) State **three** characteristics of Gregory rift valley. (3 marks)
- (b) Explain **four** ways in which faulting influences drainage. (8 marks)
- (c) Within the aid of a well labeled diagram describe how a block mountain is formed due to compressional forces. (7 marks)
- (d) Students at MEC School intends to carry out a field study on a section of Rift valley
- (i) State **three** preparation they will make before the study. (3 marks)
- (ii) State **two** follow up activities that they would engage in after the study. (3marks)
8. (a) Distinguish between **vulcanicity** and **volcanicity**. (2 marks)
- (b) (i) A part from a plug volcano, name **three** other extrusive volcanic features (2 marks)
- (ii) With the aid a well labeled diagram describe the formation of a plug dome (8 marks)
- (c) (i) What are fumaroles? (2 marks)
- (ii) Describe how a hot spring is formed (6 marks)
- (e) Explain **two** ways in which volcanic features may influence the climate (4 marks)
9. (a) (i) Distinguish between a swash and backwash (2 marks)
- (ii) The diagram shows the parts of a wave



- Name the parts labelled Q , R ,S and T (4 marks)
- (b) (i) State **four** factors that determine the size of a wave (4 marks)
- (ii) Using a well labelled diagram describe the formation of a cusped foreland (7 marks)
- (c) Describe **four** factors that influence wave erosion along the coast (8 marks)

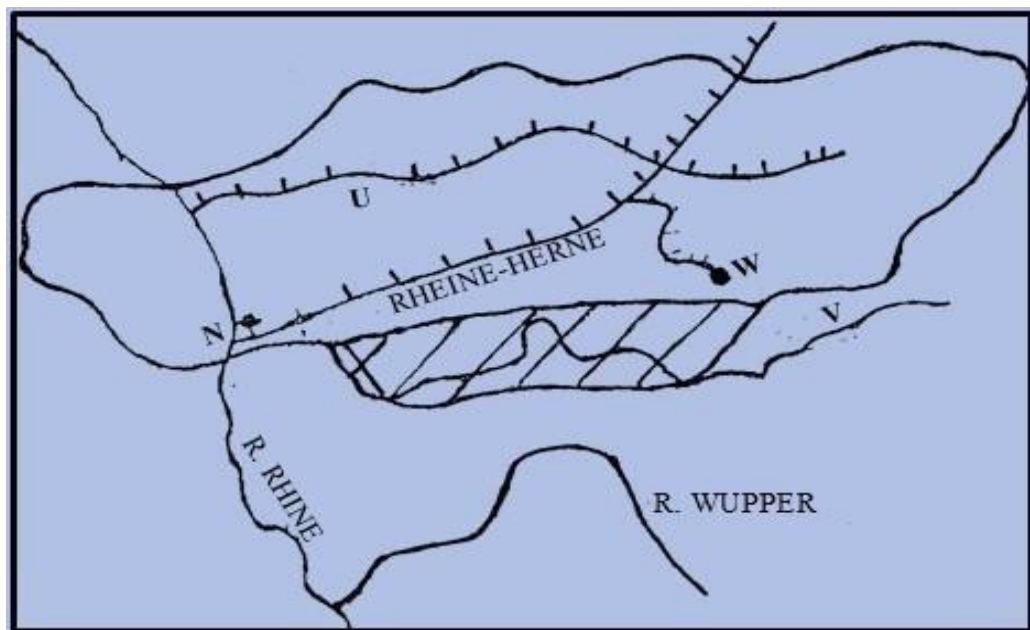
10. (a) The diagram below shows an artesian basin. Use it to answer question (a).



- (a) Identify ;
- (i) the part marked **P**. (1 mark)
 - (ii) the layer marked **Q** (1 mark)
 - (iii) the process marked **R** (1 mark)
 - (iv) Describe how artesian basin forms (3 marks)
- (b) State **three** ways springs form (3 marks)
- (c) Explain **four** factors that influence the existence of underground water (8 marks)
- (d) (i) What is karst Scenery? (2 marks)
- (ii) State reasons why there are few settlements in karst regions. (3 marks)
 - (iii) Name **three** underground karst features (3 marks)

PAPER 2 SECTION A: (25 MARKS)**Answer all questions.**

1. Describe dredging process as a method of mining. (5marks)
2. (a) Differentiate between horticulture and market Gardening. (2marks)
 (b) Outline **two** reasons why horticultural products from Kenya are in high demand in Europe. (2 marks)
3. (a) Define invisible trade. (2 marks)
 (b) (i) Give two reasons why Kenya is experiencing unfavourable balance of trade. (2 marks)
 (ii) Name two visible exports from Kenya. (2 marks)
4. (a) Give **two** types of settlement patterns. (2 marks)
 (b) State **three** benefits of hinterland to Thika. (3 marks)
5. (a) Below is a map of the Ruhr Industrial Region. Use it to answer the questions that follow.



Name

- i) the canal marked U. (1 mark)
- ii) the river marked V. (1 mark)
- iii) the town marked W. (1 mark)

- (b) Apart from coal , give **two** other sources of energy used in the Ruhr region. (2 marks)

SECTION B: (75 MARKS)

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

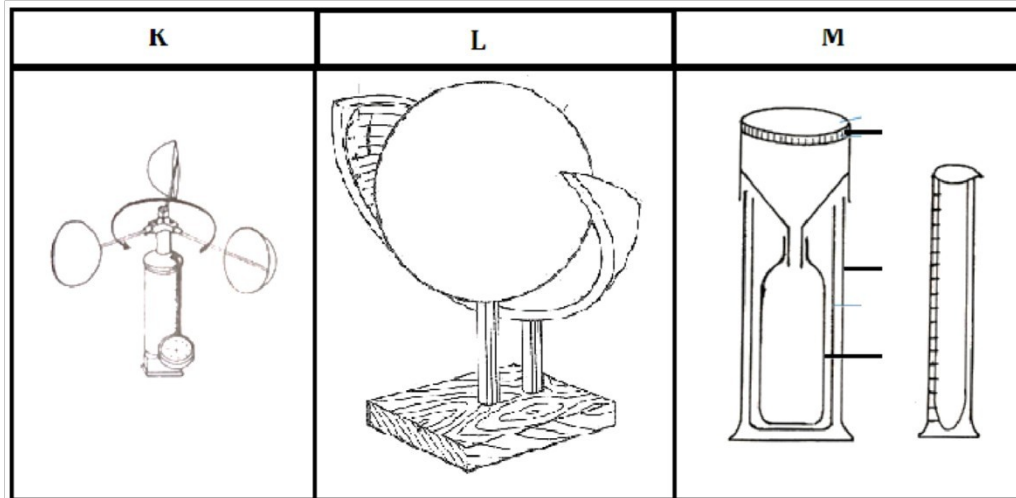
6. (a) The table below shows hypothetical size of land in '000 acres for exotic trees grown in Kenya Between 2010 and 2011. Use the data to answer the following questions.

Year/Tree species	2010	2011
Pine	150	120
Cypress	100	84
Cedar	40	30
Fir	10	6
TOTAL	500	240

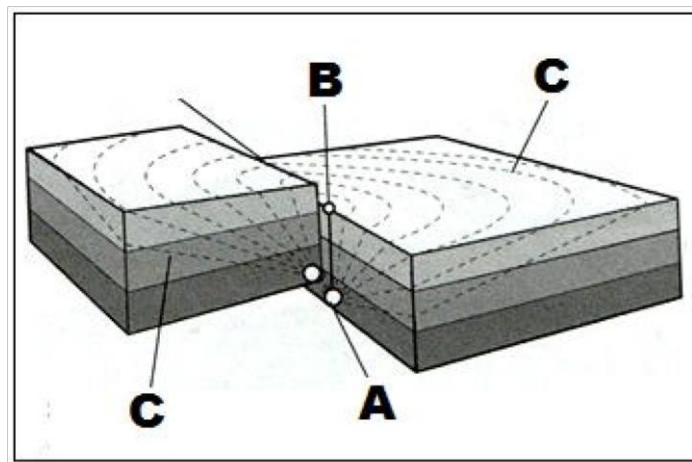
- (i) Calculate the decline in total land acreage under exotic between 2010 and 2011. (2 marks)
- (ii) Using a **radius of 5cm**, draw a pie – chart to represent the data for 2010. (7 marks)
- (iii) State **three** advantages of using a pie-chart to represent statistical data. (3 marks)
- (b) State **four** likely reasons why there was a decline in total average of land under exotic tree in Kenya before 2010 and 2011. (4 marks)
- (c) Give **three** characteristics of coniferous forests. (3 marks)
- (d) Explain the differences between softwood forestry in Kenya and Canada under the following.
- (i) Period of growth (2 marks)
- (ii) Forest distribution (2 marks)
- (iii) Transportation of logs. (2 marks)
7. (a) (i) What is beef farming (2 marks)
- (ii) Give **two** types of beef farming (2 marks)
- (b) (i) State **four** characteristics of beef farming (4 marks)
- (ii) Apart from meat , hide and skin , identify **three** other products from beef farming (3 marks)
- (c) Compare beef farming in Kenya and Argentina (8 marks)
- (d) Your class intend to conduct a field study on a nearby ranch scheme
- (i) Identify **three** problems you are likely to face in the field (3 marks)
- (ii) State **three** methods used to record data collected (3 marks)

8. (a) What is population structure (2 marks)
- (b) Explain **three** physical factors that influence population distribution in East Africa (6 marks)
- (c) (i) State **four** effects of mortality on population in Kenya (4 marks)
- (ii) Outline the information that can be derived from a population pyramid (4 marks)
- (iii) Give **three** causes of low fertility rates in Sweden (3 marks)
- (d) Explain **three** causes of rural - rural migration (6 marks)
9. (a) Define Eco- Tourism (2 marks)
- (b) Apart from Wildlife , name three other tourist attractions found in the Kenyan Rift valley. (3 marks)
- (c) Give four benefits of domestic tourism in Kenya. (4 marks)
- (d) Explain four Reasons why tourism is more developed in Switzerland than Kenya. (8 marks)
- (e) Explain is the future of Tourism in Kenya. (8 marks)
10. (a) What is environment conservation? (2 marks)
- (b) (i) Name **three** rivers causing flooding in western Kenya (3 marks)
- (ii) State **four** effects of floods on human settlements. (4marks)
- (c) (i) Identify **three** natural causes of floods in Kenya (3 marks)
- (ii) Explain **three** methods that can be used to control floods in Kenya. (6 marks)
- (d) (i) Define pollution. (2 marks)
- (ii) Apart from air pollution, name **two** other types of pollution. (2 marks)
- (iii) State **three** causes of air pollution in Kenya. (3marks)

1. The diagram below shows some weather instruments.



- (a) Identify the instruments marked K, L and M. (3 marks)
 (b) Give two modern methods of weather forecasting. (2 marks)
2. (a) Give the two main movements of the earth. (2 marks)
 (b) State three reasons why the interior of the earth is very hot. (3 marks)
3. The diagram below show the occurrence of an earthquake

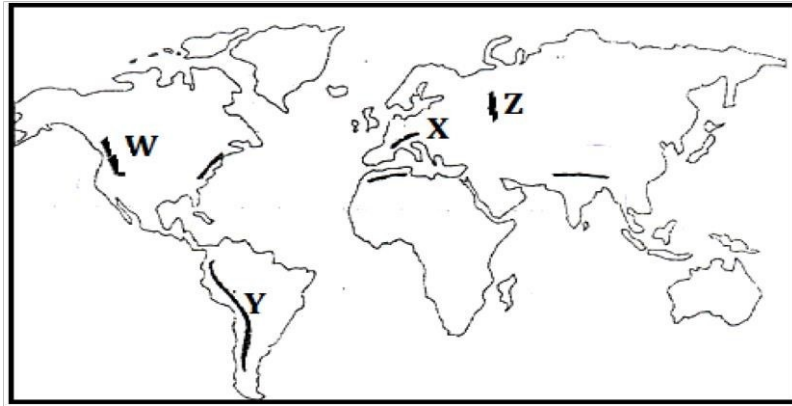


- (a) Name the parts marked A, B and C. (3marks)
 (b) List two scales used to measure the magnitude of an earthquake. (2 marks)
4. State five characteristics of coniferous forests. (5 marks)
5. (a) What is soil catena? (2 marks)
 (b) State three factors that influence soil colour. (3 marks)

SECTION B

6. Study the map of MUMIAS (1:50,000, sheet 101/2) provided and use it to answer the following questions.

- a) i) What type of map is Mumias map extract? (1 mark)
ii) Give the magnetic declination of the map as at 1965. (2 marks)
iii) Identify any two districts covered by the map. (2 marks)
- b) i) Name two human made features found in the grid square 6132. (2 marks)
ii) What is the bearing of Bumala Dam from the Trigonometrical station-Other, 101 T 6 found in the Northern part of the map? (2 marks)
iii) Measure the length of the Dry weather road found in the North Western part of the area covered by the map. (2 marks)
- c) i) Using a scale of 1cm to represent 20 m, draw a cross-section from grid reference 610310 to 650350. (3 marks)
ii) On the cross-section mark and name:
 - River Lusimu (1 mark)
 - Woodland (1 mark)
 - All weather road – loose surface (1 mark)
iii) Calculate the vertical exaggeration of the cross-section. (2 marks)
- d) i) Identify two social services offered in the area covered by the map. (2 marks)
ii) Describe the drainage of the area covered by the map. (4 marks)
7. (a) (i) What is a mineral? (2 marks)
(ii) Give three ways used to classify rocks. (3 marks)
- (b) (i) Describe how igneous rocks are formed. (5 marks)
(ii) List three examples of mechanically formed sedimentary rocks. (3 marks)
- (c) Explain three types of rock metamorphism. (6 marks)
- (d) Suppose you were to carry out a field study on rocks in the area surrounding your school
(i) State three characteristics that you would look for while identifying different rock types (3 marks)
(ii) State three follow up activities for the field study (3 marks)
8. (a) (i) Differentiate between faulting and folding. (2 marks)
(ii) Name five features formed as a result of faulting. (5 marks)
- (b) The world map below shows the location of some fold mountains. Use it to answer the questions that follow:



- (i) Identify the fold mountains marked W, X, Y and Z (4 marks)
- (ii) Citing relevant examples, explain how Fold Mountains were formed according to the plate tectonics theory. (6 marks)
- (c) Explain the effects of Fold Mountains on the following
- (i) Transport. (2 marks)
 - (ii) Agriculture. (2 marks)
 - (iii) Tourism. (2 marks)
 - (iv) Mining. (2 marks)
9. (a) Give three examples of West coast deserts. (3 marks)
- (b) (i) Apart from rock pedestals, name four other features formed due to wind erosion in arid regions. (4 marks)
- (ii) With the aid of well labelled diagrams, describe how a rock pedestal is formed. (7 marks)
- (c) Explain four factors that influence the rate of wind transport. (8 marks)
- (d) State three negative influence of desert features. (3 marks)
10. (a) (i) What is a lake? (2marks)
- (ii) Give three processes that lead to formation of Lakes. (3marks)
- (b) Describe how Lake Victoria was formed (6marks)
- (c) Explain three factors why some Lakes in the Rift Valley in Kenya are saline. (6marks)
- (d) Explain four ways in which lakes influence the climate of the surrounding areas. (8marks)

PAPER 2

SECTION A (25 marks)

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

1. (a) State **three** conditions that favour the growing of oil palm in Nigeria (3marks)
(b) Apart from making oil, state **two** other uses of oil palm. (2marks)
2. (a) Name **three** areas which make up the Zuider Zee reclamation project in the Netherlands. (3marks)
b) State **three** natural problems experienced by farmers at Mwea-Tebere irrigation schemes. (3marks)
3. (a) State **three** measures that have been taken to conserve fisheries in Kenya (3marks)
(b) Give **three** reasons why Japan is a great fishing nation. (3marks)
4. (a) Give **two** advantages of using Hydro-electric power over other forms of energy (2marks)
(b) State **two** benefits that have resulted from rural electrification in Kenya (2marks)
5. Explain **two** ways in which people are affected by floods. (4marks)

SECTION B (75 marks)

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

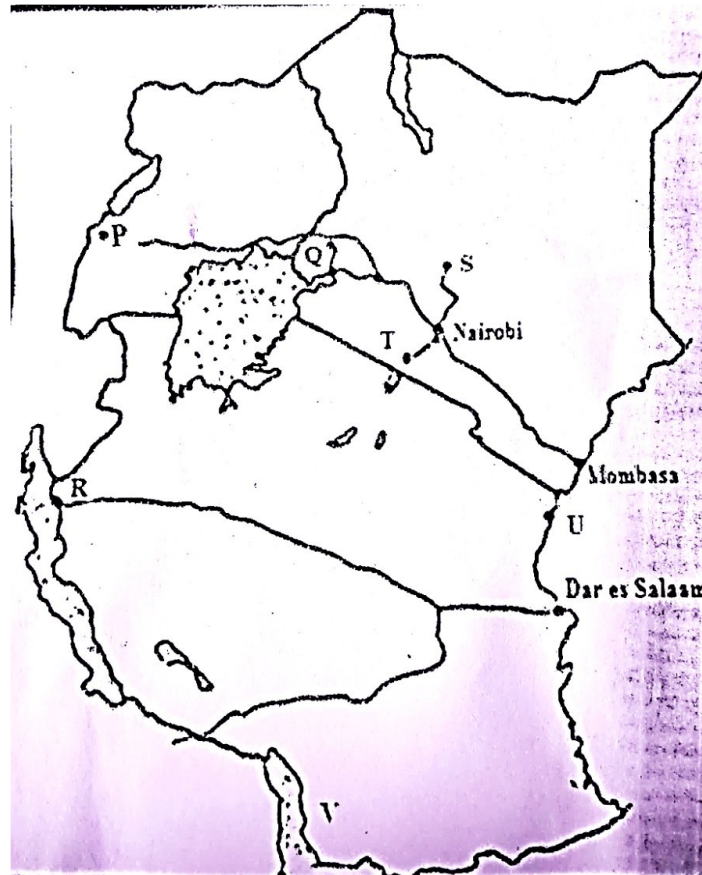
6. The table below shows total number of livestock in selected Counties in Kenya in 2019. Use it to answer (a)

County	Number of livestock
Turkana	479,902
Wajir	661,152
Garissa	457,102
Kajiado	348,304
Narok	744,010
Marsabit	645,713
Laikipia	387,969

- (a)(i) Using a scale of 1cm to represent 100,000 livestock, draw a simple bar graph to represent the data in the table above. (9marks)
- (ii) Apart from simple bar graph, name **three** statistical methods that can be used to represent the data in the table (3marks)
- (b) Name:
- (i) **Three** exotic breeds of commercial beef cattle reared in Kenya. (3marks)

- (ii) **Two** traditional breeds of cattle kept by nomadic pastoralism in Kenya (2marks)
- (c) Explain **three** physical factors that favour beef farming in Argentina. (6marks)
- (d) State **two** problems experienced by beef farmers in Argentina. (2marks)
7. (a) (i) Define the term mining (2marks)
- (ii) Identify the areas where the following minerals are mined in Kenya.
- i) Carbon (iv)oxide (1 mark)
 - ii)Titanium (1 mark)
 - iii) Limestone (1 mark)
- (b) State **three** factors that influence the exploitation of minerals (3marks)
- (c) Describe the processing of gold in south Africa (7marks)
- (d) (i) Explain **three** ways in which gold contributes to the economy of South Africa. (6marks)
- (ii) State **four** problems which South Africa experiences in the exploitation of gold. (4marks)
- 8.(a) (i) What is Agro-forestry? (2marks)
- (ii) Give **four** reasons why Agro-forestry is encouraged in Kenya (4marks)
- (b) Explain how the following factors influence the distribution of forests in Kenya.
- (i)Relief (4 marks)
 - (ii) Soil (4marks)
- (c) State **five** challenges experienced in exploitation of tropical hardwood forests. (5mark)
- (d) You plan to carry out a field study in a forest
- i)Give **three** secondary sources of information you would use to prepare for the field study. (3marks)
- ii) What would be disadvantages of using secondary methods of collecting data in this kind of study. (3marks)
9. (a) i) Define the term industrialization (2marks)
- ii) Name a town in Kenya where each of the following industries is located.
- Motor vehicle assembly (1mark)
 - Oil refining (1 mark)
 - Export processing zone (1 mark)
 - Fish processing (1 mark)
- (b) Explain **four** causes of the decline in the textile industry in Kenya. (8 marks)
- (c) Explain **four** factors which influenced the location of iron and steel industries in the Ruhr Region of Germany in the 19th Century (8 marks)
- (d) Show how industrialization can lead to environmental pollution in Kenya. (3 marks)

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



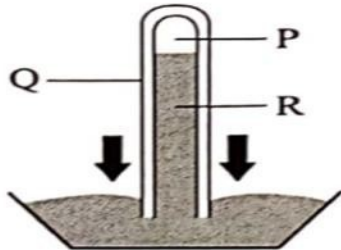
- (a) (i) Name the railway terminus **P**, **Q** and **R** (3marks)
- (ii) In each case give the main commodity transported by the railway lines marked **S** and **T**. (2marks)
- (iii) Give **four** challenges facing railway transport in East Africa. (4marks)
- (b) Outline **three** advantages of using containers while handling goods at the port of Mombasa (3marks)
- (c) One of the problems facing road transport is the high frequency of accidents. Explain **four** measures the Kenya Government has taken to reduce motor vehicle accidents in the Country. (8marks)
- (d) Give **five** reasons why there is limited use of letter writing as a means of communication in Kenya. (5marks)

SERIES 6

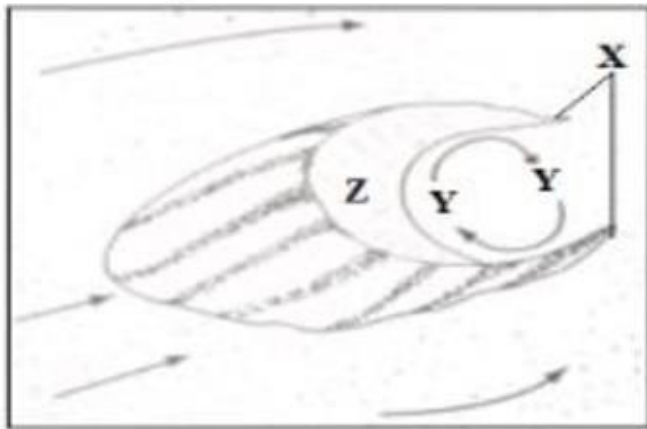
PAPER 1 SECTION A: 25 MARKS

Answer ALL questions in this section.

1. a). State the relationship between geography and meteorology (2 Marks)
b). Give three divisions of physical geography (3 Marks)
2. The diagram below shows a barometer



- a.) Identify the parts marked P and Q (2 Marks)
- b). State three ways in which cloud cover influences sunshine (3 Marks)
- 3.) a.) Define the term lake (2 marks)
b.) Identify three types of lakes formed by glacial action (3 marks)
- 4 a). Give two sources of underground water (2 Marks)
b). Identify three reasons why there are few settlements in the karst region (3 Marks)
- 5a.) List two types of sand dunes apart from barchans (2 Marks)
- b). The diagram below shows a Barchan.



Identify:

- i.) Feature marked X (1 Mark)
- ii.) Slope marked Z (1 Mark)
- iii.) The air current marked Y (1 Mark)

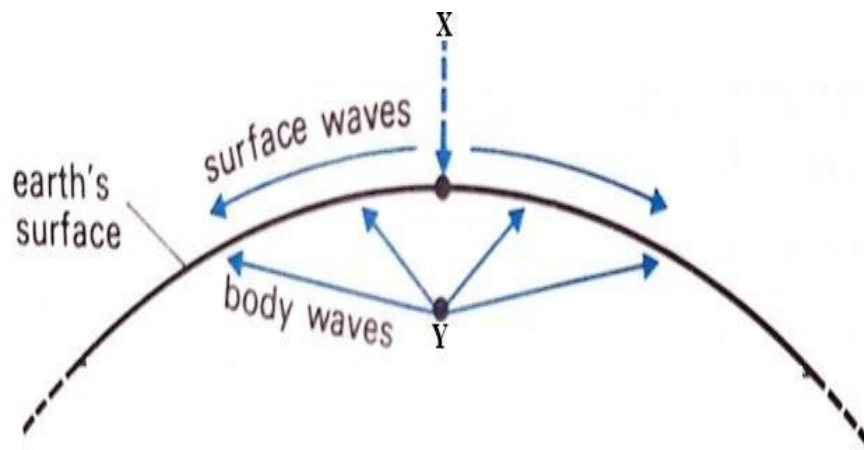
SECTION B

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

6. Study the map of Mumias 1:50,000 (101/2) provided and answer the following questions.

- (a) (i) What is the magnetic variation of the area as at 1965? (2 marks)
- (ii) What is the bearing of the Air Photo Principle in grid square 6037 from Air Photo Principle in grid square 5340? (2 marks)
- (iii) Give the six figure grid reference of the trigonometrical station **101 S5** in the southern part of the area covered by the map. (2 marks)
- (b) (i) Calculate the area covered by Nyanza province. Give your answer in km^2 (2 marks)
- (ii) Draw a square 10 cm by 10 cm to represent the area enclosed by Easting 46 and 51 and Northings 33 and 38. On its mark and name the following; (5 Marks)
- Provincial boundary
 - All Weathered Road loose surface
 - Mungayo school
 - Seasonal swamps
- (c) (i) Describe the distribution of settlement in the area covered by the map. (6 marks)
- (ii) Explain **three** factors that favor the location of Mumias town. (6 marks)
7. (a)(i) Differentiate between earth movements and earthquakes. (2 Marks)
- (ii) State **three** causes of earth movements. (3 Marks)
- (iii) Give **four** evidences supporting the continental drift theory. (4 marks)
- (iv) Name **three** features associated with the continental drift theory. (3 marks)

(b) Study the diagram provided below and use it answer the questions that follow.



(i) Identify the parts marked **X** and **Y**.

(2 marks)

(ii) Identify the **two** scales used to measure earthquake's intensity.

(2 marks)

(c)(i) Name **three** major earthquake zones of the world.

(3 marks)

(ii) Explain **three** effects of earthquakes on the earth's crust.

(6 marks)

8.(a) (i) Define the term natural vegetation?

(2 Marks)

(ii) Explain how the following factors influence the distribution of natural vegetation in East Africa.?

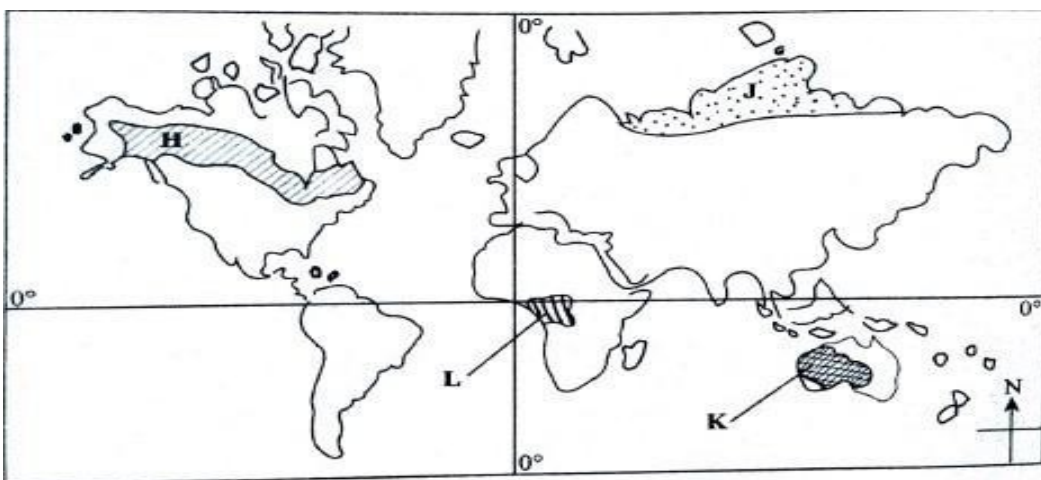
➤ Climate

(4 Marks)

➤ Soils.

(2 Marks)

(b) The map below show the distribution of world vegetation regions of the world. Use it to answer question (b) (i) and (ii) below.



- I. Identify the vegetation zones marked H and J. (2 Marks)
 - II. Describe the characteristics of the vegetation found in the area shaded and marked L. (5 Marks)
- c).State three uses of Savanah vegetation. (3 Marks)
- d).Form four students of Highlands High school conducted a field study within Kaptagat forest.
- I. State two objectives for their study. (2 Marks)
 - II. Give three importance of sampling as a method of collecting data. (3 Marks)
 - III. State two problems they experienced during the study. (2 Marks)
9. (a) (i) Distinguish between river discharge and river regime. (2 marks)
- (ii) Describe the following river erosional processes.
- Abrasion (3 marks)
 - Hydraulic action. (3 marks)
- (iii). State two factors influencing the rate of river erosion. (2 Marks)
- (b) (i) Name **three** features formed due to river rejuvenation. (3 marks)
- (ii) Describe the formation of an ox-bow lake. (6 marks)
- (c) Explain **three** negative effects of the rivers to human environment. (6 marks)
10. (a)(i) Apart from stack, name two other wave erosional features. (2 marks)
- (ii) State three factors influencing the rate of wave erosion. (3 marks)
- (iii) With aid of well labelled diagrams, describe formation of a stack. (8 marks)
- (b)(i) Name two types of submerged highland coasts. (2 marks)
- (ii) State four conditions necessary for the growth of coral polyps. (4 marks)
- (c) Explain three significance of oceans to human activities. (6 marks)

PAPER 2 SECTION A: 25 MARKS

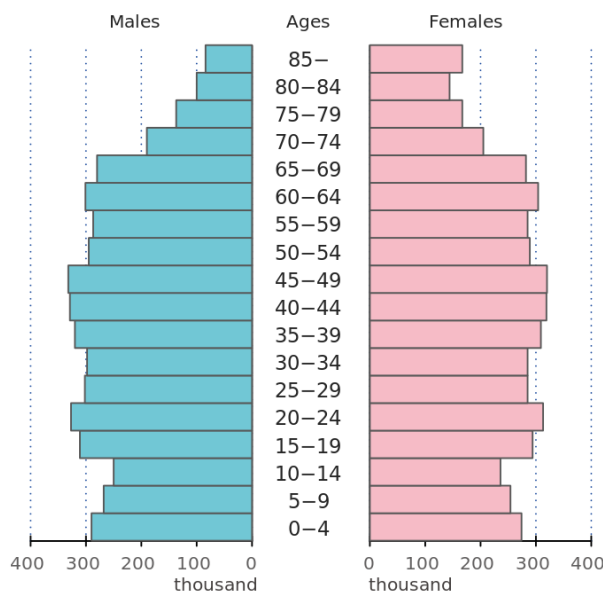
*Answer **ALL** questions in this section*

1. (a) Why is mining referred to as 'a robber industry'? (2 marks)
(b) Name **three** underground methods of mining. (3 marks)
2. (a) What is tourism? (2 marks)
(b) Name **three** tourist attraction sites at the Kenyan coast. (3 marks)
3. (a) Differentiate between manufacturing and tertiary industries. (2 marks)
(b) Give **three** Agricultural non-food manufacturing industries in Kenya. (3 marks)
4. (a) What is energy crisis? (2 marks)
(b) State **three** problems that affect hydroelectric power production long river Tana. (3 marks)
5. (a) Give **two** methods used to rehabilitate land in Kenya. (2 marks)
(b) Stage **three** benefits that Kenya derives from Perkerra irrigation scheme. (3 marks)

SECTION B

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

6. The pyramid below represents population structure. Use it to answer the questions below.



Population pyramids of Sweden 2011 (OECD stat)

- (a) Describe the **five** characteristics of the population structure represented by the pyramid above. (5 marks)
- (b) The table below shows items exported from Kenya in the year 2023. Use it to answer the questions that follow.

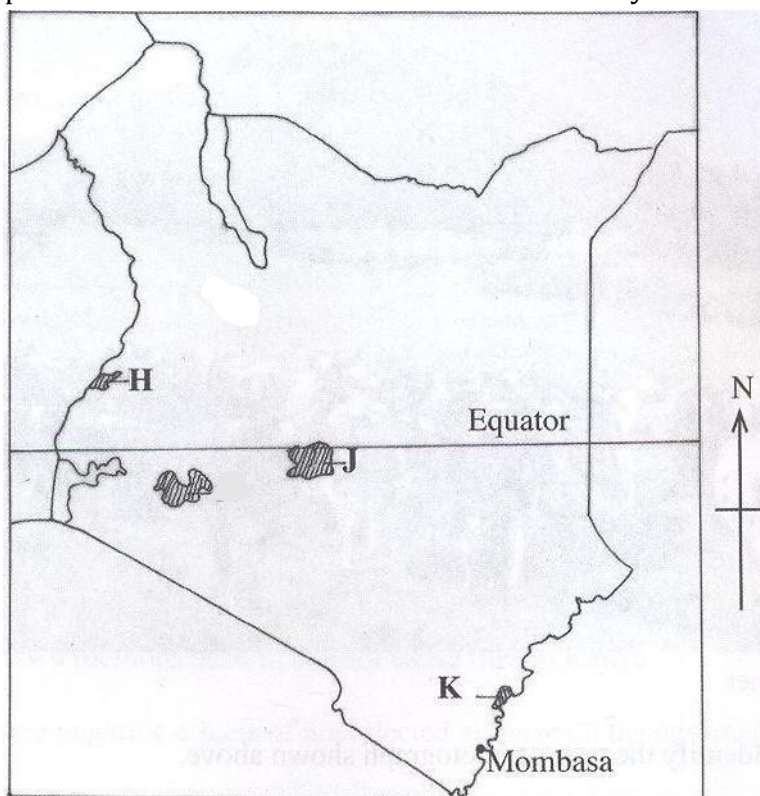
KENYA

EXPORTS	WEIGHT IN TONNES
---------	------------------

For marking schemes and more papers inbox 0724351706 or visit
www.goldlitekcserevision.co.ke

Maize	12,600
Coffee	9,990
Oil cakes	1,560
Spices	750
TOTAL	<u>24,900</u>

- (i) Name the main exports in Kenya in the year 2023. (1 mark)
- (ii) Calculate the percentage of the export item with the least tonnage in the year 2023. (2 marks)
- (iii) Draw a divided rectangle 15cm long to represent the export items for Kenya. (5 marks)
- (iv) State **two** disadvantages of using a divided rectangle as a method of presenting the data. (2 marks)
- (c) (i) State **four** effects of high population in a country. (4 marks)
- (ii) Explain how the following factors have influenced the high population density in the Kenyan Highlands. (2 marks)
- Rainfall (2 marks)
 - Temperature (2 marks)
 - Soils (2 marks)
7. (a) (i) Define the term forestry. (2 marks)
- (ii) Give **two** examples of indigenous soft wood tree species. (2 marks)
- (iii) State **four** factors favoring growth of forests on mount Kenya. (4 marks)
- (b) The map below shows the distribution of forests in Kenya.



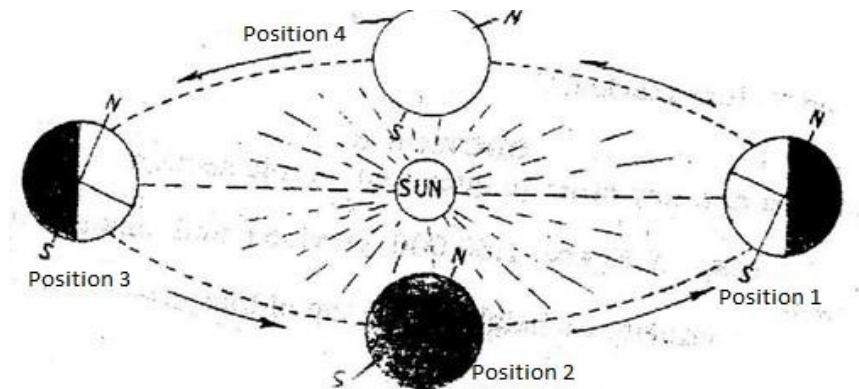
- (i) Name the forests reserves marked J and K. (2 marks)

For marking schemes and more papers inbox 0724351706 or visit
www.goldlitekcserevision.co.ke

- (ii) State **three** measures undertaken in Kenya in order to conserve forests. (3 marks)
- (c) Explain **three** features of coniferous forests that favors their exploitation. (6 marks)
- (d) Compare soft wood forests in Kenya and Canada under the following subheadings.
- Transportation (2 marks)
 - Harvesting (2 marks)
 - Distribution (2 marks)
8. (a) (i) Define Agriculture. (2 marks)
- (ii) Give **four** characteristics of plantation farming. (4 marks)
- (iii) State **four** social factors influencing agriculture. (4 marks)
- (b) (i) Draw a sketch map of Nigeria and on it mark and name **two** main oil palm growing areas. (5 marks)
- (ii) Give **four** physical conditions that favor oil palm growth. (4 marks)
- (iii) Describe oil palm processing. (6 marks)
9. (a) (i) Distinguish between regional trade and international trade. (2 marks)
- (ii) List **four** imports Kenya buys from Japan. (4 marks)
- (b) (i) What is a trading bloc? (2 marks)
- (ii) Describe **three** economic benefits of COMESA to member countries. (3 marks)
- (iii) State **six** reasons why the government should get involved in trade. (6 marks)
- (c) Explain **four** ways in which the Kenyan government promotes internal trade. (8 marks)
10. (a) Define the term environment. (2 marks)
- (b) (i) Name **two** flood prone counties in Kenya. (2 marks)
- (ii) State **four** causes of floods in Kenya. (4 marks)
- (iii) Explain **three** measures undertaken to control floods in Kenya. (6 marks)
- (c) State **four** significance of conserving the environment. (4 marks)
- (d) Form four students of Mokasa high school conducted a field study on pollution in a nearby trading center.
- (i) Identify **two** forms of pollution they identified during the study. (2 marks)
- (ii) State **two** methods of data collection the used during the study. (2 marks)
- (ii) Give **three** importance of the information obtained during the study to the local authority. (3 marks)

Answer **all** questions in this section.

- 1a) Why do the lengths of days and nights vary from one part of earth to another. (2mks)
- b) The diagram below shows the revolution of the earth around the sun. Use it to answer the questions that follow.



- (i) If the earth takes 366 days to make a complete revolution during a leap year, how long will it take to move from position 1 to position 4? (2mks)
- (ii) What season is experienced in the southern hemisphere when the earth is in position 3? (1mk)
2. a) Differentiate between epicenter and seismic focus (2mks)
- b) Give three human causes of earthquakes (3mks)
3. a) State two conditions that influence the process of solifluction (2mks)
- b) Give three negative effects of mass wasting on the physical environment (3mks)
- 4 a) Differentiate between zero lapse rate and negative lapse rate (2mks)
- b) State three characteristics of the weather conditions in the troposphere (3mks)
- 5 a) What is soil? (2mks)
- b) Name three types of soil according to texture (3mks)

SECTION B (75mks)

Answer **question 6** and any other **two** questions this question.

- 6) Study the map of **MUMIAS 1:50,000 (sheet 101/2)** provided and answer the following questions.
- a i) What is the map sheet title (2mks)
- ii) From the map provided identify one district from each of the following Provinces: (1mk)
- Western Province (1mk)
 - Nyanza Province (1mk)
- iii) Give the magnetic variation of the map as at the year 2023. (1mk)
- iv) What is the altitude of the highest point of the covered by the Map? (1mk)
- bi) Give the longitudinal extent of the area covered by the map (2mks)
- ii) Identify three physical features found in the grid square 5833 (3mks)
- iii) Describe the characteristics long profile of river Nzoia (5mks)
- c i) Draw a rectangle measuring 12cm by 8cm to represent the area enclosed by Easting 47 and 50 and

Northings 37 and 39

(2mks)

ii) On the rectangle mark and label

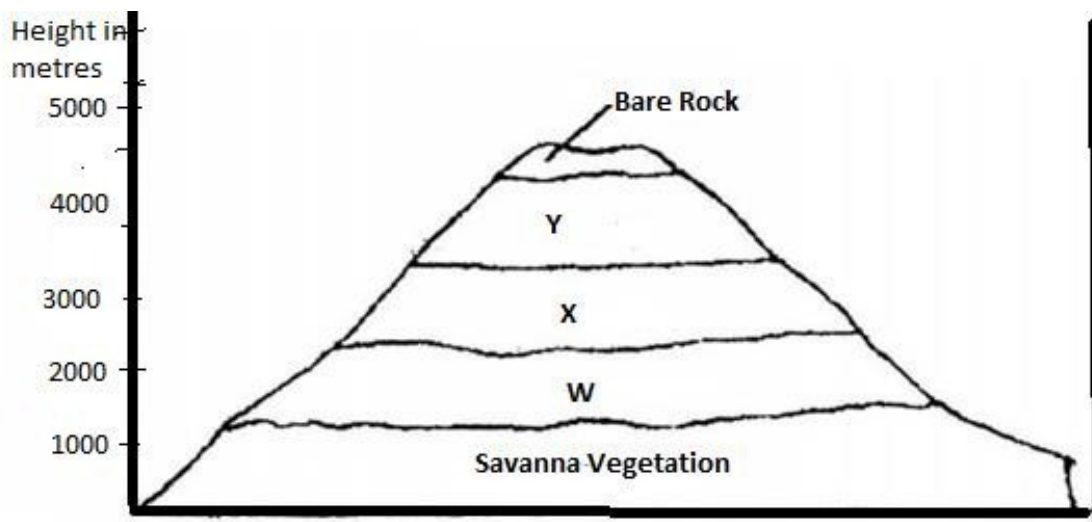
- Seasonal swamp (1mk)
- Dry weather road (1mk)
- All weather road loose surface (1mk)

iii) Calculate the new school new scale for the rectangle (2mks)

d) Citing evidence from the map, state three social functions of Mumias town (2mks)

7) The diagram below represents zones of natural vegetation on a mountain in Africa.

Use it to answer question (a) and b(i)



a. Name the vegetation zones marked W, X and Y. (3mks)

b.

i. Describe the characteristics of Savanna vegetation. (6mks)

ii. Name the temperate grasslands found in the following countries:

- Canada (1mk)
- Russia (1mk)
- Australia (1mk)

c. Explain three causes of the decline of the areas under forests in Kenya. (6mks)

d. You are supposed to carry out a field study on the uses of vegetation in the area around your school.

i) State three reasons why it would be necessary to conduct a pre-visit (3mks)

(ii) Give four uses of vegetation you are likely to identify during the study (4mks)

8 a.i). Define hydrological cycle (2mks)

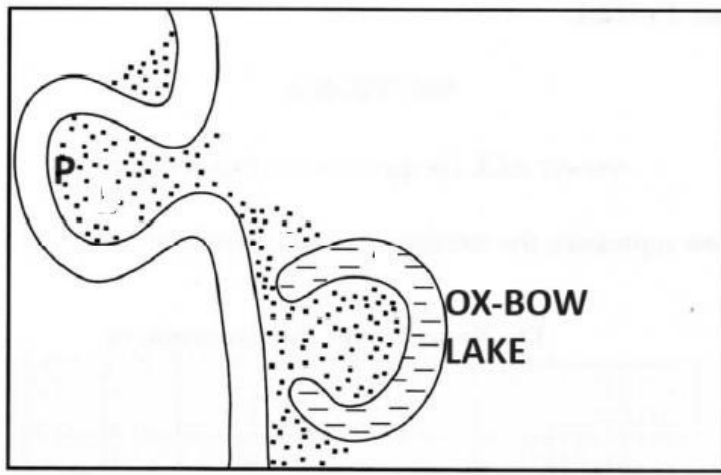
ii) state significance of the hydrological cycle (2mks)

b i) Differentiate between a watershed and confluence (2mks)

ii). State three characteristics of a river in its youthful stage. (3mks)

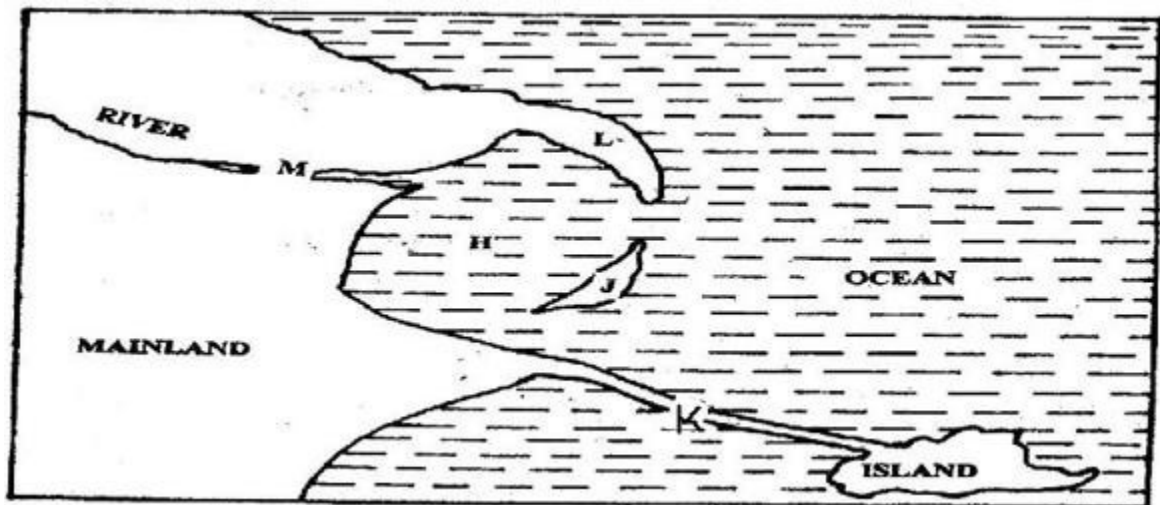
c The diagram below shows an ox-bow lake.

For marking schemes and more papers inbox 0724351706 or visit www.goldlitekcserevision.co.ke



- i). Name the feature formed at the point marked P. (1mks)
- ii). Using a well labelled diagram, describe the formation of a river braids. (4mks)
- d.i). Identify any two features formed by river capture. (2mks)
- ii). Outline three ways through which a gorge is formed. (3mks)
- iii). Explain three negative influences of a river on human environment. (6mks)

9. Use the diagram below to answer question (a)



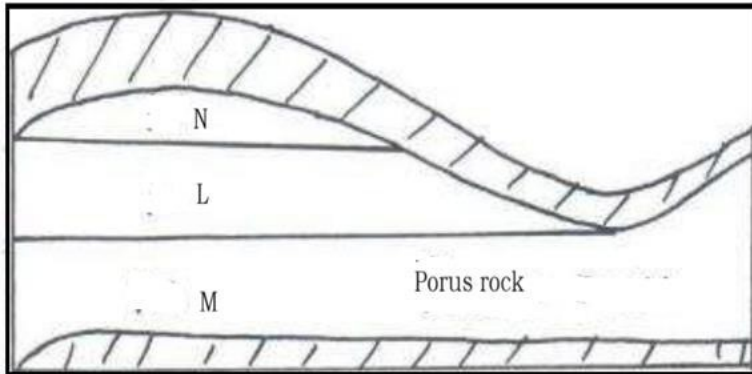
- a) Name the coastal features marked **H, J, K, L** and **M** (5mks)
- b) (i) State four conditions necessary for the formation of a beach (4mks)
- (ii) Describe three processes involved in marine erosion (6mk)
- c) Describe the formation of a stack (5mks)
- d) You are planning to carry out a field study on the depositional features along the coast of Kenya

- i) State two objectives you would formulate for your study (2mks)
- ii) Give three methods you would use to record the information collected (3mks)
- 10 a) i) What is a rock? (2mks)
- ii) Describe three ways through which sedimentary rocks are;
- Mechanically formed (2mks)
 - Organically formed (2mks)
 - Chemically formed (2mks)
- b) i) State three characteristics of sedimentary rocks (3mks)
- ii) Describe two process through which sedimentary rocks changes into metamorphic rocks. (4mks)
- c) Give an example of each of the following types of igneous rocks .
- i. Plutonic rocks (1mk)
 - ii. Hypabyssal rocks (1mk)
 - iii. Volcanic rocks (1mk)
- d) Suppose you were to carry out a field study of rocks within the vicinity of your school
- i. Name two secondary sources of information you would use to prepare for the field study (2mks)
 - ii. Identify three activities you would carry out during the field study. (3mks)
 - iii. State three problems you are likely to experience during the field study. (2mks)

PAPER 2 SECTION A. (25 MARKS)

Answer **all** questions in this section.

1. a) Give the relationship between Geography and geology (2mks)
b) Identify **three** main areas studied under physical Geography (3mks)
2. a) Name **two** forest reserves found in the coastal region of Kenya (2mks)
b) State **three** ways in which clearing of forests has affected the natural environment in Kenya. (3mks)
3. a) Name **two** Indigenous beef breeds reared in Kenya. (2mks)
b) State **three** physical factors which encourage beef farming in East Africa. (3mks)
4. a) The diagram below shows the occurrence of petroleum in the earth's crust. Name the substances in the areas labelled **L**, **M** and **N**. (3mks)



- b) List **two** by products of petroleum. (2mks)
5. a) Apart from East African Co-operation name **two** other Trading Blocs in Africa (2mks)
b) Give **three** reasons why trade between Kenya and other African countries is less developed as trade between Kenya and European market (3mks)

SECTION B: (75 marks)

Answer **question 6** and any other **two** questions.

6. The table below shows Kenya's amount of export crops in the year 1998-2001 in '000' tonnes. Study it and answer the questions that follows.

CROP	1998	1999	2000	2001
TEA	420	510	580	420
HORTICULTURAL CROPS	300	410	520	600
COFFEE	270	360	480	500
TOTALS	990	1280	1580	1520

- a) Use a scale of 1cm represents 50,000 tonnes, draw a comparative bar graph to present this data. (8mks)
- b) Give four physical conditions that favour oil palm cultivation in Nigeria. (4mks)
- c) i) Describe the cultivation of oil palm from land preparation to harvesting. (6mks)
ii) Give three uses of palm oil (3mks)

d) Explain two problems facing oil palm farming in Nigeria.

(4mks)

7. Use the map of East Africa above to answer question (a)



a) i) Name the minerals found in the areas marked **P, Q, R**. (3mks)

ii) Give **three** by products obtained when crude oil is refined. (3mks)

b) i) Explain how trona is processed after reaching the factory. (7mks)

ii) List **four** uses of soda ash. (4mks)

c) Explain **four** effects of rising prices of crude oil in the economy of Kenya. (8mks)

8 a) What is a polder? (2mks)

b). i) Give **four** physical factors which influence the establishment of Mwea-Tebere irrigation Scheme. (4mks)

ii) State **three** objectives of setting up the Mwea-Tebere irrigation Scheme. (3mks)

iii) State **four** significances of Perkerra irrigation scheme. (4mks)

c) Give **four** ways in which the salinity of the polders is reduced in the Netherlands. (4mks)

d) Explain **four** benefits of Zuider Zee project. (8mks)

9. Study the sketch map of Kenya below and use it to answer questions that follow.



- a) i) Name the game reserves marked **W** and **X**. (2mks)
 ii) Identify the National Park marked **Y**. (1mk)
- b) i) What do you understand by the term Bird's sanctuary? (2mks)
 ii) Explain **three** problems experienced by wildlife conservation. (6mks)
- c) State **four** factors that hinder domestic tourism in Kenya. (4mks)
- d) Give **four** economic benefits of tourism to the economy of Kenya. (4mks)
- e) Explain **three** human factors that enable Switzerland receive more tourists than Kenya. (6mks)
- 10 a i) Define the term life expectancy. (2mks)
 ii) Name **three** counties with low population in Kenya. (3mks)
- b) Explain how the following factors influence population distribution in Kenya.
- i) Relief. (2mks)
 ii) Government policy. (2mks)
 iii) Development of industries. (2mks)
- c) State **three** reasons why it is necessary for a country to carry out a population census. (3mks)
- d) Explain **three** efforts the Kenya Government is making to check on the high mortality rate. (6mks)
- e) Give **five** differences between population in Kenya and Sweden. (5mks)

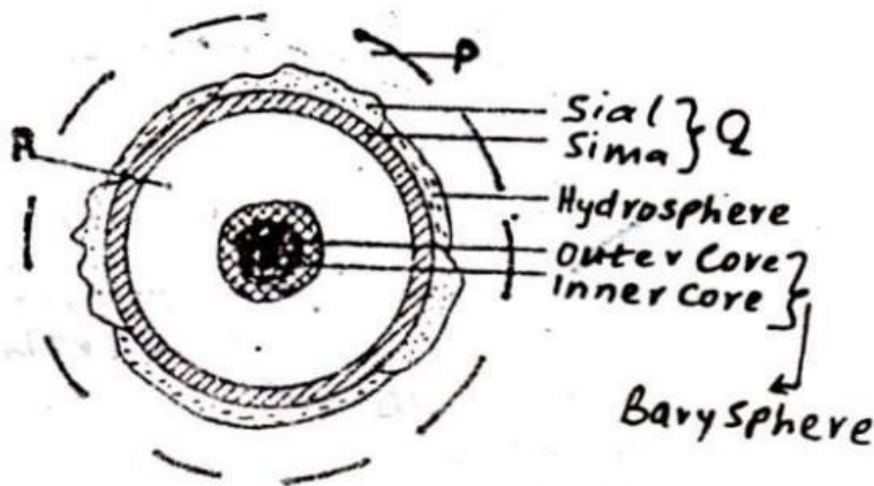
SERIES 8

PAPER 1

SECTION A

Answer all the Questions in this section

1. The diagram below shows the structure of the Earth. Use it to answer the questions below.



- (a) Name the parts marked P, Q and R. (3marks)
- (b) Identify two minerals that constitute sima. (2marks)
2. (a) State two characteristics of sedimentary rocks. (2marks)
- (b) Give two examples of chemically formed sedimentary rocks. (2marks)
3. (a) Give three causes of an earthquake. (3marks)
- (b) Name two major earthquake zones of the world. (2marks)
4. a) Give three reasons why some lakes have fresh water. (3marks)
- b) State two ways in which lakes influence the natural environment. (2marks)
5. Using an illustration, describe the formation of a Sand spit; (5marks)

SECTION B

Answer question 6 and any other two questions in this section

6. Study the map of Mumias (sheet 101/2) provided and answer the questions that follow.

- a) i) What is the title of the provided map (1mark)
- ii) Convert the scale of the map into statement scale (2marks)
- iii) Identify two physical features found at grid square 5941 (2marks)
- iv) What is the six figure grid reference for the school at Mungabo (2marks)
- b) i) What is the latitudinal and longitudinal extent of the south eastern corner of the map (2marks)
- ii) Identify two types of natural vegetation south of Northing 36 (2marks)
- iii) Measure the distance of river Lusimu from the junction of river Nzoia to the bridge in kilometres (2marks)
- c) Describe the drainage of the area covered by the map (6marks)
- d) Citing evidences from the area covered by the map, explain three problems that will be encountered if a road is to be constructed in the area covered by the map (6marks)

7. The diagram below shows some intrusive features formed by vulcanicity.

Use it to answer question (a)



- a) Name the features marked E, F and G. (3marks)

b) Explain how the following features are formed

A Sill (5marks)

Hot springs (5marks)

c) Describe four characteristics of a composite volcano (4marks)

d) Explain four ways in which volcanic mountains positively influence human activities (8marks)

8. (i) What is a natural vegetation? (2marks)

(ii) Describe the characteristics of the savanna vegetation. (6marks)

(iii) Name the temperate grasslands found in the following countries:

Canada (1mark)

Russia (1mark)

Australia (1mark)

(b) Explain how the following factors influence the distribution of vegetation:

(i) Relief (2marks)

(ii) Soils. (4marks)

(c) You are planning to carry out a field study in a forest.

(i) Give four reasons why it is important to seek permission from the school administration. (4marks)

(ii) List four sources of information you are likely to use before the actual field study. (4marks)

9. (a) (i) What is the difference between weathering and mass wasting? (2marks)

(ii) Apart from plants, give three other factors that influence the rate of weathering (3marks)

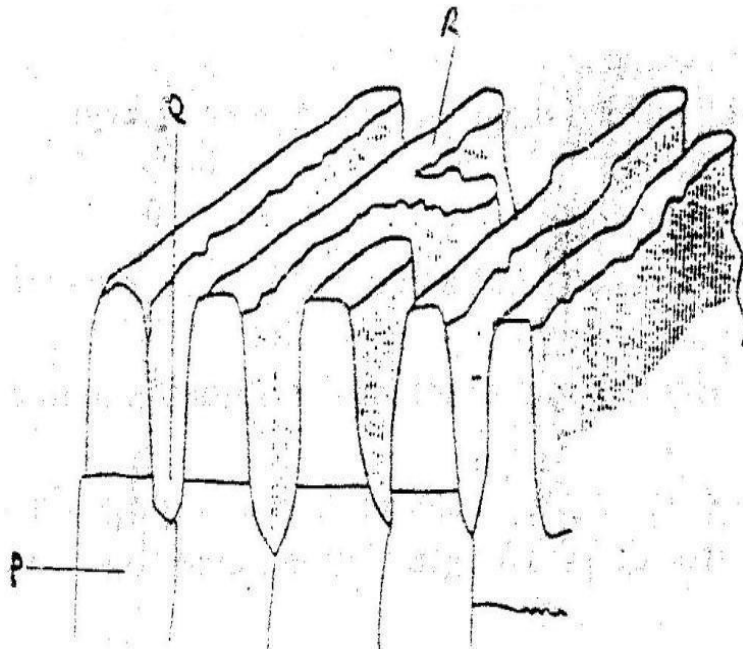
(iii) Explain two ways in which plants cause weathering (4 marks)

(b) (i) List two types of mass wasting other than soil creep (2 marks)

(ii) Explain three factors that cause soil creep. (6 marks)

(c) Explain four effects of mass wasting on the environment. (8 marks)

10. The diagram below shows some features of a Karst scenery. Use it to answer questions (a)



(a) Name the features marked P, Q, and R. (3marks)

(b) Explain how the following factors influence the amount of underground water in limestone areas;

(i) Rainfall (4marks)

(ii) Vegetation cover (4marks)

c) (i) Apart from stalagmites, name three other underground features

formed in limestone areas (3marks)

(ii) With the aid of a diagram, describe how a stalagmite is formed (8marks)

(d) Give three reasons why there are few settlements in karst landscapes (3marks)

PAPER 2 SECTION A

Answer all the Questions in this section

1. a) Name three alluvial mining methods (3marks)
b) Give three ways in which gold may occur (3marks)
2. a) Name two exotic breeds of dairy cattle reared in Kenya. (2marks)
b) State three physical conditions that favour dairy farming in Denmark (3marks)
3. (a) Apart from the sun, name three other sources of electricity. (3marks)

(b) Give three advantages of using solar energy. (3marks)
4. State three ways in which the Great Lake and St. Lawrence Sea Way has contributed to the economy of Canada and United States of America. (3marks)
5. (i) Name two settlement patterns. (2marks)
(ii) Identify three physical factors that influence settlement. (3marks)

SECTION B

Answer question 6 and any other two Questions in this section

6. The table below shows the quantity of crops exported from Kenya for the years 2006 to 2008 in '000 tonnes

CROPS/YEAR	2006	2007	2008
FRUITS	102	93	92
FLOWERS	153	156	82
TEA	354	372	182
COFFEE	327	347	138
TOTAL	946	968	497

a) (i) Draw a compound bar graph to represent the quantity of crops exported from Kenya.
Use the scale of 1cm to represent 100,000 crops. (7marks)

(ii) Give any two advantages of using a compound bar graph to represent data (2marks)

b) State three physical conditions favouring coffee growing in Kenya (3marks)

c) Explain three problems facing coffee farming in Brazil (6marks)

d) Describe the stages involved in the processing of coffee (7marks)

7. a) (i) Give three examples of hardwood trees in Kenya (3marks)

(ii) State three characteristics of tropical hardwood forests (3marks)

b) (i) Give three reasons why there are a few paper mills in Kenya (3marks)

(ii) Explain four measures that have been undertaken to conserve forests in Kenya

(8marks)

c) Explain differences of softwood forests in Kenya and Canada under the following topics

- Distribution of softwood forests (2marks)
- Period of harvesting (2marks)
- Transportation of logs (2marks)
- Marketing of forest products (2marks)

8. a) i) State three ways in which salinity in the polders is reduced in the Netherlands (3marks)
- ii) Name three areas which make up the Zuider Zee project in the Netherlands. (3marks)
- b) i) Identify four land uses of the reclaimed land in Netherlands. (4marks)
- ii) Describe the stages in the reclamation of land from the sea in the Netherlands. (7marks)
- c) Explain four benefits of Zuider Zee project in the Netherlands. (8marks)
-
9. a) i) Name three main imports to Kenya (3marks)
- ii) Give four measures which Kenya may take to reduce unfavourable balance of trade (4marks)
- b) Explain three factors that influence internal trade in Kenya (6marks)
- c) i) Identify the two countries in East Africa that are member states of the Common Market for Eastern and South Africa (COMESA) (2marks)
- ii) State four objectives of Economic Community of West African States (ECOWAS) (4marks)
- d) Explain three ways in which member states have benefited from the formation of regional trading blocs in Africa (6marks)
-
10. (a) i) Give two main sources of population data (2marks)
- ii) Outline the information that can be derived from a population pyramid (3marks)
- (b) Explain how the following factors have led to population increase in Kenya
- (i) Cultural beliefs (2 marks)
- (ii) Migration (2 marks)
- (c) Explain four problems which result from high population growthrate in Kenya (8marks)
- (d) Describe four ways in which the population of Kenya differs from that of Sweden (8marks)

Answer all questions.

1. (a) Define a planet. (2 marks)
(b) Name any three planets considered as outer planets. (3 marks)
2. (a) Name any two parts of a maximum Thermometer. (2 marks)
(b) Describe how a maximum thermometer works. (3 marks)
3. (a) How does cold ocean influence climate of an adjacent land. (2 marks)
(b) Describe characteristics of rainfall experienced in modified equatorial climate of Lake Victoria basin. (3 marks)
4. (a) List two forms of chemical weathering. (2 marks)
(b) Describe how mudflow occurs. (3 marks)
5. (a) What is river flow. (2 marks)
(b) Give three characteristics of turbulent river flow. (3 marks)

SECTION B: (75 MARKS)

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

Use the map of Mumias 1: 50,000 to answer questions 6.

6. (a) (i) Locate the South East corner of the map using longitudes and latitudes. (2 marks)
(ii) Identify the index to adjoining sheets found to the East and North Eastern part of Mumias. (2 marks)
(iii) Give the depth of the seasonal swamp found in grid square 6641. (2 marks)
- (b) (i) Name any three physical features found in grid squares 6532. (3 marks)
(ii) Describe characteristics of the long profile of River.Nzoia. (6 marks)
- (c) (i) Enlarge by 2 the area east of the easting 64 and south of northing 32 and north of northing 28. On it mark and label the following. (6 marks)
 - Main river
 - Road C 533
 - Riverine trees
- (d) Citing evidence, explain two factors which have led to growth of Mumias town. (4 marks)



7. (a) (i) Give three ways through which rocks are classified. (2 marks)
- (ii) Why are igneous rocks referred to as fire rocks? (2 marks)
- (iii) Give two examples of intrusive igneous rocks. (2 marks)
- (b) Describe how the following types of rocks are formed;
- i) Igneous rocks (5 marks)
- ii) Thermodynamic metamorphic rocks. (4 marks)
- (c) Describe how the following are found.
- i) Recumbent fold. (4 marks)
- ii) Ridge and valley landscape. (5 marks)
8. (a) (i) Give two ways through which magma may reach the earth surface. (2 marks)
- (ii) Differentiate magma from lava. (2 marks)
- (iii) State any three characteristics of intermediate lava. (3 marks)
- (b) (i) Describe how the following features are formed
- i) Acidic lava dome. (5 marks)
- ii) Explosion caldera. (7 marks)
- (c) Describe how earthquakes are measured. (6 marks)



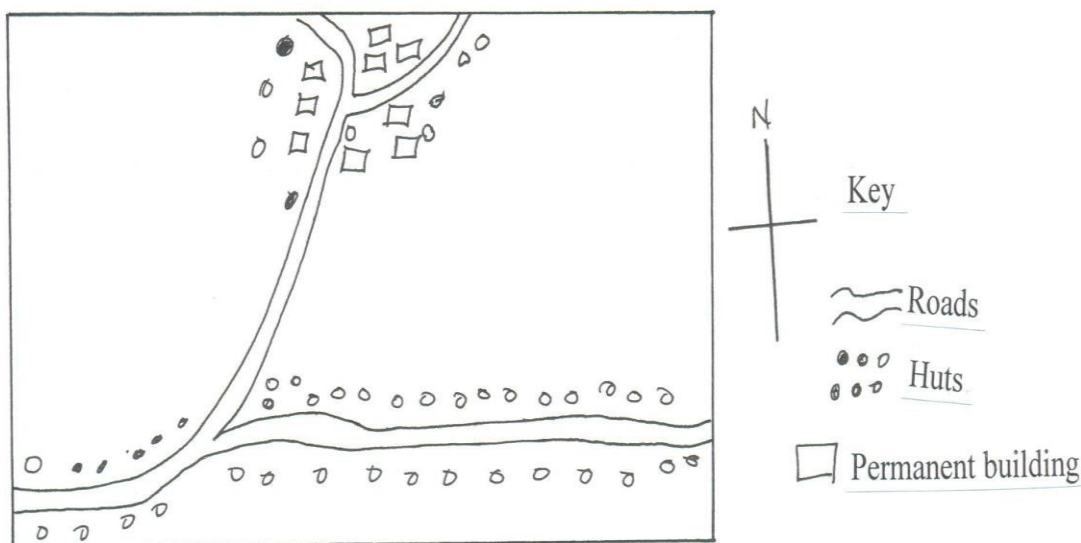
9. (a) (i) Define a Karst scenery. (2 marks)
- (ii) State three characteristics of Karst scenery. (3 marks)
- (iii) Describe three factors which are necessary for formation of Karst scenery. (6 marks)
- (b) Describe how the following features are formed;
- (i) Sinkhole (4 marks)
- (ii) Stalagmite (4 marks)
- (c) State five way in which Savannah grassland are adapted to climatic conditions. (5 marks)
10. (a) (i) Differentiate between Ocean and Sea. (2 marks)
- (ii) Name two salts which account for the highest percentage in sea water. (2 marks)
- (b) (i) Give three causes of ocean currents. (3 marks)
- (ii) State three conditions which favour the growth of coral polyps. (3 marks)
- (c) (i) Using a well labelled diagram, describe how a bay bar is formed. (4 marks)
- (ii) Explain three significance of coastal features to human activities. (6 marks)
- (d) You are planning to carry out a field study on the depositional features along the coast of Kenya.
- (i) State three objectives you will formulate for your study. (3 marks)
- (ii) Give two reasons why it is important for you to divide the students into groups. (2 marks)



PAPER 2 SECTION A

Answer all the questions in this section

1. (a) Define eco-tourism. (2mks)
(b) State three benefits of eco-tourism. (3mks)
2. (a) Name **two** counties in Kenya where wheat is grown in large scale. (2mks)
(b) List **three** problems facing wheat farmers in Kenya. (3mks)
3. (a) (i) Give **two** types of domestic trade. (2mks)
(b) State **three** factors influencing internal trade in Kenya. (3mks)
4. (a) Differentiate between environmental management and environmental conservation. (2mks)
(b) Give **three** natural environmental hazards you know. (3mks)
- 5 (a) Study the sketch map below and answer the questions that follow



- Identify **two** settlement patterns represented by the sketch map. (2mks)
- (b) State **three** causes of rural to rural migration. (3mks)

SECTION B

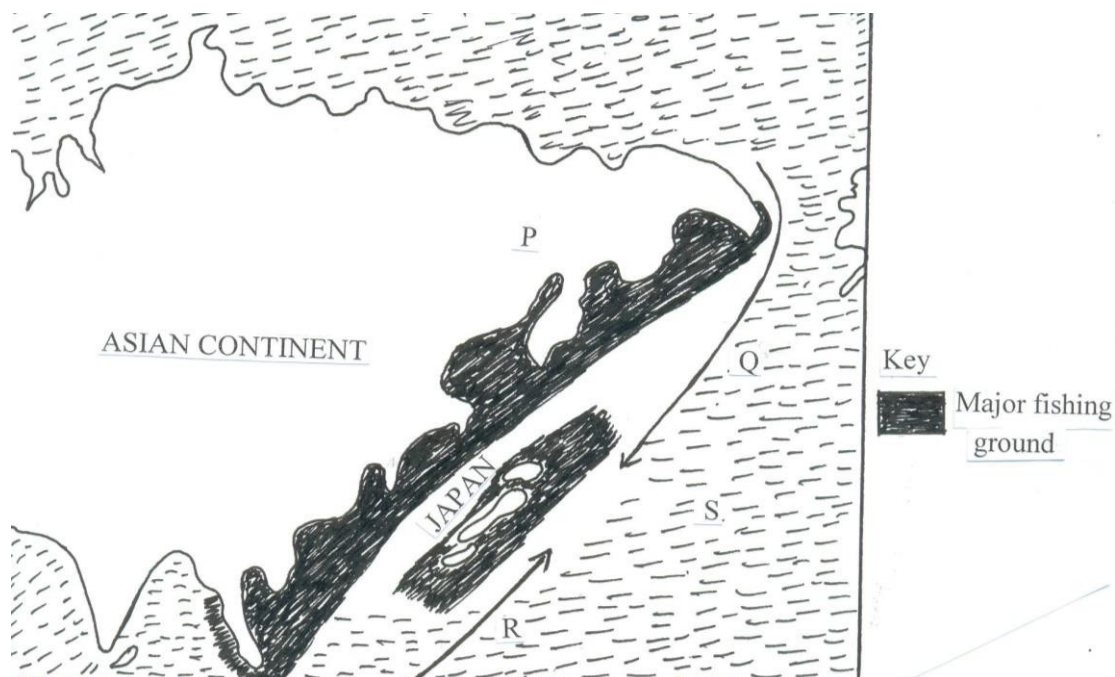
Answer question 6 and any other two questions form section B.

- 6 (a) The table below shows East Africa's milk production in '000' litres from 1998 – 2001

Country /Year	1998	1999	2000	2001
Kenya	30	41	36	25
Uganda	20	25	27	29
Tanzania	52	60	65	70

- (i) Draw a compound bar graph to represent the above data. Use a vertical scale of 1cm represents 10 ,000 litres. (7mks)
- (ii) State **two** limitations of compound bar graph in representing data. (2mks)

- (b) (i) Name **three** counties in Kenya where dairy farming is practiced in large scale. (3mks)
- (ii) State **four** similarities between dairy farming in Kenya and Denmark. (4mks)
- (c) (i) Mention **three** types of dairy animals reared in Kenya. (3mks)
- (ii) Explain **three human** factors favoring dairying in Denmark. (6mks)
- 7.(a) (i) Distinguish between transport and communication. (2mk)
- (ii) Explain how construction of transport networks is affected by the following factors.
- Relief (2mks)
 - Economic factors. (2mks)
- (b) (i) State **four** factors that hinder the development of air transport in Africa. (4mks)
- (ii) Name **two** canals that are found in Africa. (2mk)
- (c) State **five** recent development that have taken place in Kenya to improve communication.(5mks)
- (d) Explain **four** ways in which transport and communication has improved economic development in Africa. (8mks)
- 8.(a) (i) What is fishing? (2mks)
- (ii) Explain **three** ways in which the nature of coastline affects fishing. (6mks)
- (b) (i) State **three** types of fishing carried out in Kenya. (3mks)
- (ii) Describe seining as a modern method of fishing. (3 mks)
- (c)The map below shows the fishing ground East of the Asian Continent. Use it to answer the questions that follow.



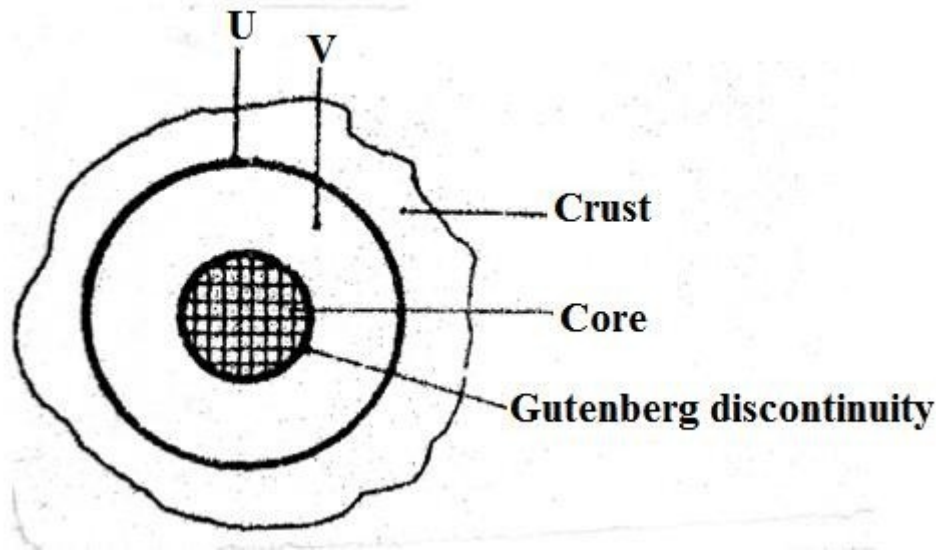
- (i) Give the name given to the major fishing ground shown on the map. (1mk)
- (ii) Identify the ocean currents marked **Q** and **R**. (2mks)
- (iii) Explain **four** factors that have favored fishing in the ground mentioned in (i) above. (8mks)

- 9 (a) (i) Apart from those in East Africa, name **four** large scale H.E.P projects in Africa (4mks)
- (ii) Other than water, give **three** other sources of renewable energy. (3mks)
- (b) Explain **four** factors that have hindered full development of H.E.P production in Kenya (8mks)
- (c) Mention **four** areas in Kenya with high potential for Geothermal power. (4mks)
- (d) A form four class in Machakos county is planning a field study to Gitaru H.E.P. dam.
- (i) State **three** reasons why they need to inform the school authority. (3mks)
- (ii) Give **three** follow-up activities they engaged in school after the study. (3mks)
10. (a) i) What is industrialization? (2mks)
- ii) Explain **three** reasons why some industries consider regular supply of water as the main reason for their location. (6 mks)
- (b) Outline **four** similarities between Jua Kali industry in Kenya and cottage industry in India. (4 mks)
- (c) Explain **three** factors that have influenced the location of iron and steel industry in the Ruhr region of Germany in the 19th century. (6 mks)
- (d) You intend to carry out a field study in Thika industrial area.
- i) State **four** effects of the industries on the environment you are likely to observe. (4mks)
- ii) State **three** reasons why it is important to prepare a working schedule for the study. (3mks)

SERIES 10
PAPER 2 SECTION A

Answer all the questions in this section

1. The diagram below represents the structure of the Earth. Use it to answer questions (a) and (b)



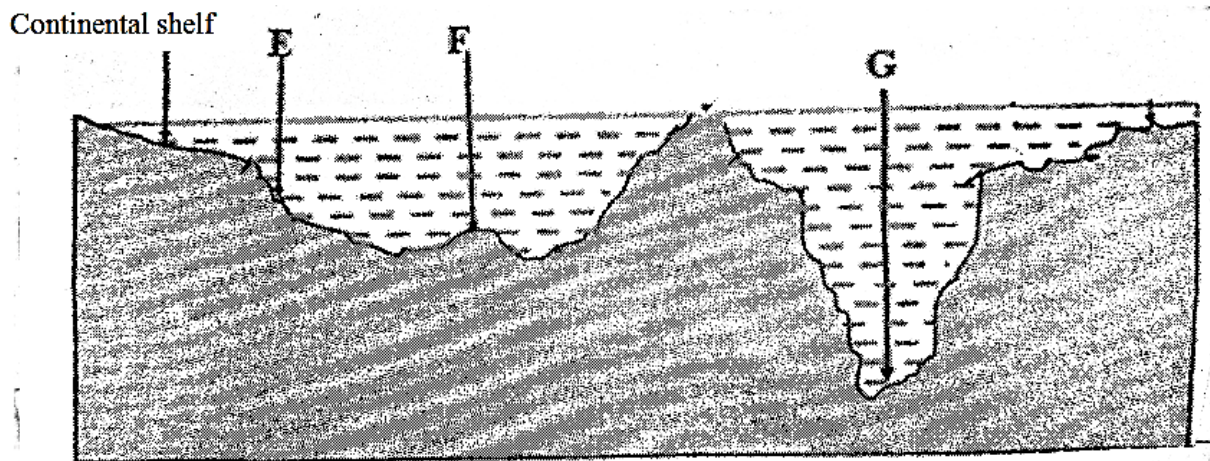
- a) Name the part marked U and V (2mks)
b) Describe the composition of the core (4mks)
2. a) Name **two** examples of plutonic Rocks (2mks)
b) State **three** economic benefits of Coral limestone Rocks (3mks)
3. a) What is vegetation (2mks)
b) State **two** factors that have led to the decline of natural grassland in Kenya (2mks)
4. a) Differentiate between River rejuvenation and River capture (2mks)
b) Name **three** features that result from river capture (3mks)
5. a) Name **two** types of submerged highland Coasts (2mks)
b) State **three** conditions necessary for the formation of beaches (3mks)

SECTION B:

Answer question 6 and any two questions from this section

6. Study the map of Mumias 1:50,000 (sheet 101/2) provided and answer the following questions
- a) i) What type of map is Mumias extract map? (1mk)
ii) Give the approximate height of the top of the hill at grid square 6381 (2mks)
iii) What is magnetic variation of the map (2mks)
iv) Identify **two** Districts in western province represented in the area covered by the map (2mks)
v) Identify the two types of scales used in the map (2mks)
- b) i) Identify **three** natural features found in grid square 4727 (3mks)
ii) Give **three** settlements patterns found in the area covered by the map (3mks)
- c) Citing evidences from the map, give two services offered in Mumias town (4mks)
- d) Describe the characteristics of the long profile of River Nzoia (6mks)
7. a) i) Name **two** types of earthquake (2mks)
ii) Identify **two** scales used to measure the intensity of an earthquake
b) i) Name **three** major earthquake zones of the world (3mks)
ii) Explain how the following causes earthquakes

- Violent volcanic eruption (3mks)
 - Excessive energy release within the mantle (3mks)
- c) Give **four** negative effects of earthquakes (4mks)
- d) You intend to carry out a field study of an area recently affected by an intense earthquake
- i) Give three methods of data collection you will use while in the field (3mks)
 - ii) Outline **three** activities you will undertake while in the field (3mks)
 - ii) State **two** follow-up activities you would be involved in after the field study (2mks)
8. a) i) What is weathering (2mks)
- ii) Give **three** factors that influence the rate of weathering (3mks)
- b) Apart from mechanical weathering, name any two types of weathering (2mks)
- c) Describe the following processes of weathering
- i) Exfoliation (6mks)
 - ii) Freeze and thaw action (6mks)
- d) Explain **three** ways in which weathering is of significance to human activities (6mks)
9. a) i) Define the term Ocean (2mks)
- ii) Name three main Oceans on the Earth's surface (3mks)
- b) The diagram below shows Ocean topography. Use it to answer the questions (b)(i) and (ii)

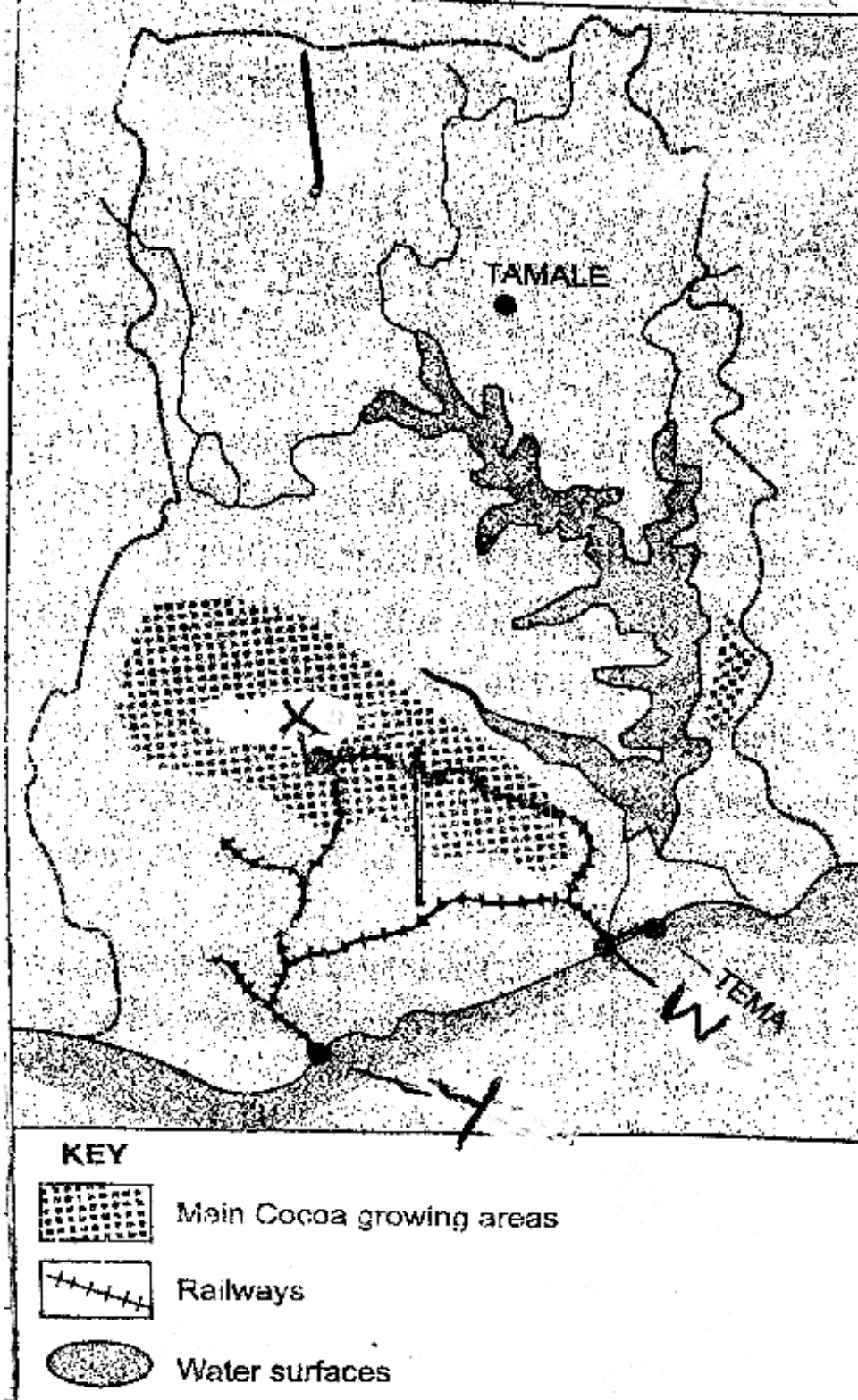


- i) Name the part marked E, F and G (3mks)
 - ii) State **three** characteristics of continental shelf (3mks)
- c) i) Give **two** factors that determine rate of wave erosion (2mks)
- ii) Describe how a wave-cut-platform is formed (7mks)
- d) Your class visited the Coast of Kenya for field-work on depositional features
- i) Name **two** types of field work you could have used (2mks)
 - ii) State **three** objectives you formulated for your study (3mks)
10. a) i) Apart from humus, name three other components of soil (3mks)
- ii) State **three** ways in which humus contributes to the quality of soil (3mks)
- b) i) Give **three** factors that determine the colour of soil (3mks)
- ii) State **four** characteristics of desert soils (4mks)
- c) Describe how laterization occurs (4mks)
- d) Explain **four** ways in which human activities contribute to soil erosion (8mks)

PAPER 2 SECTION A

Answer all the questions (1-5)

1. a) Give **two** factors that influence the occurrence of minerals (2mks)
b) State **three** negative effects of mining on the environment (3mks)
2. The map below shows cocoa growing areas in Ghana. Use it and answer question (a)



- a) Name the towns marked W, X and Y (3mks)
- b) Name **two** crops grown in Kenya that are processed to produce vegetable oil (2mks)
3. a) What is industrial inertia (2mks)
- b) Give **three** examples of cottage industries in Kenya (3mks)
4. a) Identify **two** types of migration apart from urban – rural migration (2mks)
- b) State **three** causes of urban – rural migration (3mks)
5. a) Differentiate between transport and communication (2mks)
- b) Name **three** international airports in Kenya (3mks)

SECTION B:

Answer question 6 and any two questions from this section

6. The data below represents the number of African diasporas in New York during the month of November 1960

Country	Number of African Diaspora
Comoros	50
Ghana	100
Cameroon	200
South Africa	250
Kenya	400
Total	1000

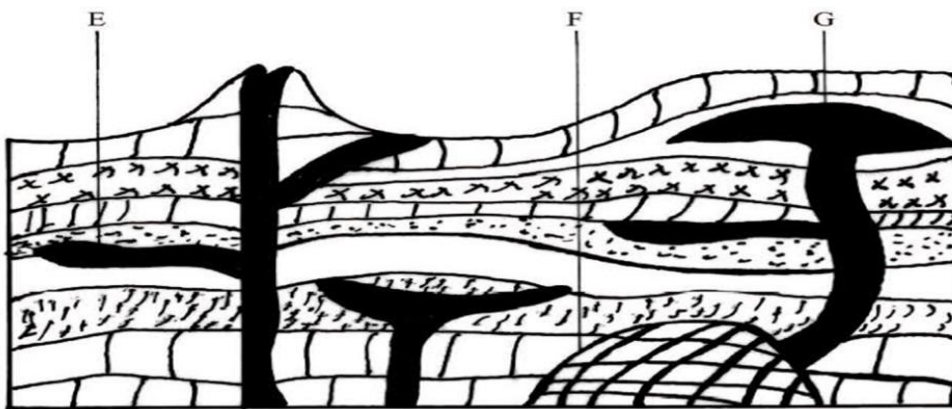
- a) i) Draw a divided rectangle 15cm long to represent the data above (8mks)
- ii) Calculate the percentage of Kenyan diasporas living in New York in the month of November 1960? (2mks)
- iii) State three advantages of representing data using a divided rectangle (3mks)
- b) Explain **two** ways in which urbanization negatively affects the surrounding agricultural areas (4mks)
- c) Explain **four** social functions of Nairobi city (8mks)
7. a) i) What is transhumance? (2mks)
- ii) Name **three** countries in Kenya where nomadic pastoralism is practiced (3mks)
- b) List **four** characteristics of beef farming in Kenya (4mks)
- c) Name **two** beef cattle breeds reared in commercial ranches in Argentina (2mks)
- d) Give **three** reasons why beef production is higher in Argentina than Kenya (6mks)
- e) Explain the role played by beef farming to the economy of Kenya (8mks)
8. a) i) Apart from petroleum, name two non-renewable sources of energy (2mks)
- ii) Give **three** reasons why Kenya imports her oil in crude form (3mks)
- b) Explain **four** ways in which Kenya has benefited from the development of seven hydroelectric power schemes (8mks)
- c) i) Name **two** developing countries that have developed nuclear energy in the

- world (2mks)
- ii) State **four** disadvantages of nuclear energy (4mks)
- d) Give **three** reasons hindering the expansion of rural electrification programme in Kenya (6mks)
9. a) i) Distinguish between bilateral and multilateral trade (2mks)
- ii) State **four** factors that encourage trade in Kenya (4mks)
- b) i) Name **three** trading blocs in Africa (3mks)
- ii) Explain **four** benefits of trading blocs to countries in Africa (8mks)
- c) Give **four** measures which Kenya may take to reduce unfavourable balance of trade (4mks)
- d) Identify **four** political problems facing regional trading blocs in Africa (4mks)
10. a) i) Distinguish between environment management and environment Conservation (2mks)
- ii) Apart from air pollution, name two other types of pollution that is common in Kenya (2mks)
- iii) Explain **three** possible solutions to the air pollution (6mks)
- b) i) Name **two** rivers in the lake region of Kenya which cause large scale flooding (2mks)
- ii) Explain **three** human activities that contribute to the occurrence of flooding in Kenya (6mks)
- c) Your Geography class intends to carry out a field study around the school on areas affected by floods
- i) State **two** reasons for reconnaissance survey (2mks)
- ii) State **three** ways in which the people around the school are likely to be affected by floods (3mks)
- iii) Name **two** after-study activities that students are likely to engage in. (2mks)

SECTION A

Answer ALL the questions in this section.

1. a) Name two heavenly bodies that form part of the solar system. (2marks)
b) State three characteristics of the outer core. (3marks)
- 2.a) What is an isothermal layer? (2marks)
b) Name the three isothermal layers in the atmosphere. (3marks)
3. a) Define the term climax vegetation. (2marks)
b) State three characteristics of the savanna vegetation. (3marks)
4. Study the diagram below and use it to answer question a).



- a) Name the features marked E, F, G. (3marks)
 - b) State two natural causes of earthquakes. (2marks)
5. a) State three conditions necessary for the formation of artesian wells. (3marks)
b) Give two ways in which underground water may reach the earth's surface. (2marks)

SECTION B

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

6. Study the map of Mumias (1:50,000) sheet 101/2 provided and answer the following questions.
 - a) i) Convert the linear scale of the map into statement scale. (2marks)
 - ii) Give the six figure grid reference of Tingolo School. (2marks)
 - iii) What is the bearing of Air Photo Principal Point 92/KE/4 157 from Indangalasia school. (2marks)

For more resources and marking schemes contact us on **0724351706** or visit our website www.goldlitekcserevision.co.ke And Download

- iv) What is the length in Kilometres of the All Weather loose surface road from Ka to Petros in the Eastern part covered by the map? (2marks)
- v) Give three relief features found in the area covered by the map. (3marks)
- b) Describe the drainage of the area covered by the map. (6marks)
- c) Draw a rectangle measuring 12cm by 8cm to represent the area to the North of Northing 40 and East of Easting 61. (1mark)

On the rectangle, mark and name:

- All Weather Loose surface road. (1mark)
- River Nzoia. (1mark)
- Mwira School. (1mark)

- d) Citing evidence from the map, give two economic activities carried out in the area covered by the map. (4marks)

7. a) (i) Define the term folding. (2marks)
- (ii) Apart from Fold Mountains, give three other features formed through folding. (3marks)
- (b) The map below shows the distribution of Fold Mountains in the world.



- (i) Name the mountains marked D and E. (2 marks)
- (ii) Identify the orogenies the mountains marked F and G were formed. (2 marks)
- c) With the aid of well labeled diagrams, describe the formation of the following types of folds:
- i. Asymmetrical folds (4 marks)

- ii. Overfolds. (4 marks)
- d) Explain four positive influence of folding to human activities. (8marks)
8. a) Differentiate between river capture and river rejuvenation. (2marks)
- b) Explain three ways in which a river transports its load. (6marks)
- c) (i) Apart from a delta, name three other features that results from river deposition. (3marks)
- (ii) Describe how a delta is formed. (5marks)
- d) You intend to carry out a field study on the youthful stage of river Yala.
- i) State three methods you will use to record data. (3marks)
- ii) Give three reasons why it is necessary to divide yourselves into groups. (3marks)
- iii) Identify three benefits of developing a work schedule for the study. (3marks)
9. a) What is a mineral? (2marks)
- b) State three ways in which rocks are classified. (3marks)
- c) (i) Give three examples of plutonic rocks. (3marks)
- (ii) State three characteristics of volcanic rocks. (3marks)
- d) Describe the processes through which sedimentary rocks change into metamorphic rocks. (6marks)
- e) Explain four significance of rocks to the economy of Kenya. (8marks)
10. a) (i) Differentiate between oceans and seas. (2marks)
- (ii) State three characteristics of ocean water. (3marks)
- (iii) List two processes of wave erosion. (2marks)
- b) (i) Name the three types of tides. (3marks)
- (ii) State two causes of tides. (2marks)
- c) With an aid of a well labeled diagram, describe how a tombolo is formed. (7marks)
- d) Explain three negative effects of oceans to human activities. (6marks)

PAPER 2.

SECTION A (25 MARKS)

Answer all the questions in this section

- 1.(a). State three roles played by transport in the economy of Kenya. (3marks)
(b) Name two highways created in Africa to ease transport across the continent (2mark)
- 2 (a). Apart from wood name two other sources of renewable energy (2 mark)
b) Give three disadvantages of Using wood fuel and source of energy. (3 marks)
- 3 (a). Other than Ghana, name two countries in West Africa where cocoa is grown. (2 Marks)
(b) Physical conditions that favor the growth of cocoa in Ghana. (3 Marks)
- 4 (a). State *three* causes of mortality in East Africa. (3 Marks)
(b) Give *two* causes of rural-rural migration in Kenya. (2 Marks)
- 5) (a) what is industrialization (2Marks)
. (b). Give three efforts that have been made to decentralize industries in Kenya? (3 marks)

SECTION B (75 MARKS)

Answers question six and any other two questions from this section.

6. The table below shows the value of beef products from 2020 to 2023 Value of beef products (million ksh)

YEAR BEEF	2020	2021	2022	2023
Beef	13,200	8,300	7,300	12,400
Hides	4,200	4,500	4,700	6,100
Hooves	7,300	7,800	7,400	8,900

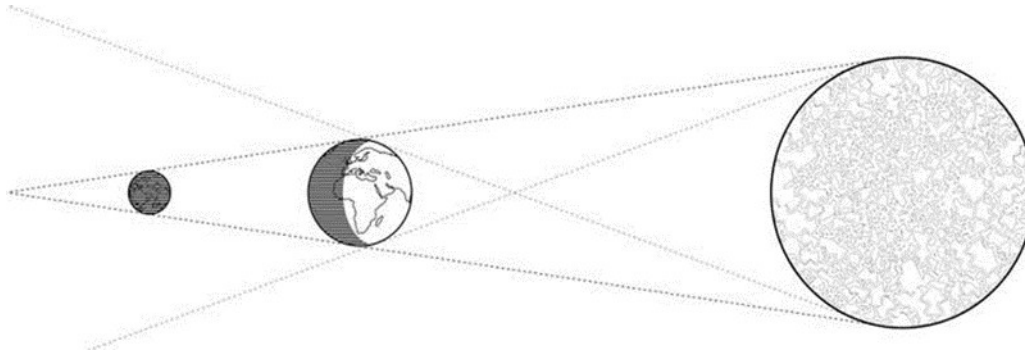
- a) (i) Using a scale of 1cm to represent 1000 million Kenya shillings, draw a comparative bar graph to represent the value of beef products from 2020 to 2023 (7marks)
(ii) State three advantages of using a comparative bar graph to represent statistical data (3marks)
- b) i) State four factors which favour beef farming in the Rift Valley (4 marks)
ii) Identify two traditional breeds of cattle kept by nomadic pastoralists in Kenya (2 marks)
- c . (i) State three factors favouring beef farming in Kenya (3marks)
(ii) Explain three significance of beef farming in Kenya (6marks)

- 7a) (i) Give three problems faced in the control of tsetse fly in Kenya (3marks)
- (ii) Explain four physical factors that influenced the location of Mwea tebere irrigation scheme (8marks)
- b) (i) Give two main projects of land reclamation in Netherlands (2marks)
- (ii) Explain three benefits of Zuider Zee projects in Netherlands(6marks)
- c) Explain three similarities between land reclamation in Kenya and Netherlands (6marks)
- 8 a) Give four reasons why conservation of wildlife is encouraged in Kenya. (4marks)
- b) Explain how the following factors influence the distribution of wildlife in East Africa
- Climate (2marks)
 - Vegetation cover (2marks)
 - Soil (2marks)
- c) (i) State four ways in which Maasai mara game reserve benefits the Maasai Community (4marks)
- (ii) Give three measures being taken in Kenya to promote domestic tourism (3marks)
- (iii) Explain four ways in which the government of Kenya would promote sustainable Tourism. (8marks)
9. a (i). State three ways mining dereliction can be reclaimed (3marks)
- (ii). Name the minerals found in the following areas (3 marks)
- i. Kasese 1mk
 - ii. Shinyanga 1mk
 - iii. Kariandusi 1mk
- (b). Give three problems facing oil industry in the Middle East (3 marks)
- c) Explain four ways in which mining leads to development of industries. (8 marks)
- d) You are to carry out a field study on effects of land dereliction around your school.
- i) Give three reasons why you would require a route map of the area of the study. (3 marks)
 - ii) For your study, you have prepared a working schedule. State three items you would include in the schedule. (3 marks)
 - (iii). Identify two benefits that your visit to the area will have in the community. (2 marks)
10. (a).(i) Give three Characteristics of wholesalers; (3marks)
- (ii). Name two Invisible exports from Kenya to the rest of the World (2marks)
- (b). State four reasons why EastAfrican Community (EAC) was revived in the year 2001. (4marks)
- (c). Explain four reasons why Kenya experiences unfavourable balance of trade (8marks)
- (d) Explain four measures undertaken by the Kenyan government to promote international trade (8 marks)

SECTION A

Answer all the questions in this section

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



- (i) What type of eclipse is represented by the diagram? (1 mark)
 - (ii) Explain how the above eclipse occurs. (2 marks)
- (b) What is the time at Malindi on 40° E, when the time at Accra on Longitude 0° is 12.00 noon? (3 marks)
3. (a) Apart from fold mountains, name three other features resulting from folding. (3 marks)
(b) State two factors that determine the folding of crustal rocks. (2 marks)
4. (a) Give three reasons why some lakes in Kenya have saline water. (3 marks)
(b) Outline two economic uses of lakes. (2 marks)
5. (a) What is natural vegetation? (2 marks)
(b) State three characteristics of the Mediterranean type of vegetation. (3 marks)

SECTION B

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

6. Study the map of Mumias 1:50,000 (Sheet 101/2) provided and answer the following questions.
 - (a)(i) Identify two types of scales that have been used in the map extract. (2 marks)
 - (ii) What was the magnetic declination of Mumias as at January 1965? (2mks)
 - (iii) Name three districts covered by the map of Mumias. (2mks)

(iv) Measure the length of the dry weather road from the junction at grid reference 6028 up to the bridge at grid reference

6434. Give your answer in KM (2mks)

(b) (i) Reduce by two, the area to the East of Easting 50 and enclosed by Northing 30 to 40. (2 marks)

On it mark and name;

- River Nzoia (1mk)
- All weather road loose surface (1mk)
- District boundary (1mk)
- Seasonal swamp (1mk)

(ii) Calculate the scale of the reduced area (2mks)

(c) Describe the drainage of the area covered by the map. (5 marks)

(d) Citing evidence from the map, identify two economic activities carried out in the area covered by the map. (4mks)

7. (a) (i) Define the term rock. (2mks)

(ii) Describe the following characteristics of minerals;

- Tenacity (2mks)
- Lustre (2mks)
- Cleavage (2 marks)

(b) (i) Name two examples of extrusive igneous rocks. (2mks)

(ii) Describe the formation of Plutonic rocks. (4mks)

(c) Explain three significance of rocks to the economy of Kenya. (6 marks)

(d) Your class is planning to carry out a fieldwork on rocks around your school.

(i) Outline two activities you would engage in before the study. (2 marks)

(ii) State three challenges you are likely to face during the field study. (3 marks)

8. (a) (i) Outline any two types of river erosion. (2 marks)

(ii) State three factors that influence river erosion. (3 marks)

(b) Describe how the river erodes through the following processes.

(i) Hydraulic action. (4 marks)

(ii) Solution (2 marks)

(c) Describe how the following features are formed.

(i) Interlocking spurs. (4 marks)

(ii) Natural levees. (4 marks)

(d) Explain three negative effects of rivers to the human environment. (6 marks)

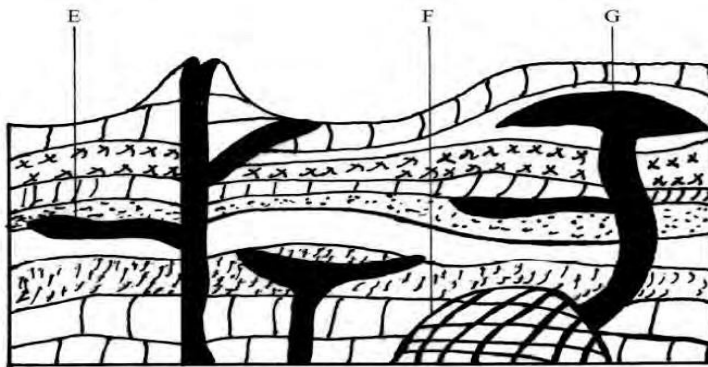
9. (a) (i) Differentiate between Vulcanicity and Volcanicity. (2 marks)

For more resources and marking schemes contact us on **0724351706** or visit our website www.goldlitekcserevision.co.ke And Download

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

(b) The diagram below shows some intrusive features formed by vulcanicity.

Use it to answer the questions that follow.



(i) Name the features marked E, F and G. (3 marks)

(ii) Explain how the feature marked E is formed. (4 marks)

(c) Students carried out a field study on volcanic rocks.

(i) Give four reasons why it is necessary to collect rock samples during such a field study. (4 marks)

(ii) Outline four follow up activities the learners would be engaged in after the field study. (4 marks)

(d) Give four causes of earthquakes. (4 marks)

10. (a) (i) What is a soil catena? (2 marks)

(ii) Give three factors that determine the colour of soil. (3 marks)

(iii) State three ways in which mulching helps in soil conservation. (3 marks)

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

(i) Burning (4 marks)

(ii) Over cultivation (4 marks)

(c) Give two economic uses of soil (2 marks)

(d) You are supposed to carry out a field study of an eroded area.

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

(ii) Give two disadvantages of using secondary sources of collecting data in this kind of study. (2 marks)

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

PAPER 2

SECTION A: (25MARKS):

Answer ALL questions in this section:

1. (a) Define the term Geography. (2mks)
(b) Name three divisions of human and economic geography. (3mks)
2. (a) Name two forest reserves in Kenya. (2mks)
(b) State three characteristics of equatorial rain forest. (3mks)
3. (a) State three physical conditions that favour large scale sugarcane growing in Kenya. (3mks)
(b) Name two areas where sugarcane is grown in large scale in Kenya. (2mks)
4. (a) Name two underground methods of mining. (2mks)
(b) Name three ways in which derelict land can be rehabilitated. (3mks)
5. (a) Define eco-tourism (2mks)
(b) State three measures being taken in Kenya to promote domestic tourism. (3mks)

SECTION B: (75 MARKS):

Answer question 6(compulsory) and any other two.

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

Mode of transport/year	2006	2007	2008	2009
Road	100,000	50,000	150,000	200,000
Air	600,000	650,000	700,000	800,000
water	200,000	150,000	100,000	50,000

- (a) (i) State two reasons why tourists preferred air transport over the other modes of transport over the period. (2mks)
- (ii) Calculate the percentage increase in the number of tourist between the year 2008 and 2009. (3mks)

(iii) Using a scale of 1cm to represent 100,000 tourists, draw a compound bar graph to represent the number of tourists who visited Kenya using the different modes of transport.

(9mks)

(b) (i) Explain three roles played by transport in the economy of Kenya. (6mks)

(ii) Name one highway created in Africa to ease transport across the continent. (1mk)

(c) Four form students from St. Christopher's secondary School visited Kisumu Airport for a field study.

(i) Identify two methods they used to record their data. (2mks)

(ii) Give two follow up activities they engaged in after the visit; (2mks)

7. (a) (i) Differentiate between land reclamation and land rehabilitation. (2mks)

(ii) Give three ways in which the government is trying to rehabilitate overgrazed lands in Kenya (3mks)

(b) Explain three conditions that favour irrigation farming in Kenya. (6mks)

(c)(i) Name three polders that make up the Zuyder Zee reclamation project in the Netherlands. (3mks)

(ii) Describe the stages of reclamation of land from the sea in the Netherlands. (6mks)

(d) Your school intends to carry out a field study in Mwea Tebere irrigation scheme.

(i) Identify the two types of hypothesis you would develop for the study. (2mks)

(ii) Give three reasons why you would need to sample the area of study. (3mks)

8. (a)(i) What is fossil fuel? (2mks)

(ii) List two fossil fuels that have recently been discovered in Kenya (2mks)

(iii) State three formations in which mineral ores occur. (3mks)

(b) Explain how the following factors influence mining.

(i) Value of minerals. (2mks)

(ii) Transport (2mks)

(c) (i) Describe how solution mining method is carried out; (5mks)

(ii) Give three negative effects of mining to the environment. (3mks)

(d) (i) Name two areas where diamond is mined in South Africa. (2mks)

(ii) Describe how diamond is processed. (4mks)

9. (a)(i) Name three trees species found in the soft wood forest of Canada. (3mks)

(ii) State three physical factors that favour the growth of soft wood forest in Canada. (3mks)

(b) State four characteristics of softwood forest in Canada. (4mks)

(c) Give three reasons why it is necessary to carry out afforestation programs in Kenyan forests. (3mks)

(e) State the difference between softwood forest in Canada and Kenya under the following subheadings. (6mks)

(i) Tree species

(ii) Harvesting

(iii) Mode of transport of logs

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

10. (a)(i) Name two types of fishing. (2mks)

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

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

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

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

(c)(i) Name three countries in the North West Atlantic fishing ground. (3mks)

(ii) Compare fishing in Kenya and Japan under the following topics:

a) Continental Shelf (2mks)

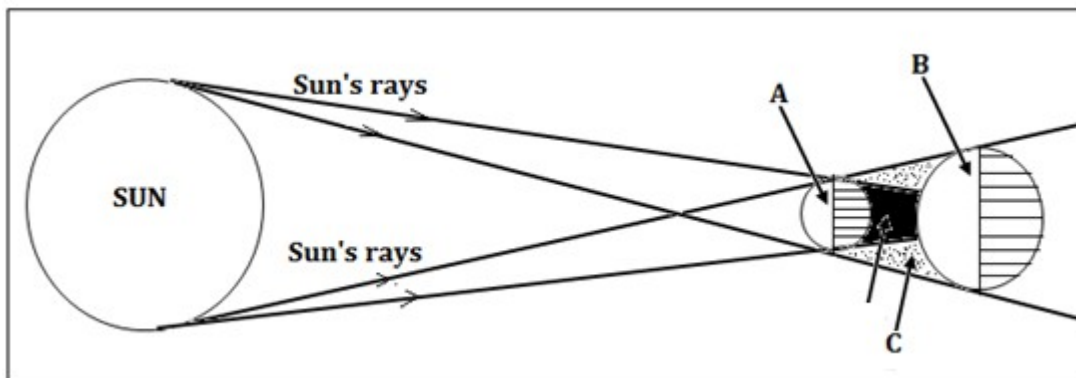
b) Coastline (2mks)

c) Ocean Currents (2mks)

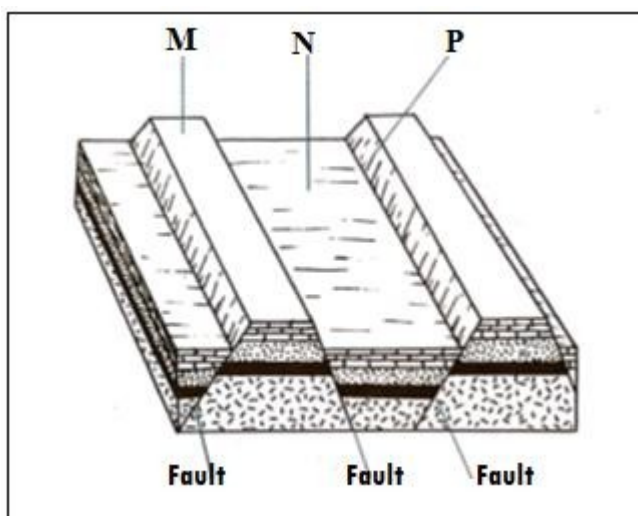
SECTION A

Answer all questions in this section.

1. The diagram below shows a type of an eclipse.



- (a) Name the bodies marked A, B, and part C. (3 marks)
- (b) Apart from the occurrence of eclipses, state **three** other effects of the movement of the earth round the sun. (3 marks)
2. (a) Name **two** isothermal layers of the atmosphere. (2 marks)
- (b) State **three** consequences of climate change. (3 marks)
3. The diagram below represents features produced by faulting. Use it to answer questions (a) and (b).



- (a) Identify the features marked **M** and **P**. (2 marks)
- (b) State **three** characteristics of feature marked **N** in Kenya. (3 marks)
4. (a) List **three** forms of slow mass wasting. (3 marks)
- (b) Give **two** effects of mass wasting on the environment. (2 marks)
5. (a) What is glaciation? (2 marks)

For more resources and marking schemes contact us on **0724351706** or visit our website www.goldlitekcserevision.co.ke And Download

- (b) State **three** ways in which ice moves. (3 marks)

SECTION B

6. Study the map of Mumias (1:50,000 sheet 112/2) provided and use it to answer the following questions.

- (a) (i) Determine the six figure grid reference of Indangalasia school. (2 marks)
(ii) Give **two** types of scale on the map extract (2 marks)
(iii) Give the longitudinal extent of the map. (2 marks)
(iv) What is the magnetic variation of the map. (2 marks)
- (b) (i) Give **two** settlement patterns in the area covered by the map. (2 marks)
(ii) Identify **two** human made features at grid square 6541. (2 marks)
(iii) Explain **two** factors that have favored trading in the area covered by the map. (4 marks)
- (c) Citing evidence from the map, explain **two** economic activities carried out in the area covered by the map. (4 marks)

- (d) Describe drainage in the area covered by the map. (5 marks)

7. (a) (i) Define the term mineral. (2 marks)

- (ii) Give **two** categories of metallic minerals. (2 marks)

- (b) (i) Name the rocks which results from the metamorphism of the following;

- Granite (1 mark)
- Clay (1 mark)
- Sandstone (1 mark)

- (ii) State **three** factors that influence rock metamorphism. (3 marks)

- (c) Describe the formation of the following rocks.

- (i) Intrusive igneous rocks (4 marks)

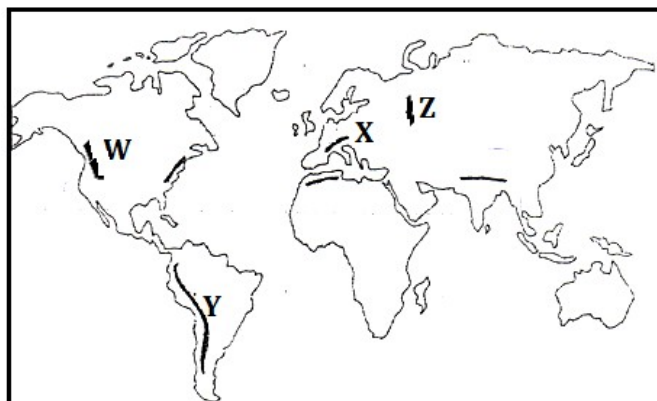
- (ii) Organically formed sedimentary rocks (5 marks)

- (d) Explain **three** economic benefits of coral rocks. (6 marks)

8. (a) (i) Define the term folding. (2 marks)

- (ii) Name **three** types of folds. (3 marks)

- (b) The world map below shows the distribution of some fold mountains. Use it to answer question (i)



For more resources and marking schemes contact us on **0724351706** or visit our website www.goldlitekserevision.co.ke And Download

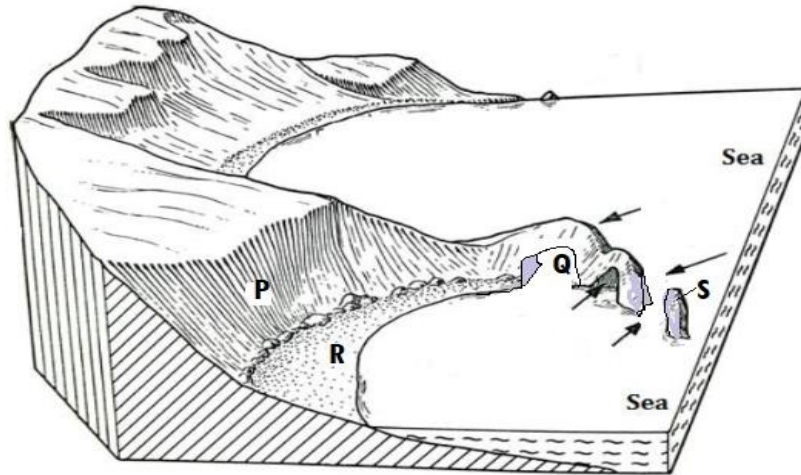
- (i) Identify the fold mountains marked W, X, Y and Z. (4 marks)
- (ii) With the aid of well labelled diagrams, describe how Fold Mountains are formed. (10 marks)

(c) Explain **three** negative effects of Fold Mountains (6 marks)

9. (a) Differentiate between an ocean and a sea. (2 marks)

(b) Give **five** conditions necessary for the formation of a beach. (5 marks)

(c) The diagram below illustrates some of the features formed by wave erosion. Use it to answer the questions that follow.



(i) Identify the features marked **Q**, **R** and **S**. (3 marks)

(ii) Describe the process through which the feature marked **P** is formed. (4 marks)

(d) (i) Give **two** causes of submergence of coasts. (2 marks)

(ii) Give **three** features formed as a result of submergence of coasts. (3 marks)

(e) You intend to carry out a field study of coastal landforms.

(i) State **two** objectives you would formulate for the study. (2 marks)

(ii) Why would you need to seek permission before the study? (3 marks)

10. (a) (i) What is a karst scenery? (2 marks)

(ii) State **five** characteristics of karst landscapes. (5 marks)

(b) Give **four** sources of ground water. (4 marks)

(c) Explain how the following factors influence the occurrence of ground water:

(i) Nature of rocks. (2 marks)

(ii) Slope of land. (2 marks)

(iii) Vegetation cover. (2 marks)

(e) Explain **four** conditions that favour the development of an artesian well.

(8 marks)

For more resources and marking schemes contact us on **0724351706** or visit our website

www.goldlitekserevision.co.ke And Download

PAPER 2

SECTION A

- 1 (a) Give the relationship between Geography and Agriculture. (2mks)
(b) State three significance of learning Geography. (3mks)
- 2a) What is mining? (2 mks)
b) State three ways in which minerals occur. (3 mks)
- 3a) Name indigenous soft wood tree species found in the Kenyan forest. (2 mks)
b) Give three importance of agro forestry. (3 mks)
- 4a) Distinguish between horticulture and market gardening. (2 mks)
b) Give three characteristics of horticultural farming in Kenya. (3 mks)
- 5a) Name two major swamp areas that have been reclaimed in Kenya. (2 mks)
b) State three physical factors that influenced the location of Perkera irrigation scheme. (3 mks)

Answer question 6 and any two questions in this section

6. The table below shows the number of Zebu cattle in different counties in Kenya in 2014.

County	Number of Zebu cattle
Isiolo	42500
Wajir	22600
Marsabit	20300
Mandera	15400

- a) Draw a divided rectangle 15 cm long to represent the data above. (7 mks)
- b) Calculate the range of the above data. (2 mks)
- c) Give three advantages of using divided rectangle to represent data. (3 mks)
- d) i) Give three reasons why nomadic pastoralists keep large herds of animals. (3 mks)
ii) Name two nomadic communities involved in beef cattle rearing in Kenya (2 mks)
iii) Explain four ways in which the government of Kenya assist nomadic pastoralists to improve the quality of their livestock. (8 mks)
- 7 a (i) Name two major categories of minerals. (2 mks)
ii) Identify four factors that influence the occurrence of minerals. (4 mks)
- b (i) Apart from shaft mining name three other methods of underground mining. (3 mks)
ii) Describe how shaft mining method is carried out. (6 mks)
ci) name two areas in South Africa where diamond is mined. (2 mks)
ii) Explain four ways in which diamond mining contributed to the economy of South Africa. (8 mks)

- 8a) i) Define re-afforestation. (2 mks)
- ii) State four reasons why afforestation is encouraged in Kenya. (4 mks)
- b (i) Name three provinces in Canada where forestry is practiced on a large scale. (3 mks)
- ii) State four factors favouring exploitation of forest in Canada. (4 mks)
- c i) Explain three factors that favour the growth of natural forest on the slopes of Mount Kenya. (6 mks)
- ii) Explain three problems which hinder the Kenyan government efforts to manage and conserve forest in Kenya. (6 mks)
- 9a (i) Differentiate between land reclamation and land rehabilitation. (2 mks)
- ii) Give four problems facing Mwea Tebere irrigation scheme. (4 mks)
- b) i) Explain three ways in which land is being rehabilitated in Kenya. (6 mks)
- ii) Name two projects in Netherlands which were aimed at reclaiming land from the sea. (2 mks)
- c) Describe the steps followed in reclaiming land for agricultural use in Netherlands. (6 mks)
- d) State five benefits which Kenya derives from irrigation farming. (5 mks)
10. The diagram below shows a fishing in the Pacific ocean.



- i. Identify the fishing ground shown above. (1 mk)
- ii. Name three types of fish species found in the fishing ground above. (3 mks)
- b) i) Differentiate between fishing and fisheries. (2 mks)
- ii) Name two inland types of fisheries in Kenya. (2 mks)
- c (i) Describe the long lining fishing method. (5 mks)
- ii) Explain four physical factors that influenced development of fishing in Japan. (8 mks)
- e) State four problems facing marine fishing in Kenya. (4 mks)

For more resources and marking schemes contact us on **0724351706** or visit our website www.goldlitekcserevision.co.ke And Download 2

SECTION A

ANSWER ALL QUESTION IN THIS SECTION.

1.
 - a) what is habitat? (2 marks)
 - b) state three reasons why it is necessary to study geography.
2.
 - a) Give the minerals that form the sima (2 marks)
 - b) Give three characteristics of the Sial layer (3 marks)
3.
 - a) What is the earthquakes? (2 marks)
 - b) State three effects of the earth quakes on build up areas
4. The map below shows the location of some fold mountain ranges in Africa, Europe, north Africa and South Africa. Use it to answer question



- a) Name the mountain ranges marked P,Q and R (3 MARKS)
 - b) Differentiate between Symmetrical and asymmetrical (2 marks)
5.
 - a) What is climate change? (2 marks)
 - b) State three factors that determine the amount of solar radiation that reaches the earth's surface. (3 marks)

SECTION B

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

6. Study the 1965 map of mumias (sheet 101/2) provided and answer as follow.

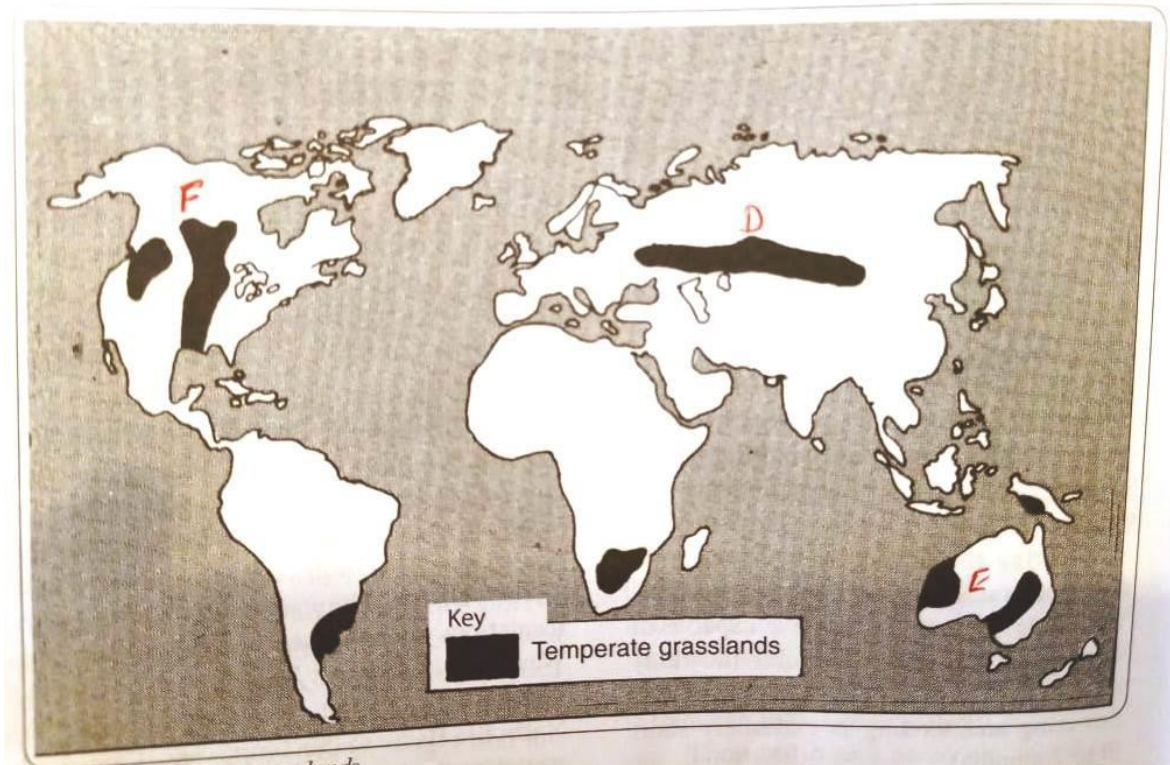
- a)
 - i) What type of map is mumias map extract. (1 mark)
 - ii) Give two scale used in the map (2 marks)
 - iii) Give two methods used to represent relief in the map extracts
 - iv) Give two types of vegetation found to the west of easting 50 and north of three northing 40 (2 marks)
 - v) Name three man made features in the grid square 5641 (3 marks)
- b) Draw a rectangle 14 cm by 8 cm to represent the area to east of easting 60 and north of northing 40. On it mark and name.
 - River Nzoia (1 mark)
 - Mwira school (1 mark)
 - All weather road loose surface B9/2 (1 mark)
 - Air photo principal point 14 (1 mark)
- c) Describe the drainage of the area covered by the map. (6 marks)
- d) Citing evidence from the map, give the economic activities carried out in the area covered by the map. (4 marks)

7.

- a)
 - i) what is isostatic movement (2 marks)
 - ii) explain three causes of Isostatic movement (6 mark)
- b)
 - i) Apart from folding, give two other endogenic processes (2 mark)
 - ii) With the aid well labelled diagrams describe how recumbent fold is formed. (7 marks).
- c) Explain the significance of fold mountains to huma activities.

8.

- a) what is derived vegetation? (2 mark)
- b) The map below shows some vegetation regions in the world. Use it to answer questions a and b



- a. Name the temperate grassland labeled D,E,F (3 marks)
 - b. State four characteristics of temperate grassland (4 marks)
 - c.
 - i) explain four causes of the decline of the area under forest in Kenya (8 marks)
 - ii) Give three reasons why the Tundra region has scanty vegetation (3 mark)
 - d. state five uses of mangrove forests (5 mark)
- 9.
- (i) Name three sources of underground water (3mrks)
 - (ii) Explain two conditions necessary for the development of karst landscape (4mrks)
 - (b) State three problems associated with artesian well (3mrks)
 - (c) Explain four reason why there are few settlements in a karst landscape (8mrks)
 - (d) You carried out a field study on underground features on a karst landscape
 - (i) Identify underground features you are likely to have observed during the study (4mrks)

(ii) one of the ways you may have used to collect data is content analysis. State three disadvantages of content analysis (3mrks)

10. study the world map below and use it to answer question a(i)



- a)
- Name
The sea marked P (1 mark)
The ocean current marked Q (1 mark)
The ocean marked R (1 mark)
 - Explain three causes of variation in salinity of the ocean water (6 marks)
- b)
- describes how sea waves develops (3 marks)
 - using well labeled diagram describe the formation of the following coastal features.
Cliff (5 mark)
Bay ban (5 mark)
- c) state three characteristics of Fjord coasts (3 marks)

PAPER 2

SECTION A

Answer All questions in this Section.

1. a) Define environmental management. (2 marks)
b) How do we combat lightning? (3 marks)
2. Give five reasons why Kenya should be industrialized. (5 marks)
3. a) What is fertility? (2 marks)
b) State three similarities between population trends in Kenya and Sweden. (3 marks)
4. a) Name two types of internal trade. (2 marks)
b) Give three roles of the European Union in the economy of Europe. (3 marks)
5. a) Name two renewable sources of energy which are exploited in Kenya. (2 marks)
b) Give three negative effects of importing petroleum products in refined form. (3 marks)

SECTION B

Answer question 6 and any two other questions from this section

6. The table below shows quantity of milk sold by some counties in '000' litres between 2004 and 2005. Use it to answer question 6.

	2004	2005
Nyeri	300	200
Kisii	400	600
Kiambu	700	900
	1400	1700

- (a) (i) Using a scale of 1cm rep 200,000, draw proportional circles for the data above. Use diameter method. (9 marks)
(ii) Comment on the trend of sale of milk during the period. (3 marks)
- (b) How do dairy farmers sell their milk? (3 marks)
- (c) Explain two physical conditions which favour dairy farming in Kenya Highlands. (4 marks)
- (d) Explain four similarities between dairy farming in Denmark and Kenya. (8 marks)

7. (a) (i) Differentiate between a lode and a vein. (2 marks)
- (ii) Name two types of open cast mining method. (2 marks)
- (iii) Explain how the following factors influences mining.
- Quality of Ore. (4 marks)
 - Method of mining. (2 marks)
- (b) Describe how oil is mined in the Middle East. (7 marks)
- (c) Explain four solutions to problems facing mining in Kenya. (8 marks)
8. (a) (i) What is a forest? (2 marks)
- (ii) Name any three species found in the coniferous forests. (3 marks)
- (iii) State four characteristics of coniferous forests. (4 marks)
- (b) Explain four physical conditions which favour growth of forests in the Kenya Highlands. (8 marks)
- (c) Explain four roles of the government in management of forests in Kenya. (8 marks)
9. (a) (i) What is land reclamation? (2 marks)
- (ii) Apart from Pekerra, name any three irrigation schemes in Kenya. (3 marks)
- (b) Explain any four benefits of Pekerra irrigation scheme. (8 marks)
- (c) Describe the following types of irrigation
- (i) Flooding. (3 marks)
 - (ii) Drip irrigation. (3 marks)
- (d) Describe the process of land reclamation from the sea in Netherlands. (6 marks)

10. (a) (i) Define a game sanctuary. (2 marks)

(ii) Name two game sanctuaries found in Kenya. (2 marks)

(b) Draw an outline map of Kenya on it mark and label the following National Parks.

(5 marks)

- Tsavo
- Marsabit.
- Kakamega Forest.

(c) Explain how the following problems facing wildlife can be controlled.

(i) Human encroachment. (4 marks)

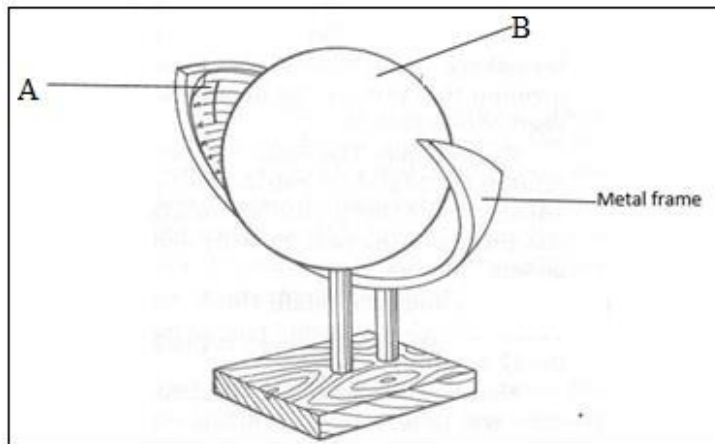
(ii) Pollution (4 marks)

(d) Explain four significance of tourism in Switzerland. (8 marks)

SECTION A

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

1. (a) What is a natural satellite? (2 marks)
- (b) State **three** characteristics of planets. (3 marks).
2. The diagram below shows one of the weather measuring instruments.



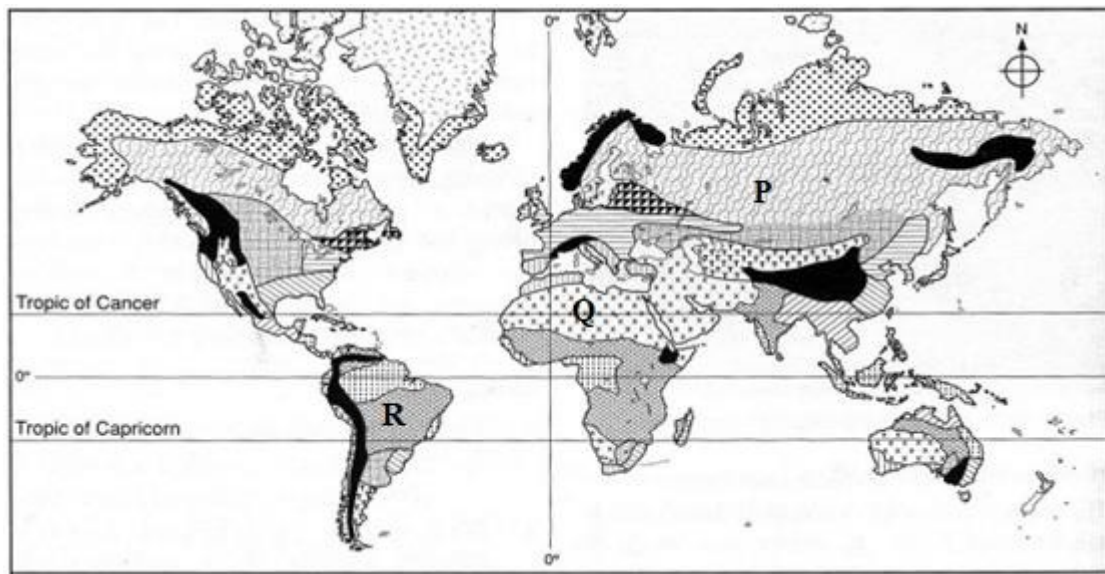
- (a) (i) Give the weather element measured using the above instrument. (1 mark)
- (ii) Name the parts marked **A** and **B**. (2 marks)
- (b) State **three** factors considered when siting a weather station. (3 marks)
3. (a) Name **two** fault scarps in Kenya. (2 marks)
- (b) Give **two** causes of earth movements. (2 marks)
4. (a) Identify **two** features formed by underground water. (2 marks)
- (b) State **three** conditions that encourage development of karst scenery. (3 marks)
5. (a) Differentiate between an ice sheet and an iceberg. (2 marks)
- (b) Give **three** features formed by glacial erosion in lowlands. (3 marks)

SECTION B

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

6. Study the map of Mumias 1:50,000 (sheet 101/2) provided and answer the following questions.
 - (a) (i) Name **two** map sheets to the north of Mumias. (2 marks)
 - (ii) Give six-figure grid reference of Khamashia school in the eastern side. (2 marks)

- (iii) Measure the length of the road **C532** from the junction with road **C533** to Musanda. Give your answer in kilometres. (2 marks)
- (b) (i) Give **two** methods that have been used to represent relief in the area covered by the map. (2 marks)
- (ii) Identify **three** human made features in grid square **5037**. (3 marks)
- (c) Describe the drainage of the area covered by the map. (4 marks)
- (d) (i) Draw a rectangle 16 cm by 12 cm to represent the area enclosed by eastings **46** and **50** and northings **41** and **44**. (1 mark)
- (ii) In the rectangle, mark and name the following;
- Scattered trees (1 mark)
 - Lukhari market (1 mark)
 - Papyrus swamp (1 mark)
- (iii) Calculate the new scale of your map. (2 marks)
- (e) Citing evidence from the map, identify economic activities carried out in Mumias. (4 marks)
7. (a) (i) Give **two** examples of non-metallic minerals. (2 marks)
- (ii) Identify **two** ways in which rocks can be classified. (2 marks)
- (b) Describe how the following rocks are formed.
- (i) Hypabyssal rocks (4 marks)
- (ii) Mechanically formed sedimentary rocks (4 marks)
- (c) (i) Outline the changes that occur when rocks undergo metamorphism. (4 marks)
- (ii) State **three** characteristics of volcanic rocks. (3 marks)
- (d) Explain **three** significances of rocks to the economy of Kenya. (6 marks)
8. (a) (i) What is derived vegetation? (2 marks)
- (ii) Explain how the following factors influence the distribution of vegetation.
- Relief (4 marks)
 - Wind (4 marks)
- (b) The map below shows the distribution of major vegetation regions of the world.



(i) Identify the vegetation regions marked **P** and **R**. (2 marks)

(ii) Explain how the vegetation in the region **Q** is adopted to the environment. (8 marks)

(c) State **five** uses of forests. (5 marks)

9. (a) Identify **three** types of river erosion. (3 marks)

(b) (i) Apart from waterfalls, give **two** other features of river erosion. (2 marks)

(ii) State **four** ways through which waterfalls are formed. (4 marks)

(c) With the aid of diagrams, describe how an ox-bow lake is formed. (8 marks)

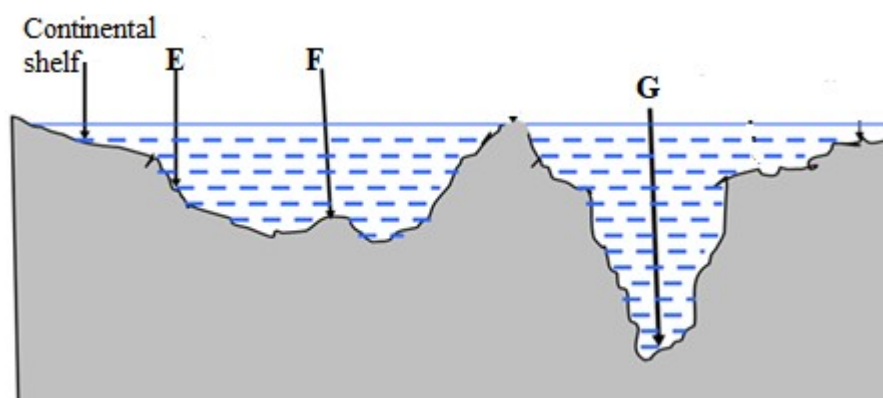
(d) (i) What is river rejuvenation? (2 marks)

(ii) Explain **three** causes of river rejuvenation. (6 marks)

10. (a) (i) Define the term ocean. (2 marks)

(ii) Name **three** main oceans on the earth's surface. (3 marks)

(b) The diagram below shows ocean topography. Use it to answer the questions that follow.



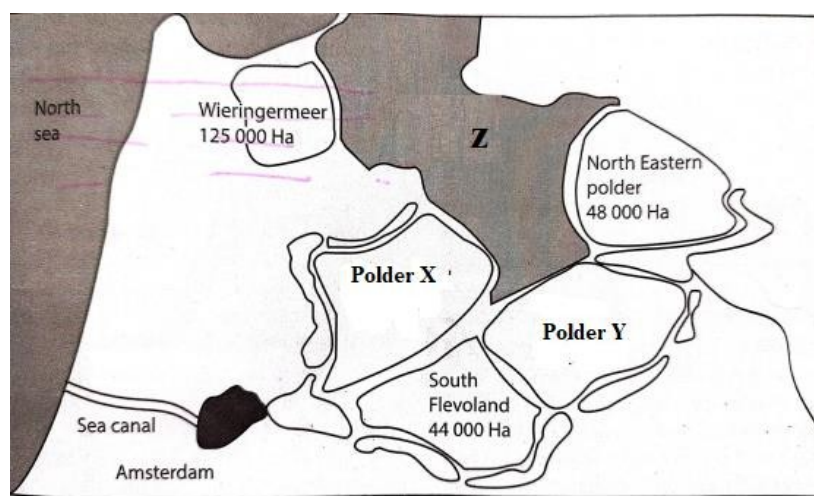
- (i) Name the parts marked **E**, **F** and **G**. (3 marks)
- (ii) State **three** characteristics of continental shelf. (3 marks)
- (c) (i) Give **two** factors that determine the rate of wave erosion. (2 marks)
- (ii) Describe how a wave-cut platform is formed. (7 marks)
- (d) Members of your class are planning to carry out a field study on a submerged highland coast.
- (i) Give **two** types of coasts you're likely to visit. (2 marks)
- (ii) State **three** reasons why you would need a working schedule. (3 marks)

PAPER 2

SECTION A

Answer all questions in this section

1. (a) What is fish farming? (2 marks)
- (b) State **three** reasons fish farming should be encouraged in Kenya. (3 marks)
2. (a) Differentiate between transport and communication. (2 marks)
- (b) State **three** physical factors that influence development of transport and communication in Kenya. (3 marks)
3. (a) Name **two** marine parks in the coast region of Kenya. (2 marks)
- (b) State **three** ways in which marine parks are conserved. (3 marks)
4. (a) Study the map below and use it to answer question 4(a)(i) and (ii)



- (i) Identify the polders marked X and Y (2 marks)
- (ii) The drainage feature marked Z (1 mark)
- (b) State **two** objectives of the delta plan project. (2 marks)
5. (a) Differentiate between horticulture and market gardening. (2 marks)
- (b) State challenges that horticultural farmers experience in marketing their produce in Kenya. (3 marks)

SECTION B

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

6. The table below shows composition of pastoral cattle herds' structure in Kenya between 2012 to 2015.

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

CATTLE TYPE	YEAR			
	2012	2013	2014	2015
Milk Cows	1 430 000	1 350 000	1 330 000	1 410 000
Non Milk Cows	1 994 000	1 800 000	1 700 000	1 900 000
Bulls	400 000	430 000	390 000	440 000
Heifers And Steers	3 100 000	2 800 000	2 600 000	2 900 000
Calves	1 370 000	1 300 000	1 250 000	1 310 000
TOTAL	8 294 000	7 680 000	7 270 000	7 960 000

(a) Using a scale of 1 centimeter to represent 1,000,000 cattle, draw a compound bar graph to represent the data. (8 marks)

(b) (i) Name two potential sites for geothermal energy production in Kenya. (2 marks)

(ii) Give four reasons that have limited exploitation of geothermal energy in Kenya. (4 marks)

(c) (i) State two causes of high oil prices in Kenya? (2 marks)

(ii) Explain three effects of high oil prices to the economy of Kenya. (6 marks)

(iii) State three measures the government of Kenya has taken to reduce effects of high oil prices (3 marks)

7. (a) (i) Differentiate between minerals that occur as veins and reefs. (2 marks)

(ii) Name a mineral mined in each of the following counties in Kenya. (3 marks)

- Kwale
- Taita taveta
- Kisii

(b) Explain how the following factors influenced exploitation of diamond in South Africa

- Capital (2 marks)
- Transport (2 marks)

(c) Describe how stripping mining method is used to mine limestone in Bamburi in Kenya. (5 marks)

(d) Explain three problems facing gold mining in south Africa (6 marks)

(e) Maranda high school students carried out a field study on the mining of soda ash in Lake magadi

(i) Identify **two** methods they may have used in recording data. (2 marks)

(ii) State **three** benefits that accrue to the local community as a result of the mining that they may have observed. (3 marks)

8. (a) (i) apart from Nigeria, name two countries in western Africa where oil palm is grown (2 marks).

(ii) Name two regions in Nigeria where oil palm is grown (2 marks)

(b) Explain three human factors that favour growing of oil palm in Nigeria. (6 marks)

(c) The photograph below shows an oil palm. Study it and sue it to answer question c (i) and (ii)



(i) describe the processing of the oil palm from the stage shown in the photograph (6 marks)

(ii) Give three uses of the parts of the palm oil shown above (3 marks)

(d) Explain three economic problems facing oil palm growing in Nigeria (6 marks)

9. (a) (i) Define Agro-forestry (2marks)
- (ii) Explain **two** ways how human activities influence distribution of forests (4 marks)
- (d) State **five** characteristics of planted forest (5 mark)
- (e) Name **two** major forest reserves in Kenya (2 marks)
- Other than creation of forest reserves give **four** other ways of managing forests in Kenya
- (f) State **two** problems that affect forestry in Canada
- Differentiate between softwood forests in Kenya and Canada under the following sub headings
- Logging
 - Growing areas
 - Transport
10. a) (i) What is an industrial inertia? (2 marks)
- (ii) state two causes of industrial inertia (2 marks)
- State two reasons why some industries are located near market of their produce
- b) Other than water, give two factors that favoured the location of paper mills at Webuye (2 marks)
- State three likely reasons for the closure of paper mills at Webuye
- c) (i) Name **two** automobile companies in Japan (2 marks)
- (ii) Explain **three** factors that favoured the growth of car and electronics industry in Japan. 6 marks)
- (d) Explain three measures taken to curb environmental pollution as a problem associated by industrialization in Kenya

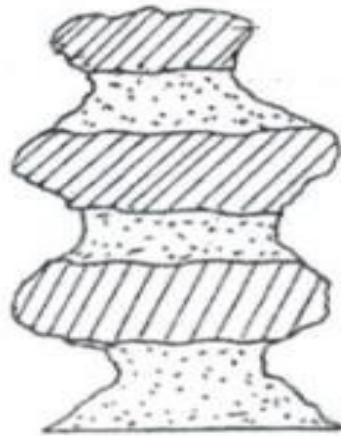
SERIES 16

PAPER 1

SECTION A

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

1. (a) Define the solar system. (2 marks)
(b) State **three** characteristics of the sun. (3 marks)
2. (a) The diagram below shows a feature of wind erosion in an arid area. Use it to answer the questions that follow.



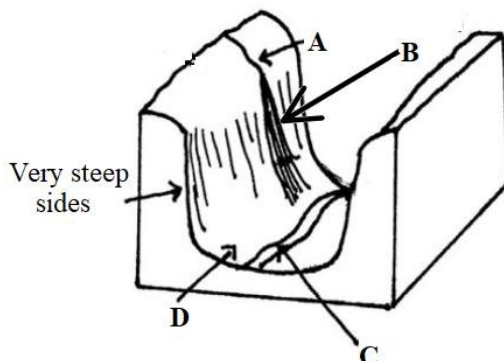
- (i) Name the feature. (1 mark)
(ii) Give **two** processes of wind erosion responsible for the formation of the feature. (2 marks)
 - (b) State **three** characteristics of an arid area. (3 marks)
3. (a) Explain how the following factors cause movement of crustal rocks:
(i) Gravitational pressure (2 marks)
(ii) Magma movement (2 marks)
(b) Name **one** major tectonic plate of the earth. (1 mark)
 4. Give **four** ways of soil conservation. (4 marks)
 5. (a) Name **two** composite cones in East Africa. (2 marks)
(b) State **three** negative influences of composite cones to human environment. (3 marks)

SECTION B

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

6. Study the map of Kisumu East 1: 50,000 (sheet 116/2) provided and answer the following questions.
(a) (i) Give **two** scales used in the map extract. (2 marks)
(ii) What is the altitude of the lowest point covered by the map? (2 marks)

- (iii) Give the approximate position of Chiga in terms of latitudes and longitudes (2 marks)
- (b) (i) Name **four** relief features found in the area covered by the map. (4 marks)
- (ii) Calculate the area of the sugar plantation between the provincial boundary and the road C 543/1 in square kilometres. (2 marks)
- (c) Describe the drainage of the area covered by the map. (4 marks)
- (d) (i) Reduce by 50% the area bound by easting 03 and northing 90 to the edges of the map on the eastern and northern parts (2 marks)
- (ii) On the frame, mark and name the following:
- Railway line; (1 mark)
 - Boundary of Kisumu Municipality; (1 mark)
- (e) Citing evidence from the map, identify **five** social activities offered in Kisumu Town. (5 marks)
7. (a) (i) Apart from the Rift Valley, name **two** other relief features that were formed as result of faulting. (2 marks)
- (ii) With the aid of a well labeled diagram, describe how a Rift Valley is formed by compressional forces. (8 marks)
- (b) Explain **four** effects of faulting. (8 marks)
- (c) Students are planning to carry out a field study of an area affected by faulting
- (i) State **four** reasons why it is important for the students to have a pre-visit of the area. (4 marks)
- (ii) One of the ways they would use to collect data is through direct observation. State **three** disadvantages of direct observation in the study of such an area. (3 marks)
8. (a) (i) Define the term glaciation. (2 marks)
- (ii) Give **three** ways in which ice moves outwards from its area of accumulation. (3 marks)
- (b) State **three** factors that influence glacial erosion. (3 marks)
- (c) The diagram below shows some features of glaciation erosion. Use it to answer the questions that follow.



- (i) Name the parts labeled **A**, **B** and **C**. (3 marks)

(ii) Describe how the part labeled **D** is formed. (5 marks)

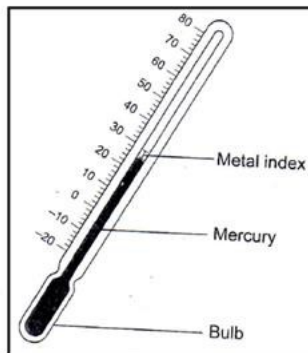
(d) List **three** depositional features of glaciation in lowland areas. (3 marks)

(e) Explain **three** problems of glaciation to the environment. (6 marks)

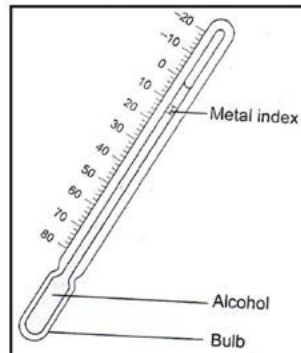
9. (a) (i) Define the term weather forecasting. (2 marks)

(ii) State **four** problems facing weather forecasting in Kenya. (4 marks)

(b) The diagrams below show some instruments that are used to measure temperature. Use them to answer the questions that follow.



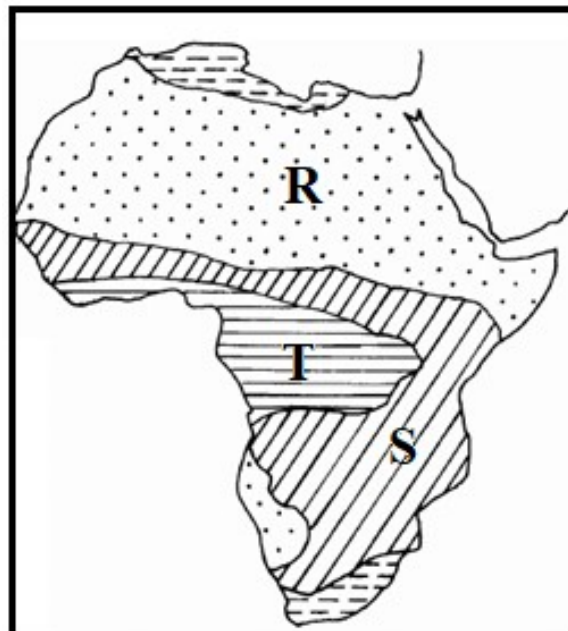
M



N

Describe how the instruments are used to measure the weather element stated. (5 marks)

(c) The map below shows some climatic regions of Africa. Use it to answer the questions that follow.



- (i) Name the climatic types labeled **R** and **S**. (2 marks)
- (ii) Describe the characteristics of climatic type marked **T**. (5 marks)
- (d) (i) Name the regions associated with the following vegetation types;
- Pampas (1 mark)
 - Veldts (1 mark)
- (ii) State **five** significance of vegetation. (5 marks)
10. (a) (i) Name **two** fresh water lakes that are found in Kenya. (2 marks)
- (ii) State **three** reasons why some lakes in Kenya have fresh water. (3 marks)
- (b) (i) Describe the formation of an oxbow lake. (7 marks)
- (ii) Name **two** oxbow lakes in Kenya. (2 marks)
- (c) Explain **three** negative effects of lakes to human activities. (6 marks)
- (d) Members of your class plan to conduct a field study on Lake Victoria.
- (i) Other than Kisumu County, name **two** other counties they may visit for the study. (2 marks)
- (ii) State **three** significance of studying lakes through fieldwork. (3 marks)

PAPER 2

SECTION A

Answer ALL the questions in this section.

- 1 (a) Apart from floods, name two other environmental hazards experienced in Kenya. (2 marks)
- (b) Outline three methods used to control floods. (3 marks)
- 2 (a) (i) Define an anadromous fish? (1 mark)
- (ii) Give an example of anadromous fish. (1 mark)
- (b) Give three reasons for encouraging fish farming. (3 marks)
- 3 (a) State two formations in which mineral ore occur. (2 marks)
- (b) Give three effects of land dereliction on the environment. (3 marks)
- 4 (a) Differentiate horticulture and market gardening. (2 marks)
- (b) Outline three problems facing horticulture in Kenya. (3 marks)
- 5 (a) List two functions of the central business district. (2 marks)
- (b) State three factors that may lead to rural - urban migrations. (3marks)

SECTION B

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

- 6 Study the table below and answer the questions that follow.

Oil Consumption in Kenya 1989 (in %)

Agriculture	04
Road	33
Railways	05
Shipping	08
Aviation	15
Power (thermal)	07
Commercial and Industrial	23
Others	05

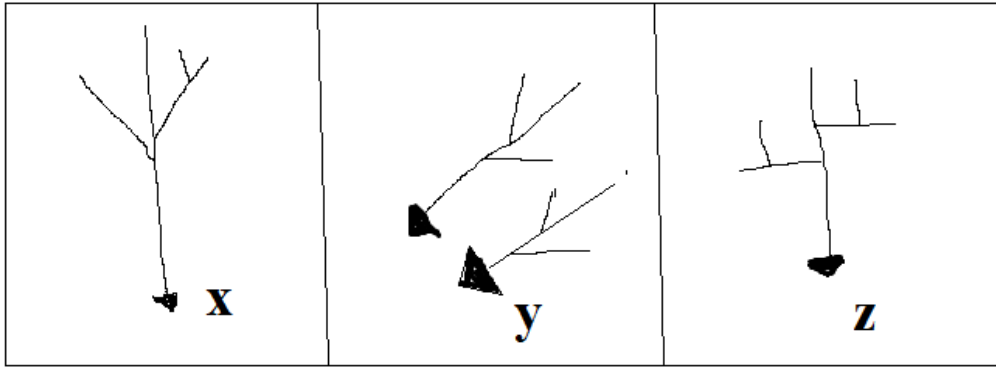
- (a) (i) What is the percentage of oil used in transport. (1 mark)
- (ii) Using a radius of 5cm, draw a pie chart to represent the information above.(8mks)
- (iii) Give two advantages of using a pie chart to represent data.

- (b) Name two alternative sources of energy that can be used in agriculture. (2 marks)
- (c) State three reasons why Kenya imports oil in crude form. (3 marks)
- (d) (i) Define the concept energy crisis. (1 mark)
- (ii) Explain four effects of rising oil prices on the economy of Kenya. (8 marks)
- 7** (a) (i) What do you understand by Bird's sanctuary. (1 mark)
- (ii) Explain four problems experienced by wildlife conservation. (8 marks)
- (b) State three factors that hinder domestic tourism in Kenya. (3 marks)
- (c) Apart from wildlife, name three other features that attract tourists to Kenya. (3 marks)
- (d) Explain five economic benefits of tourism to the economy of Kenya. (10 marks)
- 8** (a) Give two examples of primary industry. (2 marks)
- (b) State three characteristics of Jua kali industry. (3 marks)
- (c) Give five reasons why the Kenya government encourages the setting up of Jua kali industry. (5 marks)
- (d) State three reasons for the location of Pan Paper mills at Webuye. (3 marks)
- (e) (i) What is decentralization of industries. (2 marks)
- (ii) Give four reasons for decentralizing industries. (6 marks)
- (iii) Explain three factors that hinder decentralization of industries. (6mks)
- 9** (a) (i) Name two indigenous softwood trees in Kenya. (2 marks)
- (ii) State five factors that favour the development of softwoods in Kenya. (5 marks)
- (b) Explain four problems experienced in commercial exploitation of tropical rain forest in Africa. (8 marks)
- (c) Give four protective rules of forests in a country. (4 marks)
- (d) Explain three problems facing exploitation of the forests. (6 marks)
- 10** (a) Define the term life expectancy. (2 marks)
- (b) Explain how the following factors influence population distribution in Kenya. (9 marks)
- (i) Relief. (3 marks)
- (ii) Government policy. (3 marks)
- (iii) Development of industries. (3 marks)
- (c) Explain three efforts the Kenya Government is making to check on the high mortality rate. (8 marks)
- (d) Explain three factors for the reduction of fertility in Kenya. (6 marks)

SECTION A

Answer all questions in this section

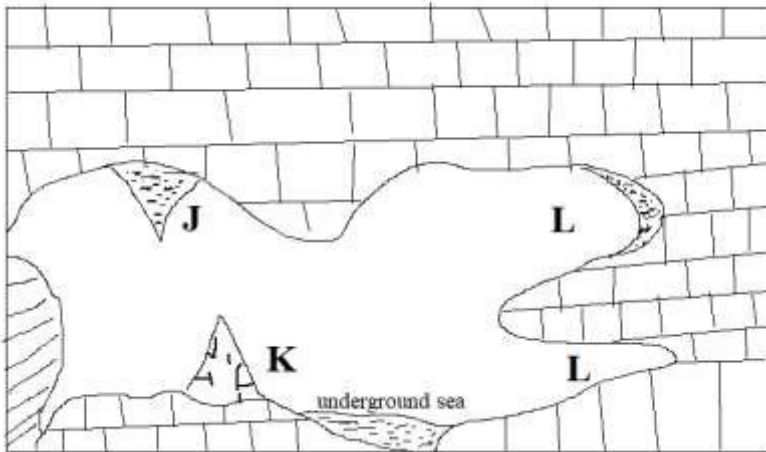
1.
 - (a) Differentiate between a comet and a natural satellite. (2mks)
 - (b) State three characteristics of the crust in the internal structure of the earth. (3mks)
2.
 - (a) Identify two ways in which heat is transferred in the earth's atmosphere system. (2mks)
 - (b) State three factors that influence the amount of solar radiation that reaches on the earth's surface. (3mks)
3. The diagram below represents drainage patterns. Use it to answer questions.



- (a) Identify the drainage patterns marked x, y and z (3mks)
- (b) Give two characteristics of arcuate deltas (2mks)

- 4.
- What is chemical weathering (2mks)
 - Identify three processes of chemical weathering (3mks)

5. The diagram below represents underground features in a limestone area. Use it to answer question (a)



- (a) Identify the features marked j, k and L (3mks)
- (b) Give two problems associated with artesian wells (2mks)

SECTION B

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

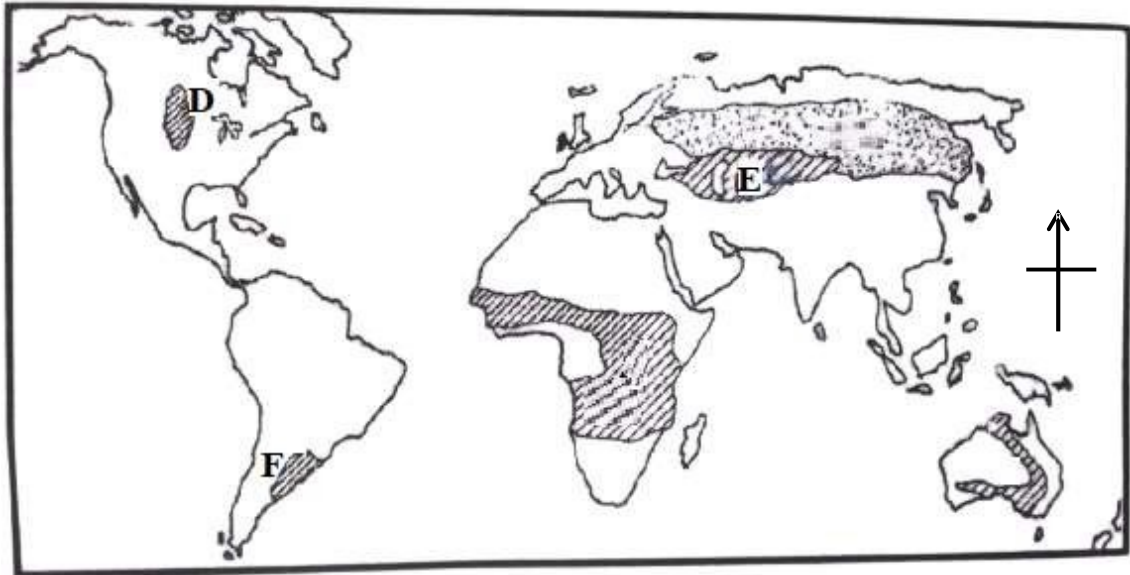
6. Study the 1965 map of Mumias (sheet no. 101/2) provided and answer the following questions.
- (a)
- (i) Give the title of the Mumias map extract (1mks)
 - (ii) What is the vertical interval for the Mumias map. (2mks)
 - (iii) Identify the magnetic declination of the map. (2mks)
 - (iv) Give the latitudinal extent of the area covered by the map. (2mks)
- (b)
- (i) Draw a rectangle 10 cm by 8 cm to represent the area East of Easting 60 and North of Northing 40 (1mk)
 - (ii) On the rectangle, mark and label the following features:
 - River Nzoia
 - Air Photo Principal Point
 - Mwira School.
 - Matangu Health Centre (5mks)
- (c)
- (i) Describe the drainage of the area covered by the map (6mks)
 - (ii) Explain how the following factors have influenced settlement in the area covered by the map
 - Transport (2mks)
 - Drainage (2mks)
- (d) Give two economic activities carried out in the area covered by the map.
- 7.
- (a) Differentiate between a mineral and a rock (2mks)
- (b)
- (i) Describe the process of formation of mechanically formed sedimentary rocks (4mks)
 - (ii) For each of the following metamorphic rocks, name the original rock from which they are derived
 - Graphite
 - Marble
 - Gneiss (3mks)
- (c) Explain four ways in which rocks are of significance to the economy of Kenya (8mks)
- (d) You are planning to carry out a field study on rock with the local environment.
- (i) List three methods you should use to record data. (3mks)
 - (ii) State three problems you are likely to encounter (3mks)
 - (iii) Give two follow up activities that you would undertake (2mks)
- 8.
- (a)
- (i) Identify three causes of earth building movements (3mks)
 - (ii) Describe the theory of continental drift (7mks)
- (b) Give four types of folds (4mks)

- (c)
- (i) In which counties are the following fold mountains located

Appalachian	(1mk)
Atlas	(1mk)
Himalayas	(1mk)
 - (ii) Using well labeled diagram, describe how fold mountains are formed (8mks)

9.

- (a) What is natural vegetation (2mks)
- (b) The map below shows the same vegetation region of the world. Use it to answer question b(i)



- (i) Name the temperate grasslands marked D, E and F (3mks)
 - (ii) State four characteristics of temperate (4mks)
- (c) Explain three causes of the decline of the area under forests in Kenya (6mks)
- (d) You are required to carry out a field study on a natural forest.
- (i) Give three reasons why it would be appropriate to sample part of the forest (3mks)
 - (ii) Identify four methods of data collection you are likely to use. (4mks)
 - (iii) State three ways in which your findings will be useful to the local community (3mks)

10.

- (a) Different between ocean and sea (2mks)
- (b)
 - (i) Apart from coral islands, identify two other types of islands. (2mks)
 - (ii) Explain three conditions necessary for the growth of coral polyps (6mks)
- (c) Using well labeled diagrams, describe how a stask is formed. (9mks)
- (d) Explain three ways in which coral contributes to the economy of Kenya (6mks)

PAPER 2

SECTION A

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

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

SECTION B

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

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

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

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

- (a) (i) Using a scale of 1cm represent 1000 million Kenya shillings, draw a comparative bar graph to represent the data shown. (8 marks)
- (ii) State **three** advantages of using comparative bar graphs to represent statistical data. (3 marks)

- (b) Describe how deep shaft mining method is used in exploitation of minerals. (6 marks)
- (c) (i) Name **two** leading gold mining areas in South Africa. (2 marks)
- (ii) Explain **three** ways in which gold mining has contributed to the economy of South Africa. (6 marks)
7. (a) (i) What is forestry? (2 marks)
- (ii) State **three** significance of agro-forestry. (3 marks)]
- (b) (i) Name **three** indigenous hard wood tree species found in Kenyan forests. (3 marks)
- (ii) Explain **four** problems facing natural forests in Kenya today. (8 marks)
- (c) (i) Name **two** areas under large scale softwood forests in Canada. (2 marks)
- (ii) Compare forestry in Kenya and Canada under the following sub-headings.
- Period of tree harvesting. (2 marks)
 - Tree harvesting (2 marks)
 - Transportation of logs. (2 marks)
8. (a) (i) What is visible trade? (2 marks)
- (ii) Suppose you were an international business man, list **three** industrial goods you would import from Japan. (3 marks)
- (b) Explain **four** factors that influence internal trade in Kenya. (8 marks)
- (c) Why do you think trade is important in Kenya? (4 marks)
- (d) Explain **two** benefits which member states of ECOWAS derive from the formation of the trading bloc. (4 marks)
- (e) Your class intends to carry out a field study on the Nairobi International Trade Fair.
- (i) State **two** methods you would use to collect data. (2 marks)
- (ii) State **two** reasons why a pre-visit will be necessary. (2 marks)

9. (a) (i) Distinguish between a national park and a game reserve. (2 marks)
- (ii) State **three** reasons why the government establishes national parks in Kenya. (3 marks)
- (b) (i) Name three tourist attractions at the coast of Kenya. (3 marks)
- (ii) Explain the socio-economic benefits of tourism in Kenya. (6 marks)
- (c) (i) Give **three** reasons why high tourism potential areas benefit more from tourism. (3 marks)
- (ii) Explain **four** measures that Kenyan government should take in order to attract more tourists. (8 marks)
10. (a) (i) Define the term transhumance. (2 marks)
- (ii) State **four** characteristics of nomadic pastoralism. (4 marks)
- (b) (i) Name **three** dairy breeds kept in Kenya. (3 marks)
- (ii) Explain **four** conditions favouring dairy farming in the Kenyan highlands. (8 marks)
- (c) (i) State **four** limitations of beef farming in Kenya. (4 marks)
- (ii) Give **four** similarities between beef farming in Kenya and Argentina. (4 marks)

THIS IS THE LAST PRINTED PAGE.

SECTION A

Answer all questions in this section

- 1a) What is the relationship between Geography and Economics. (2marks)
- b) Differentiate between habitat and environment. (2marks)
- 2 a) Distinguish between extrusive and intrusive vulcanicity (2marks)
- b) Name **two** resultant features due to intrusive vulcanicity (3marks)
- 3 (a) List **three** components of the solar system (3marks)
- (b) State **three** characteristics of plane Jupiter. (3marks)
- 4 (a) State **three** factors which influence how rivers transport their load. (3marks)
- b) State **two** processes through which a river transports its load. (2marks)
- 5a) State **two** characteristics of minerals (2marks)
- b) State **three** ways in which metamorphic rocks are formed (3marks)

SECTION B

Answer question six and Any other two question in this section

6. (a) Study the map of **Kisumu East (1:50,000)**, sheet **116/2** provided and answer the following questions.
- (i) Convert the **ratio scale** of the map to into a **statement scale**. (2marks)
- (ii) Give **six figure grid reference** of the trigonometrical station **1154 SKP 21** in the southern part of the area covered by the map. (2marks)
- (iii) Calculate the bearing of **Rabuor** market from Air photo Principal point in **GR 0986?** (2marks)
- (b) i) Identify **two** drainage features in the area covered by the map. (2marks)
- (ii) Using a vertical scale of 1cm to represent 100metres, draw a Cross-section to represent the area between GR:040940 and 040990. (4marks)
- On it mark and name;
- **the escarpment.** (1 mark)
 - **Power transmission line.** (1 mark)
 - **Plantation.** (1 mark)
- (ii) Describe the relief of the area covered by the map. (3marks)

(c) i) Give **two** factors that favour cultivation of sugarcane in the area covered by the map.

(2marks)

2

ii) Explain how relief has influenced settlement in the area covered by the map (4marks)

(d) Students from the school at Mosongo (Grid square 0681) carried Out a field study of the course of the river Ombeyi.

i) State **two** findings they are likely to have come up with. (2marks)

ii) Give **two** advantages of studying rivers through fieldwork. (2marks)

7 (a) (i) Differentiate between a coastline and a shore. (2marks)

(ii) Name **two** examples of marginal seas. (2marks)

(b) i) Apart from oceanic island, name two features on the ocean floor (2marks)

(ii) Give **two** examples of *Oceanic Islands* (2marks)

(c) (i) State **four** conditions that favour the growth of corals. (4marks)

(ii) Explain **three** ways in which corals contribute to the economic development of Kenya (6marks)

(d) Members of your class intend to conduct a field study on depositional features along the Kenyan Coast.

(i) State **two** reasons why they would need to carry an atlas during the study. (2marks)

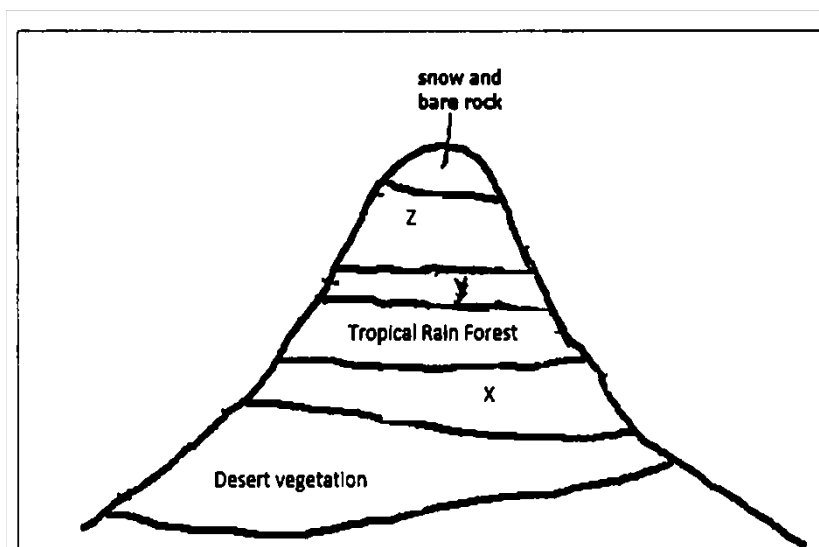
(ii) Name **two** features of deposition you are likely to identify during the study. (2marks)

(iii) What problems are you likely to encounter during the field study? (3marks)

8 a) (i) Name two types of vegetation. (2marks)

ii) Give **two** physiographic factors influencing vegetation distribution (2marks)

(b) The diagram below shows vegetation zones of an East African mountain. Use it to answer questions b(i) and b(ii) below



- i) Name the vegetation zones **X**, **Y**, and **Z** (3marks)
- ii) Give **two** reasons why there is no vegetation cover on the top of the mountain (2marks)
- (c) (i) State the names given to temperate grassland vegetation in (2marks)
- **North America----**
 - **Argentina.....**
- (ii) Explain **three** uses of the vegetation labelled **X**, (6marks)
- d) Explain **four** characteristics of tropical desert vegetation (8marks)
- 9 (a) (i) state **two** classifications of soil according to soil order (2marks)
- ii) Draw a well labelled diagram of a mature soil profile (4marks)
- (b) i) A part from topography name four other factors that influence formation of soil (4marks)
- (ii) State three ways in which topography influences formation of soils. (3marks)
- (iii) State **three** characteristics of desert soil (3marks)
- (c) (i) Name **three** types of soil erosion (3marks)
- ii) Explain **three** effects of soil erosion on human activities (6marks)
- 10 (a) (i) What is an earth movement? (2marks)
- (ii) State **three** causes of earth movements. (3marks)
- (b) i) State **three** boundaries associated with tectonic plates (3marks)
- (ii) Describe how the Mid Atlantic ridge was formed. (3marks)
- (c) (i) Other than fold mountains, give two features that result from the folding process. (2marks)
- (ii) Describe how the Alps and Atlas Mountains were formed. (6marks)
- (d) Explain **three** positive influences of fold mountains (6marks)

PAPER 2

Answer all questions in section A and any two questions from section B

- 1) (a) i) Apart from geothermal power, name three other renewable sources of energy in Kenya (3Marks)
ii. State two factors that limit exploitation of geothermal power in Kenya (2Marks)
- 2) (a) Give **four** advantages of air transport over water transport. (4Marks)
(b.) Name three types of communication. (3Marks)
- 3) (a) Name two tourist attraction found in Kenyan Rift Valley. (3Marks)
(b) State three factors that hinder domestic tourism in Kenya. (3Mark)
- 4) (a) What are floods? (2Marks)
(b) Mention two advantages of farrow irrigation. (2 Marks)
(c) Name one river which causes large scale flooding in Kenya. (1 Mark)
- 5) (a) Name three major imports from Europe to Kenya (2Marks)
(b) State four factors that influence internal trade in Kenya (3Marks)

SECTION B

Answer question 6 and any other questions from this section

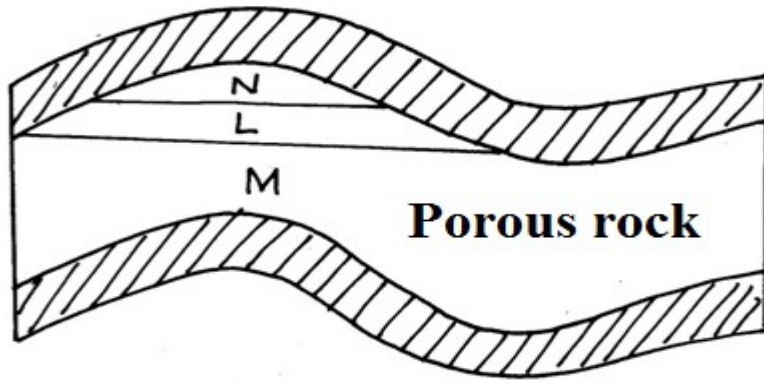
6. The table below shows total number of livestock in Kenya in 2012

Type of livestock	Number in millions
Dairy cattle	2.4
Sheep	7.0
Goats	7.2
Pigs	8.5
Total	25.1

Source: Central Bureau of Statistics

- (a) Draw a divided rectangle 15 cm to represent the data give above 7Marks
- (b) Explain why the population of sheep is higher than that of dairy cattle 2Mark
- (c) Explain four ways in which the government of Kenya assist nomadic pastoralist to improve the quality of their livestock 4Marks
- (b) Explain three factors that favour beef farming in Argentina. 3Marks

7. (a) (i) What is rural settlement? (2 Marks)
- (ii) State three characteristics of rural settlements. (3 Marks)
- (b) Explain three factors that led to the growth of Kisumu (6 Marks)
- (c) Explain how the following problems facing Kisumu can be solved.
- (i) Pollution (2 Marks)
- (ii) Crime (2 Marks)
- (iii) Unemployment (2 Marks)
- (d) Explain how Rotterdam port differs from Mombasa port (8 Marks)
- 8 a) i). Differentiate between indigenous and exotic forests. (2Marks)
- (ii) Name two exotic hardwood trees species found in Kenya (2Marks)
- iii). State three factors that lead to depletion of forests in Kenya. (3Marks)
- b). Explain three factors that favour the growth of natural forests on the slopes of Mt. Kenya (6Marks)
- c). Compare forestry in Kenya and Canada under the following headings;
- i). Mode of exploitation (2Marks)
- ii). Transport (2Marks)
- d). i). State three factors favouring the development of softwood forests in Canada (3Marks)
- ii). Give four measures used to conserve forests in Kenya. (4Marks)
- 9.a) i) Name two Methods of Land reclamation (2Marks)
- ii) Name two Methods of swamp drainage (2Mark)
- b) i) Give two rivers that supply water to Mwea irrigation scheme 2Marks
- ii) Explain how the following factors influence establishment of Mwea irrigation scheme
- (i). Topography 2Marks
- (ii). Soils 2Marks
- (iii). Population 2Marks
- (iv). Government policy 2Marks
- c) i) Identify three areas of Zuider zee project takes place. 3Mark
- ii) Explain four differences between land reclamation in Kenya and Netherlands. (8Marks)
10. (a)(i) Name the substances marked L,M,N in the diagram below (3Marks)



L-

M-

N-(3 Marks)

(ii). Give three by-products obtained when crude oil is refined (3Marks)

(b). State five effects of mining on the environment (5Marks)

(c)(i)Describe the stages involved in the processing of Trona from lake Magadi (6Marks)

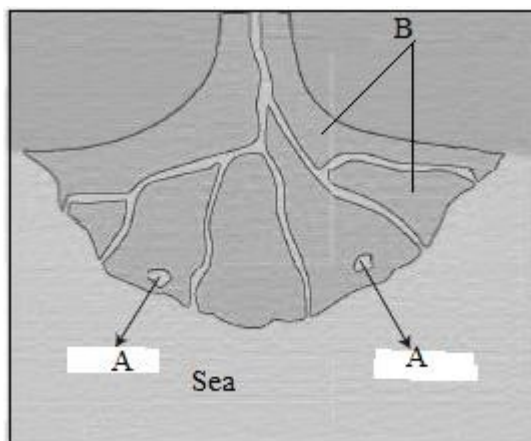
(ii) Explain four Ways in which Kenya has been profited from the mining of Trona on lake Magadi

(8Marks)

**PAPER 1
SECTION A**

Answer **all** questions in this section.

1. (a) Define the term rock. (2 marks)
- (b) Give **three** ways in which rocks are classified. (3 marks)
2. (a) Name **two** examples of prevailing winds in the northern hemisphere. (2 marks)
- (b) State **three** factors that influence the amount of solar radiation reaching the earth's surface. (3 marks)
3. (a) What is a volcano? (2 marks)
- (b) State **three** ways through which volcanic mountains influence the drainage of an area. (3 marks)
4. (a) The diagram below shows a type of delta formed in the lower course of a river.



- (i) Identify the type of delta shown in the diagram. (1 mark)
- (ii) Name the parts marked **A** and **B**. (2 marks)
- (b) State **three** conditions that contribute to the formation of deltas. (3 marks)
5. State **four** ways in which human activities contribute to soil erosion. (4 marks)

SECTION B

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

6. Study the map of Mumias Sheet 101/2 (1:50,000) provided and answer the following questions.
 - (a) (i) Give the longitudinal extent of the area covered by the map. (2 marks)
 - (ii) What is the approximate altitude of Bumala dam? (2 marks)
 - (iii) Identify **three** human features found in grid square 5640. (3 marks)

- (b) (i) What is the magnetic variation of the map? (1 mark)
- (ii) Measure the length in kilometres of the road C532 from the bridge to Musanda. (2 marks)
- (iii) Give **three** drainage features found in the area covered by the map. (3 marks)
- (c) Describe the distribution of vegetation in the area covered by the map. (6 marks)
- (d) Citing evidence from the map, identify **three** social services offered in Mumias area. (6 marks)

7. (a) (i) Define the term folding. (2 marks)
- (ii) Give **three** types of folds. (3 marks)
- (b) The following map shows the distribution of some the fold mountains of the world.



- (i) Identify the mountains marked **C**, **D** and **E**. (3 marks)
- (ii) Give the orogenies of Cape ranges and Atlas Mountains. (2 marks)

(c) Describe how fold mountains were formed through the following theories;

- (i) Convectional currents theory (4 marks).
- (ii) Plate tectonics theory (3 marks)

(d) Explain **four** significance folding to human activities. (8 marks)

8. (a) (i) Give **three** human activities that influence climate. (3 marks)
- (ii) Identify **two** features that have modified climate in Kenya. (2 marks)
- (b) Describe the characteristics of equatorial climate. (5 marks)
- (c) (i) What is climate change? (2 marks)
- (ii) Explain **four** effects of climate change. (8 marks)
- (d) Members of your class carried out a field study on a nearby weather station.
- (i) Give **three** reasons why you prepared a working schedule. (3 marks)

(ii) State **two** problems that may have hindered accurate data collection during the study. (2 marks)

9. (a) (i) Give **two** sources of underground water. (2 marks)

(ii) State ways in which vegetation cover influence occurrence of underground water. (2 marks)

(b) Explain **four** importance of underground water. (8 marks)

(c) (i) Apart from stalagmites, give **two** other underground features formed in limestone areas. (2 marks)

(ii) With the aid of a diagram, describe how a stalagmite is formed. (8 marks)

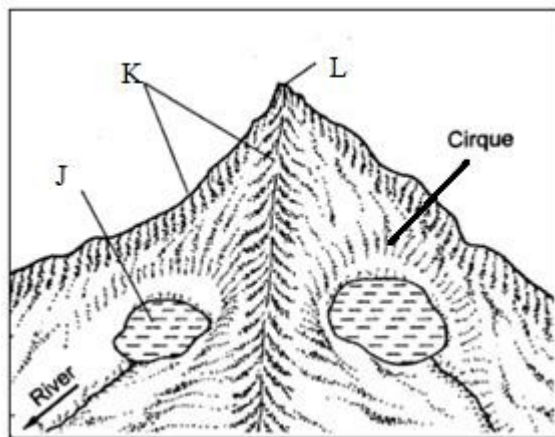
(d) Give **three** reasons why there are few settlements in karst landscape. (3 marks)

10. (a) (i) What is glaciation? (2 marks)

(ii) Give **three** types of glaciers. (3 marks)

(b) Explain **three** factors that influence movement of ice. (6 marks)

(c) The diagram below shows some features formed by glacial erosion in highlands.



(i) Identify the features labeled **J, K** and **L**. (3 marks)

(ii) Describe how a cirque is formed. (5 marks).

(d) Explain **three** positive effects of glaciation in lowland areas. (6 marks)

PAPER 2

SECTION A

Answer all questions in this section

1. (a) Define Human geography (2marks)
(b) State **three** significance of studying geography (3marks)
2. (a) Define the term forestry (2marks)
(b) Give **three** factors that determine the type and distribution of forests (3marks)
3. (a) Define the term fishing (2marks)
(b) State any **three** factors influencing fishing (3marks)
4. (a) Differentiate between a national park and game sanctuary. (2marks)
(b) State **three** reasons why the government is encouraging domestic tourism. (3marks)
5. (a) Name **two** non-renewable sources of energy (2marks)
(b) Give **three** advantages of using solar energy (3marks)

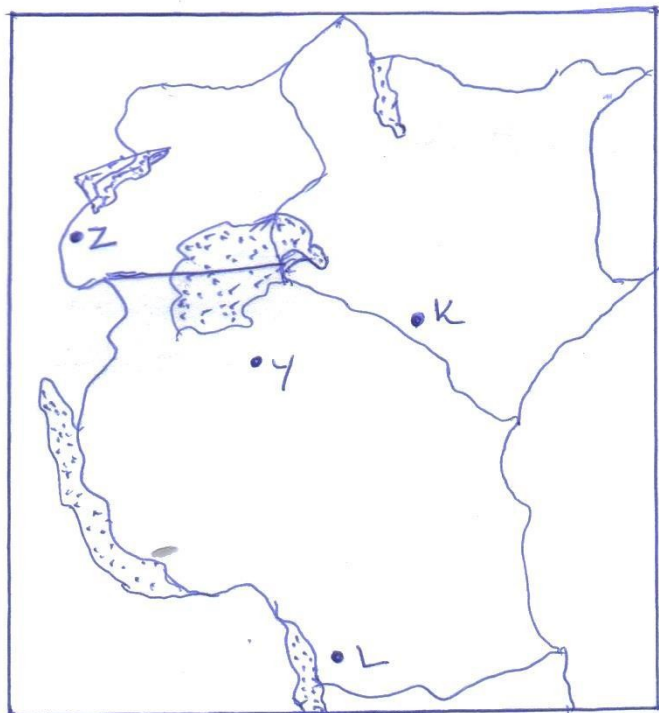
SECTION B

Answer question 6 and any other two questions from this section

6. The table below shows maize in Ksh between 2020 and 2024 in four counties in Kenya.

County	2020	2021	2022	2023	2024
Nakuru	200	240	250	280	285
Kakamega	116	135	138	170	275
Migori	100	80	60	50	45
Nanyuki	40	30	45	30	25

- (a) (i) Calculate the percentage increase of the total maize production in the four counties between **2020-2021**. (2marks)
(ii) Using a length of **10 cm** draw a divided rectangle to represent the maize production in **2023** (8marks)
(iii) State **three** advantages of using a divided rectangle in representing statistical data. (3marks)
(iv) Apart from divided rectangle mention any other data **three** presentation method that can be used to represent the data above (3marks)
- (b) (i) Name **three** counties in Kenya where maize is grown in large scale farming. (3marks)
(ii) Explain **three** measures that the government of Kenya had undertaken to improve maize farming. (6marks)
7. (a) (i). Define the term mining. (1mark)
(ii) Give **three** factors that influence the occurrence of minerals. (3marks)
(b) The map below shows the location of some minerals in East Africa.



(i) **Name** the minerals mined in the areas marked **K, L, Y.** and **Z.** (4marks)

(c) Mention **three** ways in which mining activities cause pollution. (3marks)

(d) Describe the stages involved in gold processing in South Africa (6marks)

(e) Explain **four** problems facing the gold mining industry in South Africa (8marks)

8. (a) (i) Define Land Rehabilitation? (2marks)

(ii) Mention **four** benefits of Land Rehabilitation in Kenya. (4marks)

(b) (i) Explain **four** factors that led to the successful establishment of Perkerra irrigation scheme. (8marks)

(ii) State **three** problems facing Perkerra irrigation scheme. (3marks)

(iii) List **four** main crops grown in Perkerra irrigation scheme. (4marks)

(c) Give **four** advantages of irrigation farming to the economy of Kenya. (4marks)

9 (a) Give **three** types of communication used in Kenya. (3marks)

(b) Explain **four** contributions of communication to the economic development of Kenya. (8marks)

(c) State **four** efforts taken by the government of Kenya to improve air transport. (4marks)

(d) Give **four** reasons why motorcycle transport has become common in most parts of Kenya (4marks).

(e) Students of Torome school went for a field study to a railway station in Nairobi

(i) Identify **three** reasons why they needed to have a working schedule (3marks)

(ii) Mention **three** benefits of railway expansion in Kenya. (3marks)

10. (a) (i) What is unfavourable balance of trade? (2marks)

(ii) State **three** measures a country can take to reduce unfavourable balance of trade (5marks)

(b) Explain **five** benefits that Kenya gets from participating in international trade. (10marks)

(c) (i) List **three** non-agricultural exports from Kenya. (3marks)

(ii) Name **four** countries to which Kenya exports petroleum products (4marks)

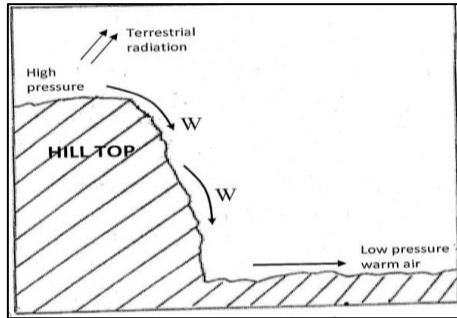
(iii). State **three** problems facing developing countries in international trade. (3marks)

THIS IS THE LAST PRINTED PAGE.

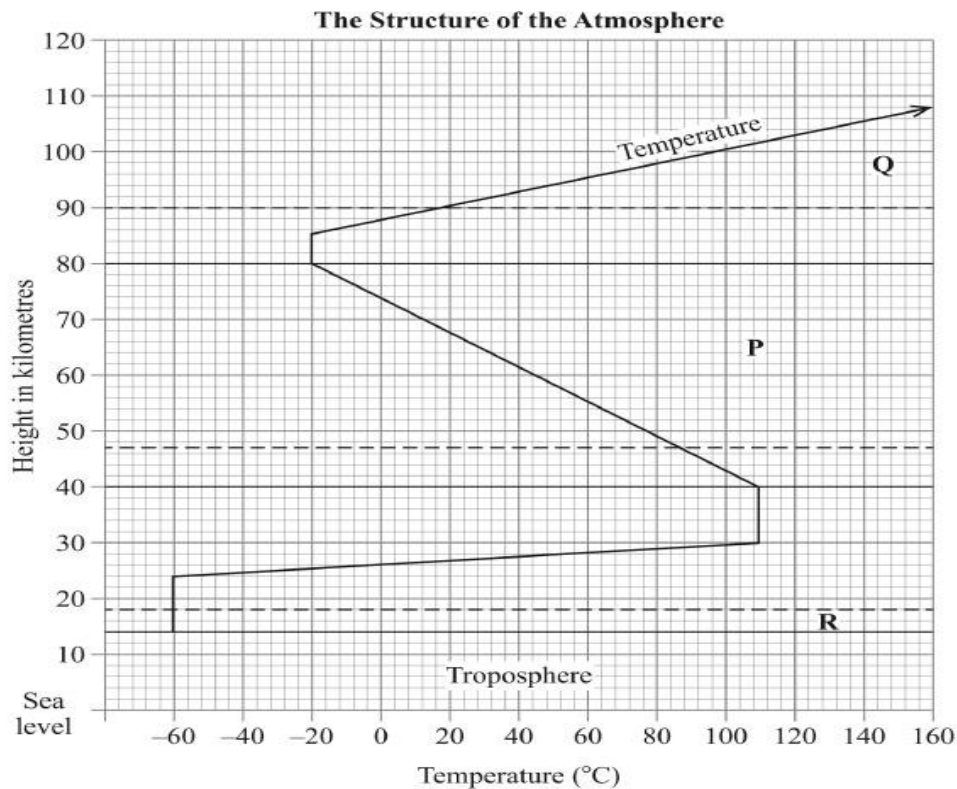
SECTION A

Answer all the questions in this section

1. (a) Identify *two* minerals that make up the continental crust (2marks)
- (b) State *three* causes of earth movement (3 marks)
2. The diagram below shows an example of a local wind marked W.



- a) Name the wind (1 mark)
- b) Describe how the wind occurs (4 marks)
3. a) Name the scale used to measure the:
 - i) intensity of an earthquake
 - ii) magnitude of an earthquake (2 marks)
- b) Give three natural causes of earthquakes (3 marks)
4. The diagram below represents the structure of the atmosphere. Use it to answer question (a).

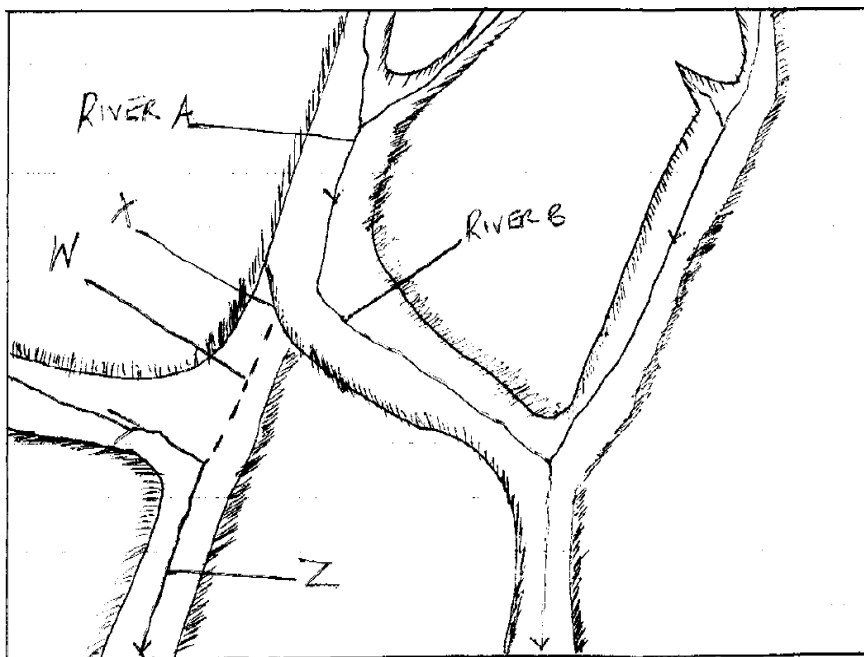


- (a) Name
- the parts marked **P** and **Q** (2 marks)
 - the layer of discontinuity marked **R**. (1 mark)
- b) State *two* characteristics of the weather conditions in the troposphere (2 marks)
5. a) State *two* conditions necessary for the development of Karst scenery (2 marks)
- b) Give two reasons why there are few settlements in Karst landscapes (3 marks)

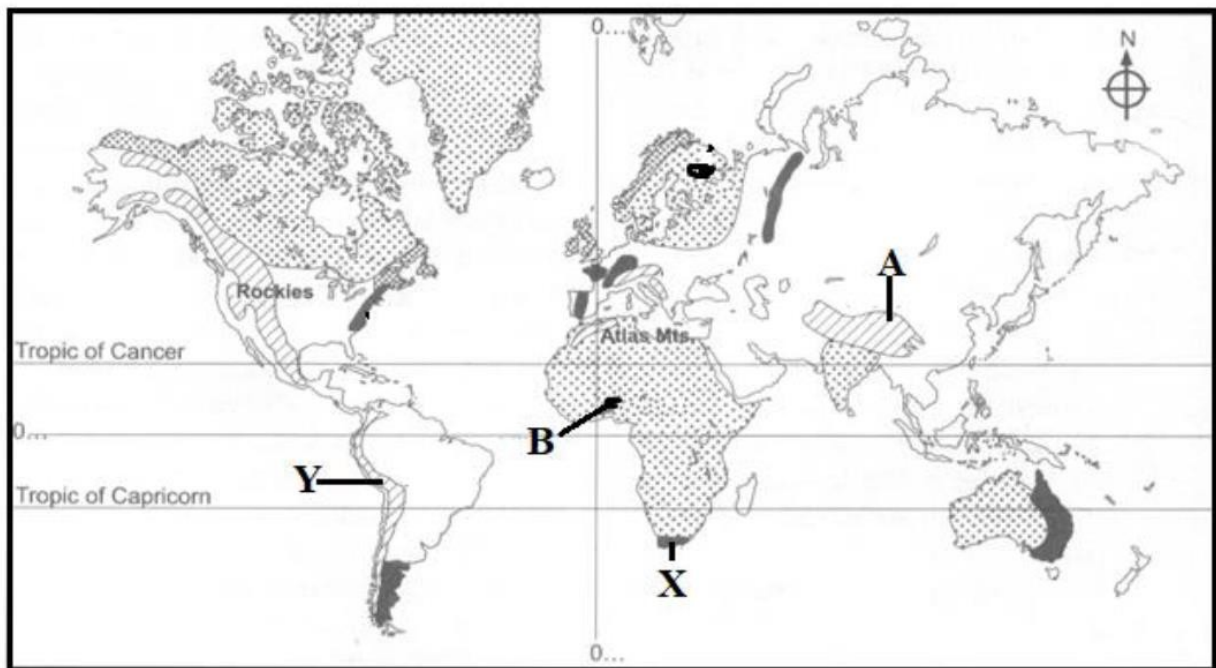
SECTION B

In this section, answer question 6 and any other two questions.

6. Study the map of Mumias 1:50,000 provided and answer the questions that follow.
- Name *two* scales that have been used in the map (2 marks)
 - Give the magnetic variation of the map at the time it was drawn (2 marks)
 - Identify *three* physical features in grid square 6044 (3 marks)
 - Name *two* districts in Western Province in the area covered by the map (2 marks)
 - Give the approximate longitudinal location of Mumias town (2 marks)
 - Draw a rectangle measuring 8cm by 4 cm to represent the area bounded by eastings 63 and 65 and northings 34 and 35 (1 mark)
 - In the rectangle, mark and label the following:
 - River Lusimu (1 mark)
 - Bridge (1 mark)
 - All weather road loose surface (1 mark)
 - Woodland (1 mark)
 - Citing evidence from the map, state *two* social services in the area covered by the map (4 marks)
 - Describe the drainage of the area covered by the map (5 marks)
7. (a) (i) What is a watershed (2 marks)
- (ii) Explain *three* ways by which a river transports its load (6 marks)
- (b) Study the diagram given below and answer questions that follow.



- i) Name the features marked X, W and Z (3 marks)
- ii) Explain the process of river capture (5 marks)
- c) Give three characteristics of a river in its youthful stage (3 marks)
- d) Explain *three* economic importance of a river to human activities (6 marks)
8. a) i) Define the term rock (2 marks)
- ii) Describe the formation of chemically formed sedimentary rocks (5 marks)
- b) i) State *three* reasons why sedimentary rocks are widely spread at the coast (3 marks)
- ii) State *three* changes that occur on sedimentary rocks when they are subjected to intense heat (3 marks)
- c) Explain *four* ways in which rocks contribute to the economy of Kenya (8 marks)
- d) Your class is planning to carry out a field study on rocks.
- i) State *three* ways in which you will prepare for the study (3 marks)
- ii) Why would they need magnifying lens (1 mark)
9. Below is a world map showing the distribution of fold mountains. Use it to answer question (a).



- (a) (i) Name the fold mountains marked A and B (2 marks)
- ii) Give the orogenies during which the fold mountains marked X and Y were formed (2 marks)
- iii) Apart from fold mountains, name *three* other features resulting from folding (3 marks)
- (b) With the aid of a well-labeled diagram, explain how an overthrust fold is formed (6 marks)
- (c) Explain *three* positive significance of folding to human activities (6 marks)
- (e) Your class intends to carry out a field study on folding;
- (i) State *three* reasons why you would require a route map (3 marks)
- (ii) Name *three* secondary sources of information you are likely to use before the actual fieldwork (3 marks)

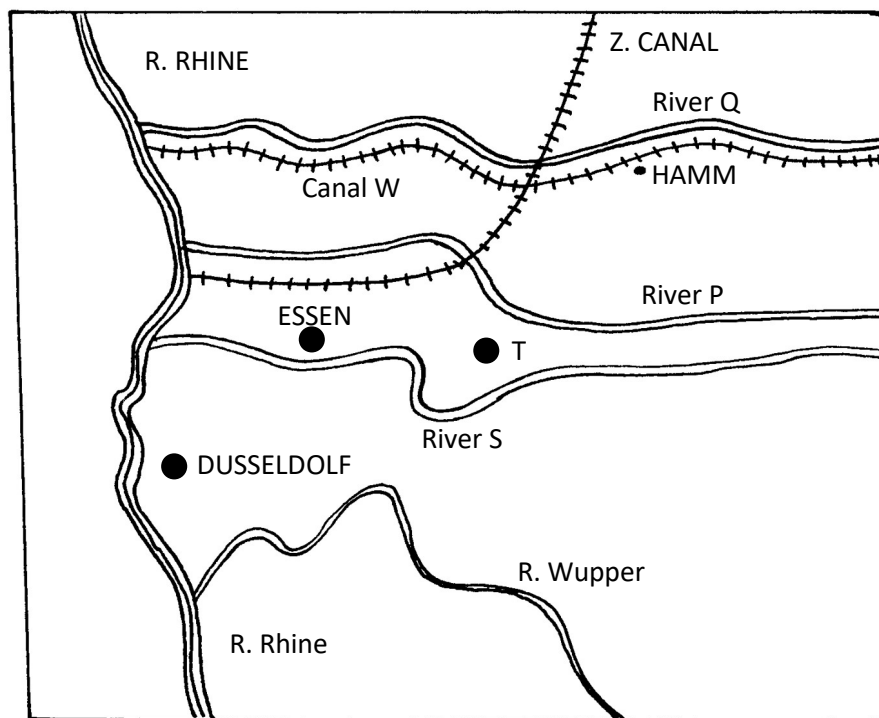
10. a) i) Define the term sea (2 marks)
- ii) Give *two* causes of oceans currents (2 marks)
- b) Explain *three* factors that cause movement of ocean waters (6 marks)
- c) i) List *four* types of tides (4 marks)
- ii) Using a well labeled diagram, describe the formation of a Tombolo (7 marks)
- d) Explain *two* economic benefits of oceans to man (4 marks)

PAPER 2

SECTION A (25 marks)

Answer all the questions in this section in the answer sheets provided.

1. a) What is fish farming? (2mks)
b) List down three physical factors that favour fishing in North West pacific. 3mk)
2. (a) Give two conditions necessary for the construction of a dam (2mks)
(b) State three reasons why Africa's hydro-electric power is not fully developed? (3mks)
3. a) Below is a map of the Ruhr industrial region in Germany.



Give the name of

- (i) The river marked Q (1mk)
- (ii) The town marked T (1mk)
- (iii) The canal marked Z (1mk)

b) Give TWO reasons why the Ruhr region has become of little importance as an industrial centre in recent years. (2mks)

4.a) State two factors which have contributed to decline in infants' mortality in Kenya. (2mks)

b) Identify three problems resulting from decline in population in industrialized countries. (3mks)

5.a) Name two environmental hazards that have affected Kenya in the recent years (2mks)

b) Give three causes of noise pollution in Nairobi city. (3mks)

SECTION B

Answer Question 6 and any other two questions.

6. The table below shows tea production in Kenya in thousands metric tonnes`

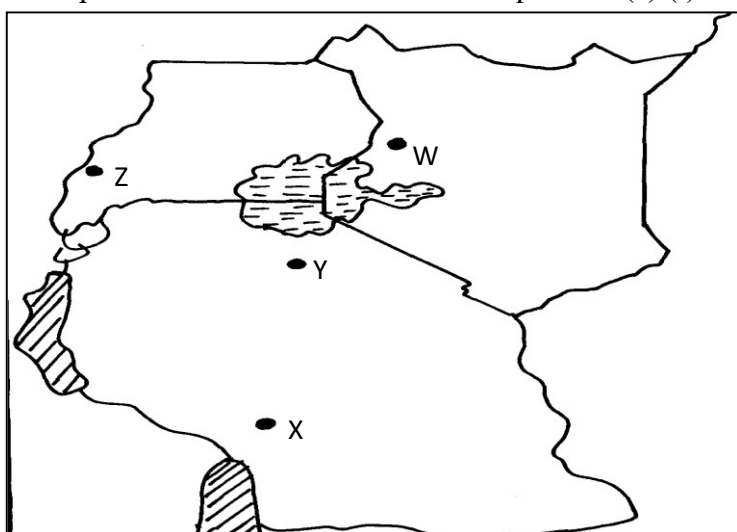
Tea production (000s of metric tones)

Zones	2001	2002	2003
Kericho	35	20	25
Nandi	20	15	25

Kisii	25	20	15
Kiambu	15	12	15
Embu	10	8	10
Meru	5	15	10

- a) i) Use a compound bar graph to **present** the data provided above (6mks)
 ii) **What** are the disadvantages of using compound bar graphs to present data? (3mks)
- b) i) **State four** condition favouring tea growing in Kenya (4mks)
 ii) **Explain four** problems facing tea farmers in Kenya (8mks)
- c) Suppose students were to carry out a field study on a tea growing area of Kericho. **Give four** reasons why a pre-visit is necessary. (4mks)

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



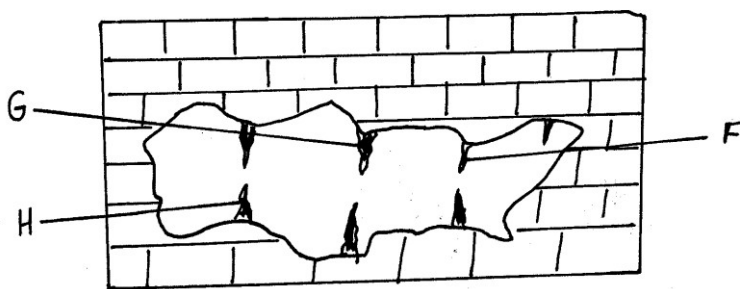
- (a) (i) Name the minerals mined in the areas marked **W, X, Y** and **Z** (4mks)
 (ii) Give **four** ways in which minerals occur (4mks)
- (b) Identify any **five** factors that influence the exploitation of minerals (5mks)
- (c) Explain any **four** problems associated with mining (8mks)
- (d) List any **four** main minerals mined in Kenya (4mks)
- 8) a) (i) Define re-afforestation (2mks)
 (ii) State **four** reasons why afforestation should be encouraged in Kenya (4mks)
 (iii) Name **three** provinces in Canada where forestry is practiced on large scale (3mks)
- b) Explain **three** problems which hinder the Kenya government efforts to manage and Conserve forest (6mks)
- c) Explain **three** factors that favour the growth of natural forest on the slopes of Mount Kenya (6mks)
- d) Identify **four** factors that favour exploitation of forest in Canada (4mks)
- 9). a (i) Give **three** differences between a national park and a game reserve. (3mks)

- (ii) Name **four** tourist attraction sites found in the coastal region of Kenya. (4mks)
- b) (i) State **two** negative effects of tourism on the social life of Kenyans. (2mks)
- (ii) State **four** reasons why domestic tourism should be encouraged in Kenya. (4mks)
- c) State **four** measures that the Kenya government is taking to promote tourism. (4mks)
- d) Explain **four** ways in which tourism has influenced infrastructure. (8mks)
- 10). (a) **Explain four** factors which influence the importation and exportation of goods in and out of Kenya (8mks)
- (b) (i) **Differentiate** between visible and invisible trade. (2mks)
- (ii) **Explain four** challenges facing trading activities among the East African Countries. (8mks)
- (c) (i) **Name two** products Kenya exports to other countries (2mks)
- (ii) **State five** ways in which trade is of significance to Kenya. (5mks)

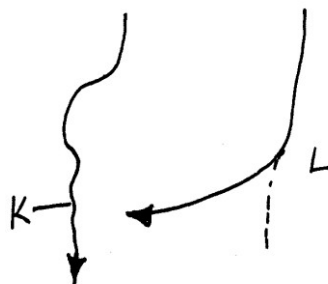
SECTION A

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

- 1 (a) Define the term **Earth's rotation** (1 mark)
- (b) State **three** effects of the rotation of the earth. (3 marks)
- 2 (a) Name **two** causes of earth movements. (2 marks)
- (b) State **three** evidences that confirm the continental drift theory. (3 marks)
- 3 (a) Define the term water table. (1 mark)



- (i) Name the features marked F, G and H. (3 marks)
- (ii) Give **two** characteristics of limestone rocks. (2 marks)
- 4 (a) Define the concept global warming. (2 marks)
- (b) Name three indicators of global warming. (3 marks)
- 5 (a) The diagram below shows a river capture, Name the parts marked **K** and **L**. (2 marks)



- (b) Describe how a lava dammed lake is formed. (3 marks)

SECTION B

*Answer Question 6 and any other **two** questions from this section*

6. Study the map of Mumias 1:50,000 (Sheet 101/2) provided and answer the following questions.

- (a) (i) Identify two types of scales that have been used in the map extract. (2 marks)
- (ii) What was the magnetic declination of Mumias as at January 1965? (2mks)
- (iii) Name three districts covered by the map of Mumias. (2mks)
- (iv) Measure the length of the dry weather road from the junction at grid reference 6028 up to the bridge at grid reference 6434. Give your answer in KM (2mks)
- (b) (i) Reduce by two, the area to the East of Easting 50 and enclosed by Northing 30 to 40.

(2 marks)

On it mark and name;

- River Nzoia (1mark)
- All weather road loose surface (1mark)
- District boundary (1mark)
- Seasonal swamp (1mark)

- (ii) Calculate the scale of the reduced area (2marks)

- (c) Describe the drainage of the area covered by the map. (5 marks)

- (d) Citing evidence from the map, identify two economic activities carried out in the area covered by the map. (4marks)

- 7 (a) List three ways in which wind erodes the desert landscape. (3 marks)

- (b) With the aid of well – labeled diagram describe how the following desert features are formed.

- (i) Zeugen. (5 marks)

- (ii) Barchan. (5 marks)

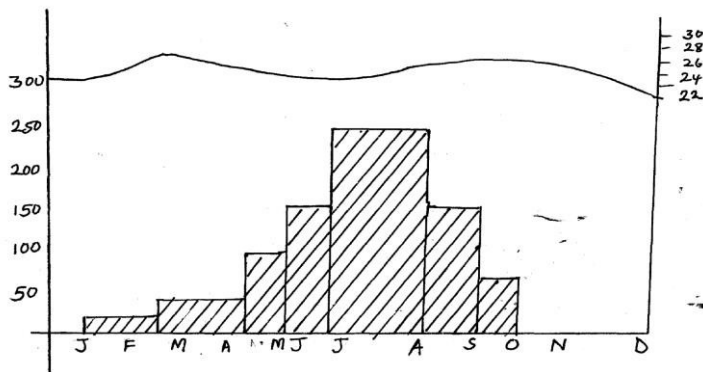
- (c) Explain three factors that influence wind transportation in a desert. (6 marks)

- (d) A group of students carried out a study on wind effects in an arid area.

- (i) State three reasons why they would have required to map of the area. (3 marks)

- (ii) State three follow – up activities they may have made. (3 marks)

- 8 (a) (i) Define fog. (1 mark)
(ii) How is an advection fog formed? (4 marks)
(b) The graph below represents the climate of station X. Use it to answer the questions that follow.



Describe characteristics of the climate represented. (6 marks)

- (c) Explain three ways in which vegetation in the station adapt to the climate. (6 marks)
(d) Students carried out a field study on soils found on the station represented.
(i) State four soil characteristics they would look for. (4 marks)
(ii) Explain how they would use the following methods to collect data.
- Content analysis (2 marks)
- Observation (2 marks)

- 9 (a) Name two types of faults. (2 marks)
(b) With the aid of well labeled diagrams, describe how a rift valley is formed by Tensional Forces. (6 marks)
(c) (i) Name two escarpments in Kenya. (2 marks)

(ii) List three ways in which faulting can influence drainage. (3 marks)

- (d) Students of a school in Rift valley carried out a field study of an area affected by faulting.
(i) State four importance of having a pre-visit of the area. (4 marks)
(ii) Give three advantages of using observation to collect data. (3 marks)
(iii) Give five importance of learning Geography through fieldwork. (5 marks)

- 10 (a) What is the difference between weathering and mass wasting. (2 marks)
(b) Give two processes involved in each of the following types of weathering.
(i) Physical weathering. (2 marks)

(ii) Chemical weathering. (2 marks)

- (c) (i) Apart from plants, give four other factors that influence the rate of weathering. (4 marks)
(ii) Explain two ways in which plants cause weathering. (4 marks)
(d) Describe how an exfoliation dome is formed. (5 marks)
(e) Explain three effects of mass wasting on the environment. (6 marks)

END

SERIES 22

PAPER 1

Section A.

1. (a) Name **two** forces responsible for the spherical shape of the earth (2mks)
(b) Give **three** reasons why interior part of the earth is very hot (3mks)
2. (a) Name **two** types of earth movement (2mks)
(b) State any **three** causes of earth movement (3mks)
3. (a) What is natural vegetation? (2mks)
(b) Name the temperate grasslands found in the following countries: (3mk)
(i) Canada
(ii) Russia
(iii) Australia
4. (a) Differentiate between Mass Wasting and Mass Movement. (2mks)
(b) State **three** factors influencing Mass Wasting. (3 mks)
5. With the aid of a well labelled diagram, illustrate the hydrological cycle (5mks)

SECTION B

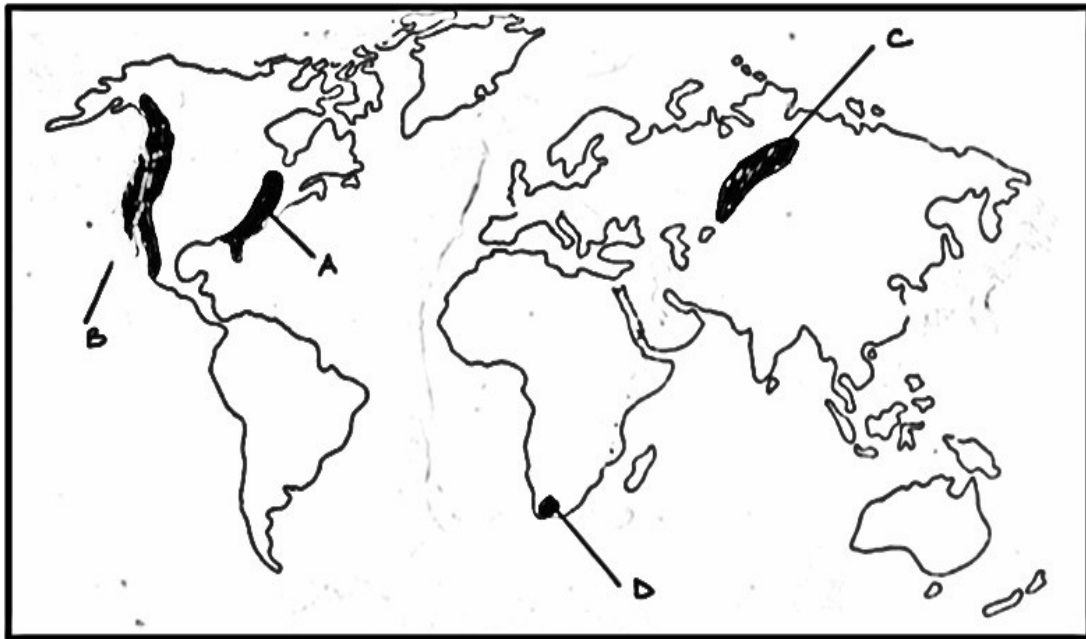
Answer question 6 and any other two questions in this section

6. Study the map provided of Mumias (1:50,000) sheet 101/2 and answer the following questions.
 - (a) i) What was magnetic variation when the map was prepared in 1965? (1mk)
ii) Identify **three** districts represented by the area covered by the map. (3mks)
iii) What is the altitude of the highest point in the area covered by the map? (1mk)
iv) Give **two** methods of showing relief that have been used on the area Covered by the map. (2mks)
v) State **two** types of rivers found in the area covered by the map. (2mks)
 - (b) (i) Give the longitudinal extent of the area covered by the map. (2mks)
(ii) Give the six figure grid reference of Buhuyi Dam. (2mks)
 - (c) (i) Citing evidence, give **three** social provided by Mumias municipality. (3mks)
(ii) Describe the vegetation distribution of the area covered by the map. (4mks)
Draw a rectangle measuring 12cm by 10cm to represent the area enclosed by easting 47 and 51 and Northing 37 and 41 (1mk)
On the rectangle show:
 - Seasonal swamp (1mk)
 - Dry weather road (1mk)
 - Riverine vegetation on R. Akonyo (1mk)

➤ Wood land

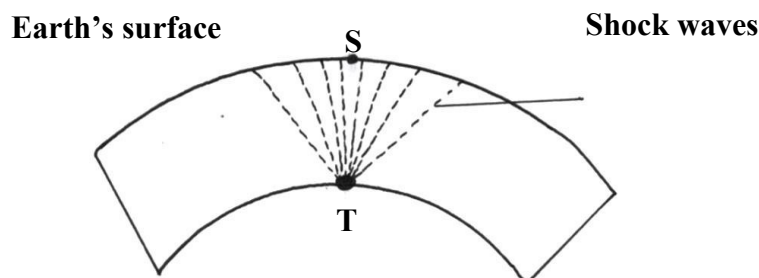
(1mk)

7. a) What is folding? (1mk)
b) Study the world map below and answer the questions that follow.



- i) Name the Fold Mountains found in the area marked A, B, C, D.
- | | |
|-----|-------|
| A - | (1mk) |
| B - | (1mk) |
| C - | (1mk) |
| D - | (1mk) |
- c) Describe the formation of Fold Mountain under the following theories
- | | |
|-----------------------------------|--------|
| i) Contraction theory | (3mks) |
| ii) Convectional currents theory. | (3mks) |
- d) Explain three significance of folding to both physical and human environment. (6mks)
- e) Using diagrams describe the formation of rift valley by Tensional (6mks).
- f) Name two features resulting from faulting. (2mks)
8. (a) (i) Define wind abrasion. (2mks)
(ii) Name **two** processes of wind transportation. (2 mks)
- (b) Give **one** difference between a rock pedestal and a mushroom block(2 mks)
- | | |
|---|--------|
| (c) (i) Explain a factor that makes wind an effective agent of erosion in arid areas. | (2mks) |
| (ii) Give three characteristics of barchans. | (3mks) |
| (d) Using well illustrated diagrams, explain how Mesas and Buttes form | (8mks) |
| (e) You are to carry out a field study in the arid north of Kenya: | |
| (i) Mention three preparations you would make before the study. | (3mks) |
| (ii) Mention three problems you are likely to face during the field | (3mks) |
9. (a) (i) What are earthquakes? (2mks)

(ii) The diagram below shows the vibration of shock waves within the crust.



Name the locations marked S and T. (2mks)

(iii) State **four** ways in which the earth's crust is affected by earthquakes (4mks)

(b) (i) Name any three natural causes of earthquakes. (3mks)

(ii) Discuss any three effects of earthquakes on human activities. (6mks)

(d) You intend to carry out a field study of an area recently affected by an intense earthquake.

(i) Give **two** sources of information that you would use in preparation for the study. (2mks)

(ii) Give two reasons why they need a route map of the area. (2mks)

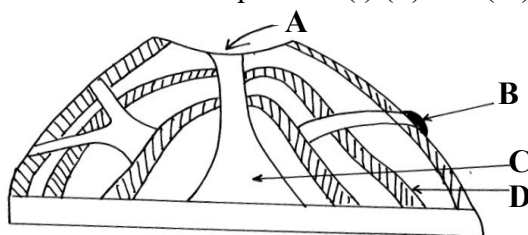
(iii) Explain **two** factors that would make it difficult for you to collect accurate data during the field study. (4mks)

10.a) (i) With the help of a well labelled diagram describe the formation of the following intrusive landforms. (8mks)

- Lopolith
- Batholith

(ii) Distinguish between vulcanicity and volcanicity. (2mks)

b) Use the diagram below to answer question (i) (ii) and (iii)



(i) Name the parts marked A, B, C and D (4mks)

(ii) Identify the type of volcano represented by the diagram above. (1mk)

(iii) Explain how the above volcanic feature is formed. (4mks)

c) State **four** significance of vulcanicity. (4mks)

d) Students from Kisumu West district carried out a field study on vulcanicity within the District. What **two** problems did they encounter. (2mks)

PAPER 2

INSTRUCTIONS TO CANDIDATES

- This paper has two sections. A and B.
- Answer ALL the questions in section A. In section B answer question 6 and **any** other two questions.
- All answers must be written in the booklet provided.

FOR EXAMINER'S USE ONLY

SECTION	QUESTION	MAXIMUM MARKS	CANDIDATE'S SCORE
A	1 – 5	25	
B	6	25	
		25	
		25	
Total Score		100	

SECTION A

- (a) Apart from polders, name two other reclaimed areas in the Netherlands. (2mks)
 - (b) Apart from irrigation, name three methods of land reclamation used in Kenya. (3mks)
- (a) Name two forest reserves in Kenya. (2mks)
 - (b) State three characteristics of equatorial rain forest. (3mks)
- (a) Name two primary sources of population data. (2mks)
 - (b) State three negative effects of high population to a developing country. (3mks)
- (a) Give three factors to be considered when choosing a method of mining. (3mks)
 - (b) Name two examples of fossil fuels. (2mks)
- (a) Define non-renewable energy sources. (2mks)

- (b) State any two effects of charcoal burning in the environment. (3mks)

SECTION B

6. The table below shows forestry products from various countries of Africa. (1000 tonnes)

Country	Production (1,000 tonnes)
DRC	450
Swaziland	170
Zambia	140
Ghana	110
Uganda	30
Tanzania	50

- a) (i) Using a radius of 4cm, draw a pie chart to represent the data above. (7mks)
- (ii) State any **three** advantages of using a pie-chart to represent data. (3mks)
- b) Explain **three** factors that influence the distribution of soft-wood forests in Kenya. (6mks)
- c) (i) Identify **three** provinces in Canada with extensive soft wood forests. (3mks)
- (ii) Explain **three** reasons why only a small part of Kenya is forested. (6mks)
7. (a) Name **three** types of dairy cattle kept in Kenya. (3mks)
- (b) (i) State **four** conditions that favour dairy farming in Kenya highlands. (4mks)
- (ii) Explain **three** problems facing dairy farmers in Kenya. (6mks)
- (c) (i) State **three** measures the government of Kenya is taking to improve dairy farming. (3mks)
- (ii) Compare dairy farming in Kenya and Denmark. (4mks)
- (d) You intend to carry out a field study in a dairy farm.
- (i) Give **three** methods you would use to collect information. (3mks)
- (ii) State **two** follow up activities you would carry out after the field study. (2mks)

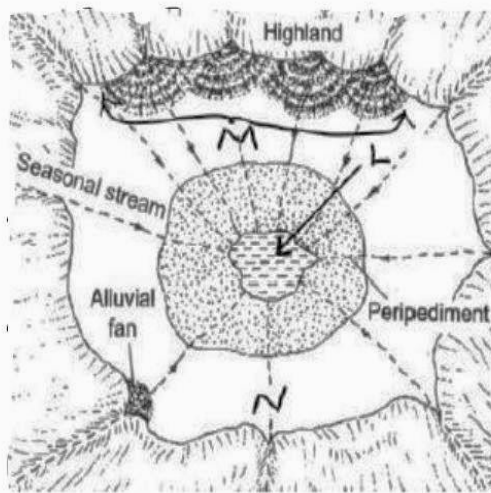
8. (a) (i) Define land Rehabilitation (2mks)
- (ii) State four benefits of land Rehabilitation in Kenya. (4mks)
- (b) (i) Explain four factors that led to the successful establishment of Pekerra irrigation scheme. (8mks)
- (ii) State three problems facing Pekerra irrigation scheme (3mks)
- (i) List four main crops grown in Pekerra irrigation scheme. (4mks)
- (c) State four advantages of irrigation farming to the economy of Kenya. (4mks)
9. (a) (i) Define the meaning of the term census. (2mks)
- (ii) Give **two** primary sources of population data. (2mks)
- (iii) What information can be derived from a population pyramid? (3mks)
- (b) Describe **three** ways in which the population of Kenya differs from that of Sweden. (6mks)
- (c) Explain **three** causes of rural-rural migration in Kenya. (6mks)
- (d) You intend to carry out a field study on the population within the vicinity of your school.
- (i) State **three** preparations you would make for the study. (3mks)
- (ii) State **three** methods you would use to record information. (3mks)
- 10.a) i) Identify **two** types of open cast mining. (2mks)
- ii) Describe the stages involved in deep-shaft mining. (6mks)
- b) State **three** negative effects of mining on the environment. (3mks)
- c) Give **two** reasons why Kenya import her oil in crude form. (2mks)
- d) Explain **four** ways in which mining contributes to the economy of Kenya (8mks)
- e) Explain how the following factors influence exploitation of minerals.
- Technology (2mks)
- Quality of the ore. (2mks)

SERIES 23

PAPER 1

Answer all questions in this section.

1. (a) What is the relationship between geography and civil engineering (2mks)
(b) State **three** ways in which the study of geography leads to development career (3mks)
2. a) Define the term atmosphere (2mks)
b) Outline **three** isothermal layers of the atmosphere (3mks)
3. a) The diagram below shows an in land drainage features in an arid area. Use it to answer the questions that follow.



- i. Name the feature shown above (1mk)
- ii. Identify the parts marked L, M and N (2mks)
- iii. What is an inselberg (2mks)
4. a) Name **two** areas in the world where ice sheet exists today. (2mks)
b) State **three** processes in which ice moves. (3mks)
5. a) Name **three** types of folds. (3mks)
b) Give **two** factors that influence on the landforms that form as a result of folding. (2mks)

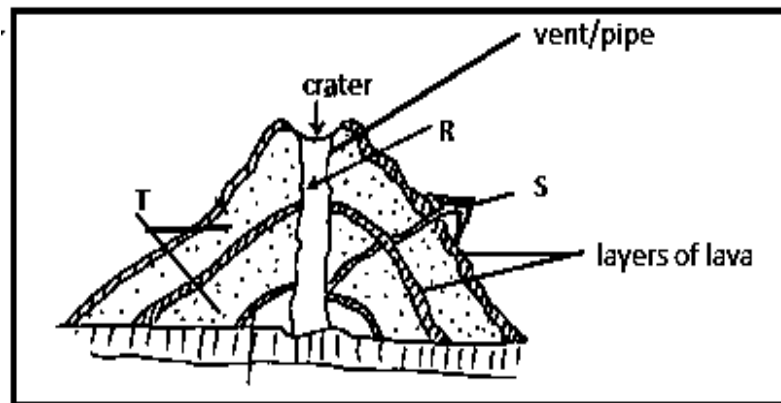
SECTION B

Answer question 6 and any other two questions from this section

6. Study the map of Mumias (Sheet No. 101/2) provided and answer the following questions.

- a) i. Identify three physical features found in the grid square 5941. (3 marks)
ii. Name three hygrosopic features shown in the area covered by the map. (3 marks)
- ii Identify three human features found in the grid square 5540. (3marks)

- iii. Identify two forms of land transport found to the north of northing 40. (2 marks)
- b) i. Give the six-figure reference for the school at Mungabo. (2 marks)
- ii. What is the six-figure grid reference of the air photo principal point close to Buduma School? (2 marks)
- c) i. Name two methods of representing relief used in the map. (2 marks)
- ii. What is the direction of Nyapera dam from Buhuyi dam? (2 marks)
- iii. What is the bearing of the school at Khaamashia from the school Ihonje?
- iv. Measure the distance of river Lusimu from the junction of river Nzoia to the bridge in kilometres and metres. (2 marks)
- v. Give the length of the linear scale shown on the map (Give your answer in km). (2 marks)
- d) Identify the administrative regions crossed by River Nzoia. (2 marks)
- e) What is the longitudinal extend of the area covered by the map. (2 marks)
7. a) Differentiate between magma and lava (2mks)
- b) The diagram below represents an extrusive volcanic feature. Use it to answer the questions that follow.



- i. Identify the features above (1mk)
- ii. Name the parts marked R, S, T (3mks)
- c) Describe the formation of hot springs (6mks)
- d) Giving examples, explain the three types of volcanoes (6mks)
- e) State Seven negative effects of Vulcanicity to the environment (7mks)
8. a) i. What is a metamorphic rock? (2mks)
- ii. Name two types of rocks found in the Lake Victoria region (2mks)
- iii. Differentiate between plutonic and hypabyssal rocks. (2mks)
- b) i. Describe any two ways through which sedimentary rocks are formed. (4mks)
- ii) State three sources of sedimentary rocks (3mks)
- d) Explain the following characteristics of rocks
- (i) Cleavage (2mks)
- (ii) Lustre (2mks)

(iii)Texture (2mks)

e) You carried out a field study on rocks around your school compound

i. State how you prepared for the study. (2mks)

ii. Which problems did you encounter during the study (2mks)

iii. State **Two** follow-up activities you engaged yourself in after the study. (2mks)

9. a) i) Name two types of tides. (2 mks)

ii) .State two causes of vertical movement of ocean water (2mks)

b) i). Explain how wave erosion by compressed air action takes place (3mks)

ii). Using well labelled diagrams, explain the formation of a cliff. (6mks)

c) i) Give Three conditions necessary for the formation of a beach (3mks)

ii) With an aid of a well labelled diagram, explain the formation of a bay bar (5mks)

d) Students from Kala School, went for a field study on coastal features along the Kenyan coast.

i) State two methods they used to collect data. (2mks)

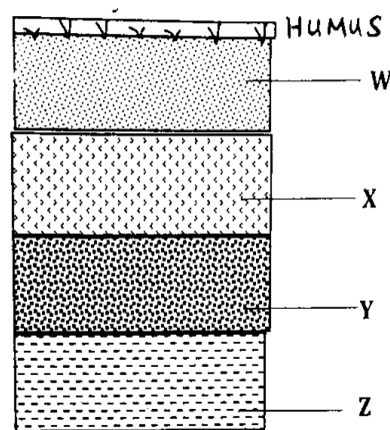
ii) Give two economic benefits of coral rocks they identified. (2mks)

10. a) i. Define soil Catena. (2mks)

ii. Give three types of soil degeneration. (3mks)

b) Differentiate between mineralization and humification in soil formation. (2mks)

c) The diagram below represents a well-developed soil profile. Use it to answer questions i, ii and iii below



i) Name the parts marked W, X, Y and Z. (4mks)

ii) Explain how the following factors may have influenced the formation of the soil above:

- Parent rock (4mks)

- Time (2mks)

iii) Give four ways in which humus contributes to the quality of soils. (4mks)

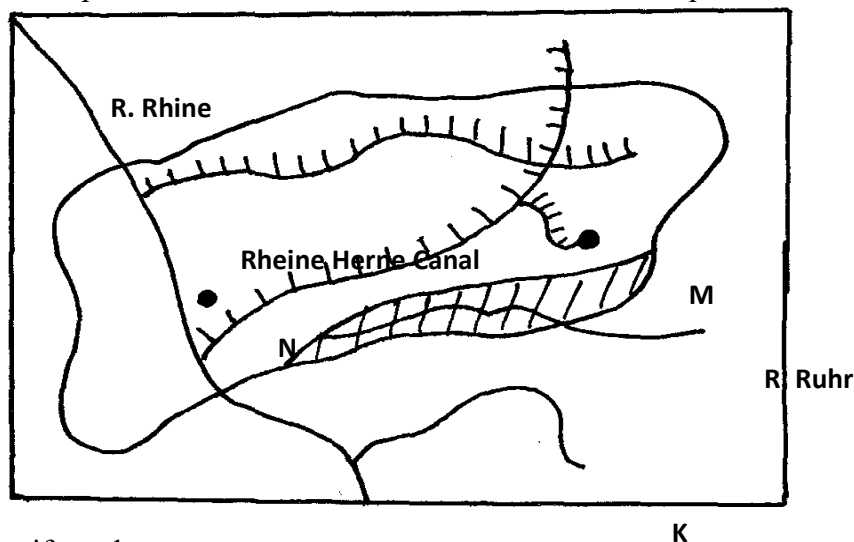
d). State four negative effects of soil erosion. (4mks)

PAPER 2

SECTION A:

Answer ALL questions in this section

- 1a) Identify **two** ways in which Geography is related to demography. (2mks)
- b) State **three** significance of studying Geography. (3mks)
- 2a) What is a forest? (2mks)
- b) Give **three** reasons why the Kenyan government is encouraging afforestation Programme. (3mks)
- 3a) Apart from the sun, name **two** other renewable sources of electricity. (2mks)
- b) Give **three** disadvantages of using solar energy. (3mks)
4. Use the map of the Ruhr Industrial Zone below to answer question that follow.



- a) i) Identify and name:
- The town marked **M** (1mk)
 - The river marked **K** (1mk)
- b) State **three** physical factors that influenced the location of the iron and steel industry in the Ruhr Region of Germany (3mks)
5. a) Define the term regional trade (2mks)
- b) State **three** challenges facing Common Market of Eastern and Southern Africa (COMESA) (3mks)

SECTION B: (75 MARKS)

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

6. The table below shows agricultural crops produced in Kenya in the year 2015 to 2018. Use it to answer question (a).

<i>Crops</i>	<i>Amount in metric tonnes</i>			
	<i>2015</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>
Tea	240,000	314,000	399,000	405,000
Coffee	98,000	54,000	42,000	55,000
Wheat	70,000	37,000	54,000	66,000

a) i) Using a scale of 1cm to represent 50,000 metric tonnes, draw a comparative bar graph to represent the data above. (8mks)

ii) State **two** disadvantages of using comparative bar graphs to present data (2mks)

b) Explain **three** physical conditions that favour tea growing in the Kenyan highlands (6mks)

c) i) Describe the stages involved in the processing of tea from processing to marketing (6mks)

ii) State **three** problems facing small scale tea farmers in Kenya. (3mks)

7. a) i) Name **three** ways in which minerals occur within the Earth's crust. (3mks)

ii) Identify the main minerals mined in the following areas of East Africa.

- Mwadui. (1mk)
- Kariandusi. (1mk)
- Bamburi. (1mk)

b) i) Apart from shaft method of mining give two types of underground mining. (2mks)

ii) Describe the deep shaft method of mining. (6mks)

c) Give **three** reasons why Kenya imports her oil in crude form (3mks)

d) Explain **four** ways in which mining contributes to the economy of Kenya. (8mks)

8a) i) Define dairy farming (2mks)

ii) Name **three** exotic dairy breeds reared in Kenya. (3mks)

b) Explain **three** reasons why dairy farming is least developed in Northern Kenya. (6mks)

c) Compare dairy farming in Kenya and Denmark under the following sub-headings:

- Breeds (2mks)
- Processing of milk (2mks)

d) Explain **three** measures the government of Kenya has undertaken to improve small dairy farming (6mks)

e) Give **four** benefits of dairy farming to the economy of Denmark. (4mks)

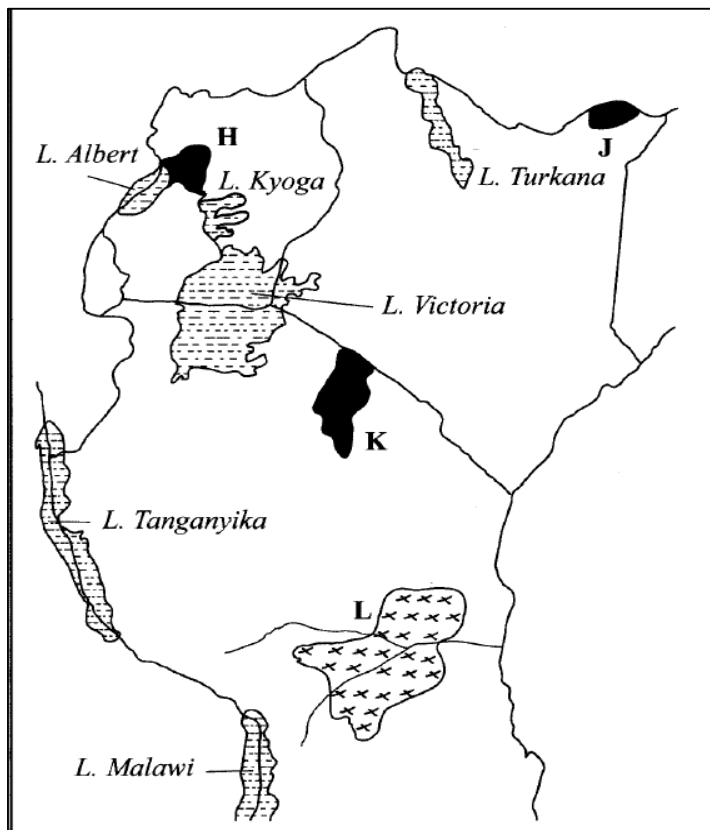
9 a) i) Apart from draining swamps, name **three** other methods used to reclaim land in Kenya (3mks)

ii) Identify **two** examples of swampy areas that have been reclaimed in Kenya. (2mks)

b) Give **four** physical factors that influenced the location of Mwea-Tebere irrigation scheme. (4mks)

- c) i) List **three** crops grown in the Mwea-Tebere irrigation scheme. (4mks)
- ii) State **four** problems experienced by farmers in Mwea-Tebere irrigation schemes. (4mks)
- d) Explain **four** differences between land reclamation in Kenya and Netherlands. (8mks)

10. a) i) What is a sanctuary. (2mks)
- ii) The map below shows the major game reserves and national parks in East Africa.



Name the;

- National Parks marked **H, J** and **K**. (3mks)
- Game reserve marked **L**. (1mk)

- b) Explain how the following factors affect wildlife industry in Kenya.

- i) Poaching. (2mks)
- ii) Drought. (2mks)

- c) i) Give **four** factors that hinder domestic tourism in Kenya. (4mks)
- ii) State **three** benefits of ecotourism in Kenya. (3mks)
- d) Explain **four** similarities between tourism in Kenya and Switzerland. (8mks)

Paper 1

SECTION A

Answer all questions in this section

1a Define the term environment 2mks

b. Name two divisions of physical geography 3mks

2.a Give the forces responsible for the spherical shape of the earth 2mks

b. State reasons why the interior of the earth is still hot 3mks

3 a. highlight the characteristics of the troposphere 2mks

b. state the factors that influence the amount of sunshine received on the earth's surface 3mks

4 a what is zero lapse rate 2mks

b. give the main zones of the atmosphere 3mks

5a. Give two types of igneous rocks 2mks

b. State any 3 uses of rocks 3mks

SECTION B

ANSWER QUESTION 6 AND ANY OTHER TWO IN THIS SECTION

6. Study the map of MUMIAS provided and answer the following questions

a. i. What is the magnetic variation of the map 2mks

ii. Name the title of the map 2mks

iii. Give any 4 types of natural vegetation found in the area covered by the map 4mks

b. Citing evidence from the map give any 2 economic activities taking place in the area covered by the map 4mks

d. citing evidence from the area covered by the map, give any 3 functions of Mumias town 6mks

e. Describe the Drainage of the area covered by the map 7mks

7a.i. Define a lake 2mks

ii. State reasons why some lakes are salty 4mks

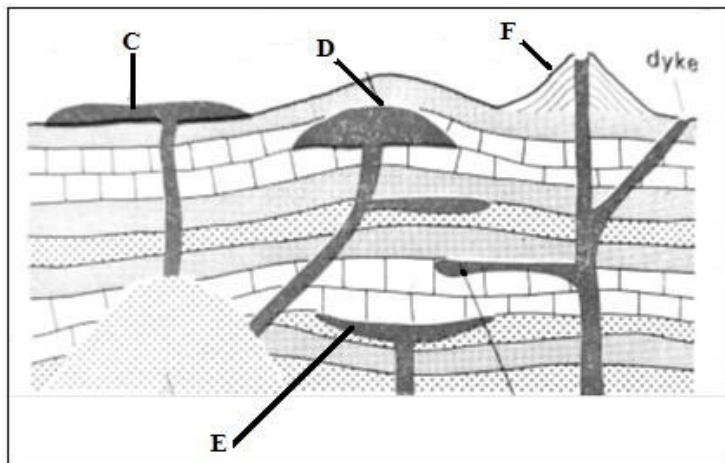
b. Explain the formation of a lake by faulting 6mks

c. Explain any 4 negative effects of human activities on lakes 8mks

D. Identify the significance of lakes 5mks

8 a. Differentiate between magma and lava. 2mks

.The diagram below shows some features of vulcanicity



i Identify the features marked C, D and E 3mks

(ii) Give three examples of the feature marked F in Kenya. 3mks

b. Describe how a lava plateau is formed 7mks

c. Explain the positive significance of vulcanicity to man 10mks

9.a What is weathering 2mks

b. Explain how the following factors affect weathering 6mks

i Nature of parent rock

ii. plants

iii. rock texture

c. Describe how exfoliation process occurs 7mks

d. suppose you are to carry a field study on weathering

i state three objectives you would formulate for the study 3mks

ii. Give three methods you would use to record data 3mks

iii. identify any problems you are likely to face during the field study 4mks+

10.a i What is glaciation 2mks

ii Describe the formation of glacier 7mks

b. Explain 3 types of moraine 6mks

c. Explain any 3 conditions that lead to glacial deposition 6mks

d. identify 4 positive significance of glaciation 4mks

PAPER 2

1a. Define forestry 2mks

b. Give 3 factors that determine the type and distribution of forests 3mks

2 a. Name two rivers that supply water to mwea Tebere irrigation scheme 2mks

b. State the significance of an irrigation scheme 3mks

3 a. Define the term fishing 2mks

b. State any 3 factors influencing fishing 3mks

4 a. What is a game sanctuary 2mks

b. Name three marine national park at the coast of kenya 3mks

5 a. What is land dereliction 2mks

b. State 3 measures that the kenya government has undertaken to rehabilitate derelict land in the country. 3mks

SECTION B

ANSWER QUESTION 6 AND ANY OTHER TWO QUESTIONS FROM THIS SECTION

6. The table below shows the production of maize in tones between 2010 and 2014 in four divisions of Baringo County.

Division	2010	2011	2012	2013	2014
Bartabwa	200	240	250	280	285
Barwesa	116	135	138	170	275
Kabartonjo	100	80	60	50	45
kipsaraman	40	30	45	30	25

(a)(i) Calculate the percentage increase of the total maize production in the four divisions between 2012-2013. 2mks

(ii) What is the difference in kilograms between the highest production and the lowest in five years. 2mks

(b)(i) Using a vertical scale of 1cm represents 50 tonnes, draw a group line graph to represent the data above. 7mks

ii) state three advantages of using group line graph. 3mks

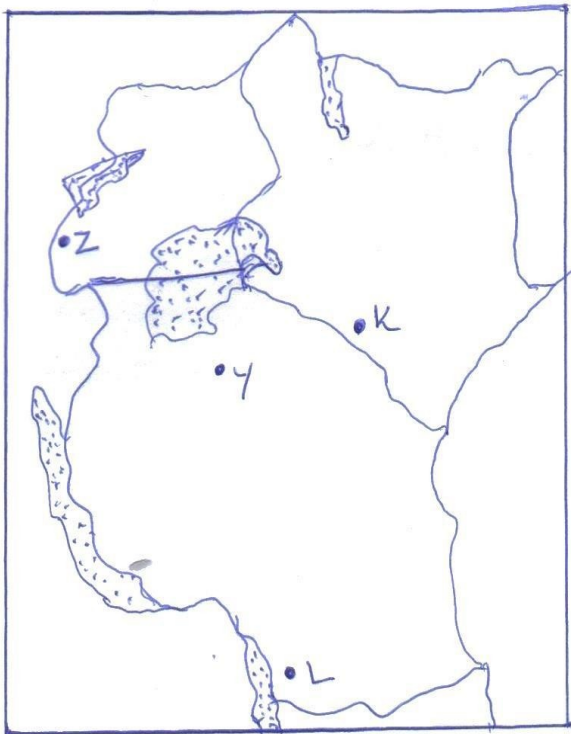
(c) State three climatic conditions favoring the growing of maize. 3mk

(d) Explain four problems facing small scale maize farmers in Kenya. 8mks

7. a I what are derived forests 2mks

- ii state the characteristics of planted forests 4mks
- b..Explain 4 the similarities between soft wood forests in kenya and Canada 8mks
- c .Explain 4 preblems facing forestry in both kenya and canada 8mks
- d.state measures taken by the government of kenya to conserve forests 3mks

8. The map below shows the location of some minerals in East Africa.



- a.Name the minerals mined in the areas marked K,L,Y. and Z. 4mks
 - (i) State two conditions that are necessary for the formation of petroleum. 2mks
 - (ii) List three ways in which open cast mining affects the environment. 3mks
 - (b) (i) Give two uses of diamond. 2mks
 - (ii) Explain three ways in which mining promotes industrialization in Kenya. 6mks
 - (c) Apart from industrialization, explain four ways in which mining contributes to the economy of Kenya. 8mks
9. a.Define industrial inertia 2mks
- b. Explain 5 importance of industrialization to the economy of the country 10mks
- C.Explain any 4 negaive effects of industrialization 8mks
- d Your class intends to have a field study in one of the industries,outline ways in which you will prepare for the study 5mks

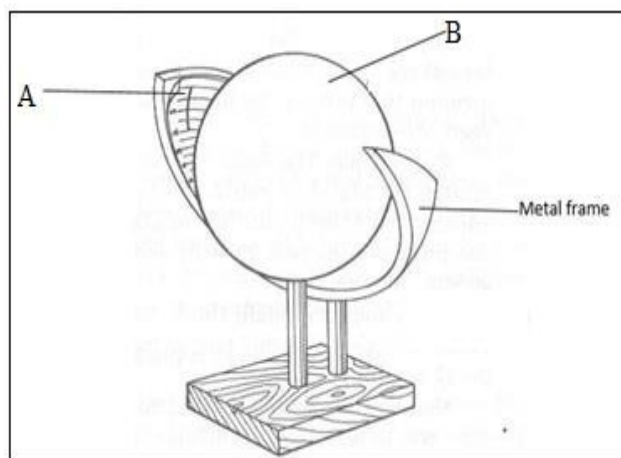
- 10.a i. Define Agriculture 2mks
- ii. Give the characteristics of dairy farming 5mks.
 - iii. state the advantages of mixed farming 3mks
- b. Explain how the following factors influence Agriculture 8mks
- i. Variation in Temperature
 - ii. Sunshine
 - iii. Winds
 - iv. Variation in rainfall
- b. Describe the cultivation of cocoa .7mks

Paper 1

SECTION A

Answer all questions in this section.

1. (a) What is a natural satellite? (2 marks)
- (b) State **three** characteristics of planets. (3 marks).
2. The diagram below shows one of the weather measuring instruments.



- (a) (i) Give the weather element measured using the above instrument. (1 mark)
- (ii) Name the parts marked **A** and **B**. (2 marks)
- (b) State **three** factors considered when siting a weather station. (3 marks)
3. (a) Name **two** fault scarps in Kenya. (2 marks)
- (b) Give **two** causes of earth movements. (2 marks)
4. (a) Identify **two** features formed by underground water. (2 marks)
- (b) State **three** conditions that encourage development of karst scenery. (3 marks)
5. (a) Differentiate between an ice sheet and an iceberg. (2 marks)
- (b) Give **three** features formed by glacial erosion in lowlands. (3 marks)

SECTION B

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

6. Study the map of Mumias 1:50,000 (sheet 101/2) provided and answer the following questions.
- (a) (i) Name **two** map sheets to the north of Mumias. (2 marks)
- (ii) Give six-figure grid reference of Khamashia school in the eastern side. (2 marks)
- (iii) Measure the length of the road **C532** from the junction with road **C533** to Musanda. Give your answer in kilometres. (2 marks)
- (b) (i) Give **two** methods that have used to represent relief in the area covered by the map. (2 marks)
- (ii) Identify **three** human made features in grid square **5037**. (3 marks)
- (c) Describe the drainage of the area covered by the map. (4 marks)
- (d) (i) Draw a rectangle 20 cm by 16 cm to represent the area enclosed by eastings **46** and **50** and northings **41** and **44**. (1 mark)
- (ii) In the rectangle, mark and name the following;
- Woodland vegetation (1 mark)
 - Bumala dam (1 mark)
 - Papyrus swamp (1 mark)
- (iii) Calculate the new scale of your map. (2 marks)
- (e) Citing evidence from the map, identify economic activities carried out in Mumias. (4 marks)
7. (a) (i) Give **two** examples of non-metallic minerals. (2 marks)
- (ii) Identify **two** ways in which rocks can be classified. (2 marks)
- (b) Describe how the following rocks are formed.
- (i) Hypabyssal rocks (4 marks)
- (ii) Mechanically formed sedimentary rocks (4 marks)
- (c) (i) Outline the changes that occur when rocks undergo metamorphism. (4 marks)

(ii) State **three** characteristics of volcanic rocks. (3 marks)

(d) Explain **three** significances of rocks to the economy of Kenya. (6 marks)

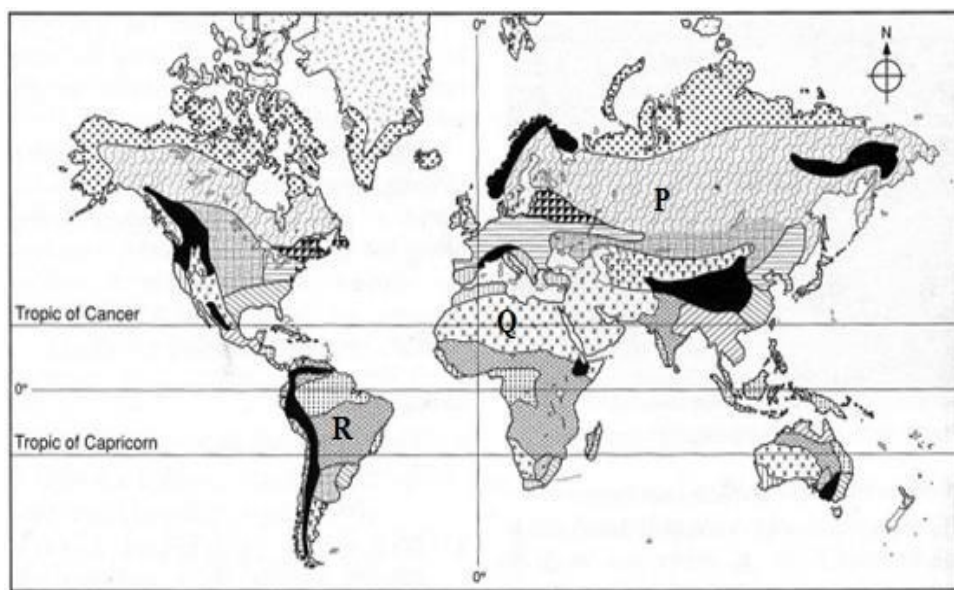
8. (a) (i) What is derived vegetation? (2 marks)

(ii) Explain how the following factors influence the distribution of vegetation.

- Relief (4 marks)

- Wind (4 marks)

(b) The map below shows the distribution of major vegetation regions of the world.



(i) Identify the vegetation regions marked **P** and **R**. (2 marks)

(ii) Explain how the vegetation in the region **Q** is adapted to the environment. (8 marks)

(c) State **five** uses of forests. (5 marks)

9. (a) Identify **three** types of river erosion. (3 marks)

(b) (i) Apart from waterfalls, give **two** other features of river erosion. (2 marks)

(ii) State **four** ways through which waterfalls are formed. (4 marks)

(c) With the aid of diagrams, describe how an ox-bow lake is formed. (8 marks)

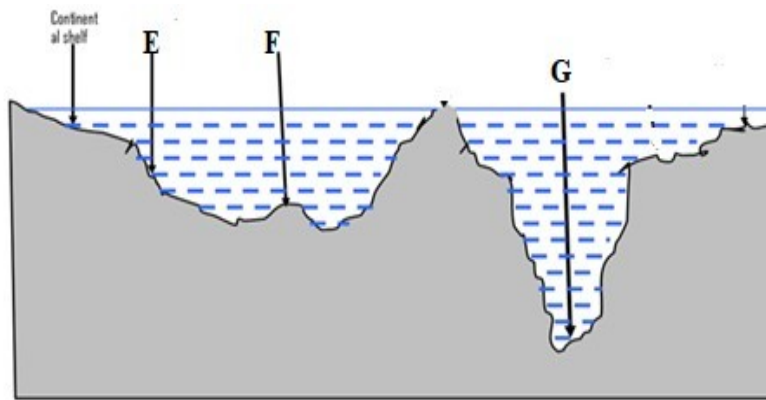
(d) (i) What is river rejuvenation? (2 marks)

(ii) Explain **three** causes of river rejuvenation. (6 marks)

10. (a) (i) Define the term ocean. (2 marks)

(ii) Name **three** main oceans on the earth's surface. (3 marks)

(b) The diagram below shows ocean topography. Use it to answer the questions that follow.



(i) Name the parts marked **E**, **F** and **G**. (3 marks)

(ii) State **three** characteristics of continental shelf. (3 marks)

(c) (i) Give **two** factors that determine the rate of wave erosion. (2 marks)

(ii) Describe how a wave-cut platform is formed. (7 marks)

(d) Members of your class are planning to carry out a field study on a submerged highland coast.

(i) Give **two** types of submerged highland coasts you're likely to visit.

(2 marks)

(ii) State **three** reasons why you would need a working schedule. (3 marks)

Paper 2

Section A: Answer All Questions in This Section

- 1.(a) What is Human Environment? (2Marks)
- (b) Identify areas of study under the Human Environment. (3 Marks)
- 2(a) Give two reasons why pastoralists keep large herds of animals. (2 Marks)
- b) Give three ways in which the government of Kenya assist nomadic pastoralists (3 Marks)
- 3(a) What is a polder? (2 Marks)
- (b) State three ways of land reclamation. (3 Marks)
- 4(a) State three problems facing crop farming in Kenya. (3 Marks)
- (b) Outline two problems facing coffee farming in Kenya (2 Marks)
5. (a) A photograph is divided into three main parts. Name them. (3 Marks)
- (b) State two limitations of using photographs. (2 Marks)

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

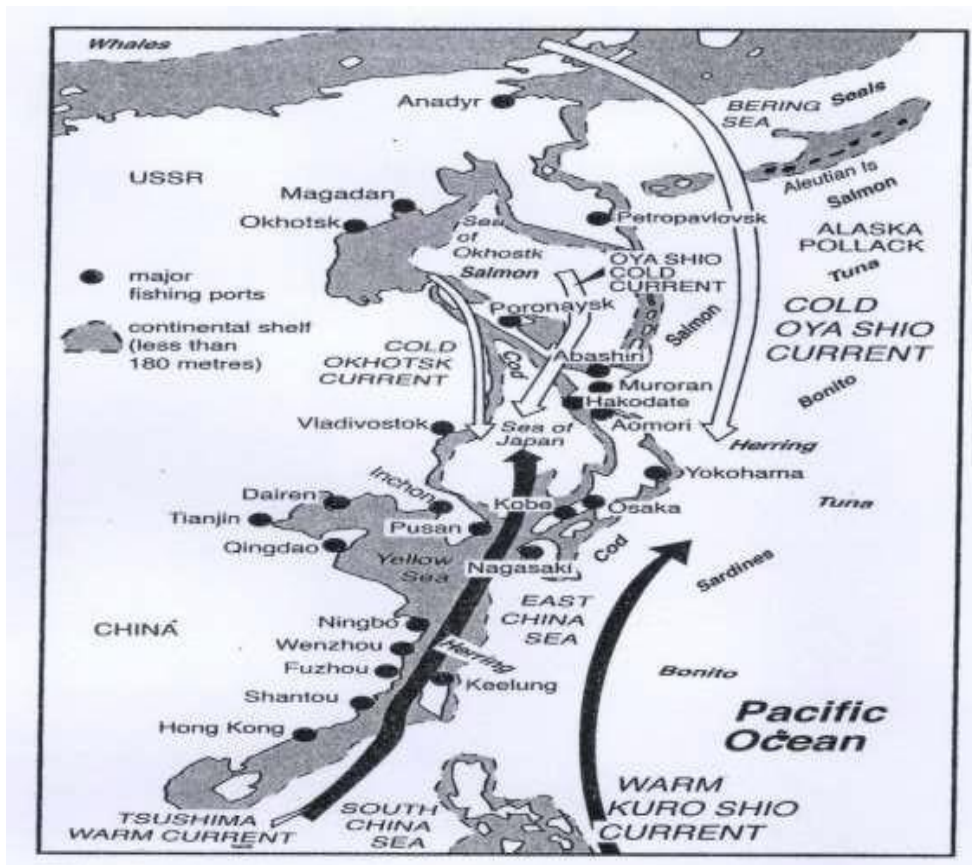
6. The table below shows the prices of sugar in Kenya shillings per ton in some countries in Africa. Use it to answer questions

YEAR	KENYA	UGANDA	TANZANIA	ZAMBIA
2014	93,400	61,923	67,102	84,556
2015	109,224	67,624	65,785	93,768
2016	110,897	65,170	90,647	86,236

- a) (i) Draw a divided rectangle 16cm long to represent the prices of sugar in the year 2016 (8Marks)
- (ii) State **two** advantages of using divide rectangle to present statistical (2Marks)
- (b) Give **three** physical factors that influence the growing of sugar cane in Kenya (3 Marks)
- (c). Describe the stages involved in processing of sugarcane at the factory (7Marks)
- d). State five challenges facing sugar farming in Kenya (5 Marks)
- 7(a) (i) Distinguish between a forest and forestry. (2Marks)
- (ii) Name **two** indigenous softwood trees species found in Kenya (2Marks)
- (b)(i) Mention 3 characteristics of planted forests. (3Marks)

- (ii) Name **two** forest reserves in West of the Rift valley of Kenya (2 Marks)
- b) (i)** State **four** characteristics of temperate hardwood forests. (4Marks)
- (ii) Explain any **three** problems which have limited exploitation of tropical hardwood forests in Africa (6Marks)
- c) Give the difference between exploitation of softwood forests in Kenya and Canada under the following headings:
- i) Trees species (2Marks)
- (ii) Mode of exploitation (2Marks)
- (iii) Marketing of products (2Marks)
- 8.a)** Define the term mineral (2Marks)
- b) i)** Name **two** areas in South Africa where diamond is mined (2Marks)
- ii)** Give **four** ways in which minerals occur (4Marks)
- c) i)** Explain **Three** negative effects of mining on the environment (6Marks)
- ii)** Identify any **two** main methods of mining (2Marks)
- iii)** Name a port through which minerals in East Africa are exported (1 Mark)
- d)** Explain **four** ways in which soda ash contributes to the economy of Kenya (8Marks)
- 9. (a) i)** Name **three** exotic breeds of beef cattle reared in commercial ranches in Kenya. (3Marks)
- (ii).** Explain **three** problems facing commercial beef farming in Kenya. (6 Marks)
- (b).** State **four** physical factors that favour dairy farming in the Kenya highlands (4Marks)
- (c) i)** Apart from fresh milk name four other dairy products (4 Marks)
- (ii)** Explain **four** ways in which dairy farming in Kenya is different from dairy farming in Denmark. (8Marks)

10. (a) The diagram below shows a fishing ground in the Pacific Ocean.



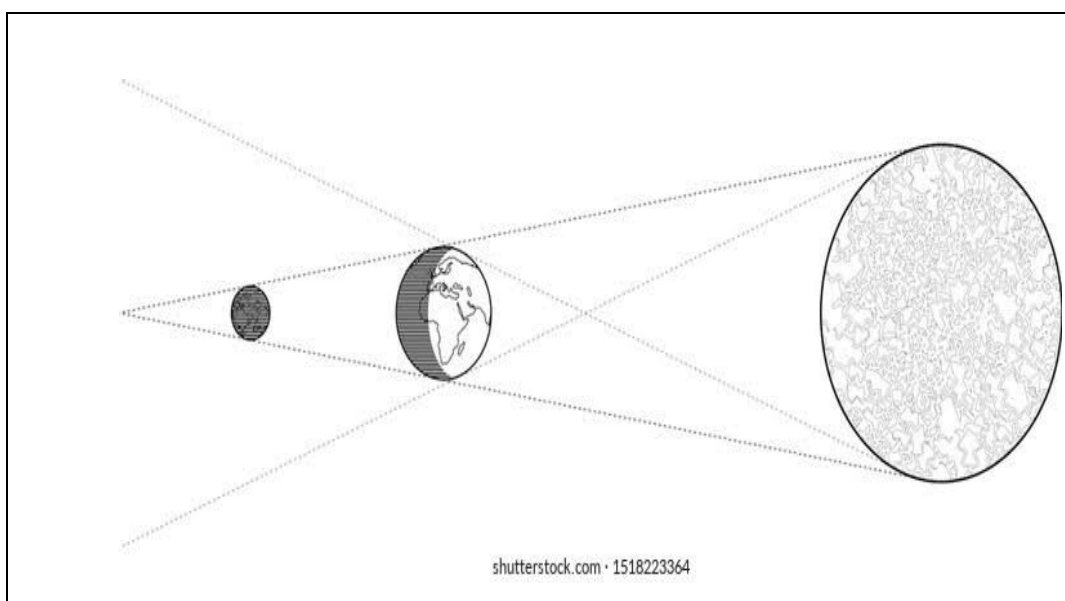
- (i) Identify the fishing ground shown above. (2 Marks)
- (ii) Name **two** types of fish species found in the fishing ground above. (2 Marks)
- (b) (i) Differentiate between fishing and fisheries. (2 Marks)
- (ii) Name **two** inland types of fisheries in Kenya. (2 Marks)
- (c) (i) Describe the long lining fishing method. (4 Marks)
- (ii) Explain **three** physical factors that have influenced the development of fishing in Japan. (6 Marks)
- (d) (i) State **four** problems that face Marine fishing in Kenya. (4 Marks)
- (ii) Give **three** ways of conserving fresh water fisheries in Kenya. (3 Marks)

SERIES 26
PAPER 1

SECTION A

Answer all the questions in this section

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



- (i) What type of eclipse is represented by the diagram? (1 mark)
 - (ii) Explain how the above eclipse occurs. (2 marks)
- (b) What is the time at Malindi on 40° E, when the time at Accra on Longitude 0° is 12.00 noon? (3 marks)
3. (a) Apart from fold mountains, name three other features resulting from folding. (3 marks)
(b) State two factors that determine the folding of crustal rocks. (2 marks)
4. (a) Give three reasons why some lakes in Kenya have saline water. (3 marks)
(b) Outline two economic uses of lakes. (2 marks)

5. (a) What is natural vegetation? (2 marks)
- (b) State three characteristics of the Mediterranean type of vegetation. (3 marks)

SECTION B

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

6. Study the map of Mumias 1:50,000 (Sheet 101/2) provided and answer the following questions.

- (a)(i) Identify two types of scales that have been used in the map extract. (2 marks)
- (ii) What was the magnetic declination of Mumias as at January 1965? (2mks)
- (iii) Name three districts covered by the map of Mumias. (2mks)
- (iv) Measure the length of the dry weather road from the junction at grid reference 6028 up to the bridge at grid reference 6434. Give your answer in KM (2mks)
- (b) (i) Reduce by two, the area to the East of Easting 50 and enclosed by Northing 30 to 40. (2 marks)

On it mark and name;

- River Nzoia (1mk)
- All weather road loose surface (1mk)
- District boundary (1mk)
- Seasonal swamp (1mk)

- (ii) Calculate the scale of the reduced area (2mks)
- (c) Describe the drainage of the area covered by the map. (5 marks)
- (d) Citing evidence from the map, identify two economic activities carried out in the area covered by the map. (4mks)

7. (a) (i) Define the term rock. (2mks)

(ii) Describe the following characteristics of minerals;

- Tenacity (2mks)
- Lustre (2mks)
- Cleavage (2 marks)

(b) (i) Name two examples of extrusive igneous rocks. (2mks)

(ii) Describe the formation of Plutonic rocks. (4mks)

(c) Explain three significance of rocks to the economy of Kenya. (6 marks)

(d) Your class is planning to carry out a fieldwork on rocks around your school.

(i) Outline two activities you would engage in before the study. (2 marks)

(ii) State three challenges you are likely to face during the field study. (3 marks)

8. (a) (i) Outline any two types of river erosion. (2 marks)

(ii) State three factors that influence river erosion. (3 marks)

(b) Describe how the river erodes through the following processes.

(i) Hydraulic action. (4 marks)

(ii) Solution (2 marks)

(c) Describe how the following features are formed.

(i) Interlocking spurs. (4 marks)

(ii) Natural levees. (4 marks)

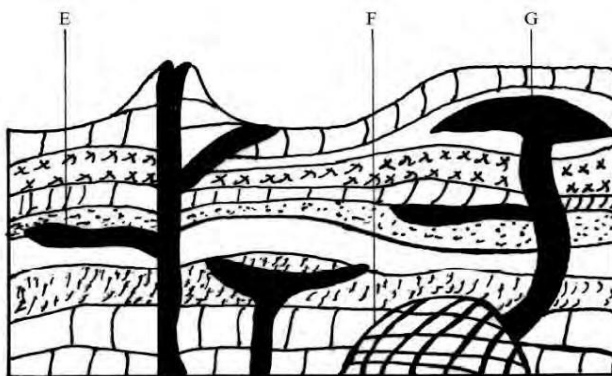
(d) Explain three negative effects of rivers to the human environment. (6 marks)

9. (a) (i) Differentiate between Vulcanicity and Volcanicity. (2 marks)

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

(b) The diagram below shows some intrusive features formed by vulcanicity.

Use it to answer the questions that follow.



(i) Name the features marked E, F and G. (3 marks)

(ii) Explain how the feature marked E is formed. (4 marks)

(c) Students carried out a field study on volcanic rocks.

- (i) Give four reasons why it is necessary to collect rock samples during such a field study. (4 marks)
 - (ii) Outline four follow up activities the learners would be engaged in after the field study. (4 marks)
- (d) Give four causes of earthquakes. (4 marks)
10. (a) (i) What is a soil catena? (2 marks)
- (ii) Give three factors that determine the colour of soil. (3 marks)
- (iii) State three ways in which mulching helps in soil conservation. (3 marks)
- (b) Explain how the following farming practices cause soil erosion.
- (i) Burning (4 marks)
 - (ii) Over cultivation (4 marks)
- (c) Give two economic uses of soil (2 marks)
- (d) You are supposed to carry out a field study of an eroded area.
- (i) State three methods you would use to control soil erosion. (3 marks)
 - (ii) Give two disadvantages of using secondary sources of collecting data in this kind of study. (2 marks)
 - (iii) Identify two methods you would use to record the observations. (2 marks)

PAPER 2

SECTION A: (25MARKS):

Answer ALL questions in this section:

1. (a) Define the term Geography. (2mks)
(b) Name three divisions of human and economic geography. (3mks)
2. (a) Name two forest reserves in Kenya. (2mks)
(b) State three characteristics of equatorial rain forest. (3mks)
3. (a) State three physical conditions that favour large scale sugarcane growing in Kenya. (3mks)
(b) Name two areas where sugarcane is grown in large scale in Kenya. (2mks)
4. (a) Name two underground methods of mining. (2mks)
(b) Name three ways in which derelict land can be rehabilitated. (3mks)
5. (a) Define eco-tourism (2mks)
(b) State three measures being taken in Kenya to promote domestic tourism. (3mks)

SECTION B: (75 MARKS):

Answer question 6(compulsory) and any other two.

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

Mode of transport/year	2006	2007	2008	2009
Road	100,000	50,000	150,000	200,000
Air	600,000	650,000	700,000	800,000
water	200,000	150,000	100,000	50,000

- (a) (i) State two reasons why tourists preferred air transport over the other modes of transport over the period. (2mks)
- (ii) Calculate the percentage increase in the number of tourist between the year 2008 and 2009. (3mks)

- (iii) Using a scale of 1cm to represent 100,000 tourists, draw a compound bar graph to represent the number of tourists who visited Kenya using the different modes of transport. (9mks)
- (b)(i) Explain three roles played by transport in the economy of Kenya. (6mks)
- (ii) Name one highway created in Africa to ease transport across the continent. (1mk)
- (c) Four form students from St. Christopher's secondary School visited Kisumu Airport for a field study.
- (i) Identify two methods they used to record their data. (2mks)
- (ii) Give two follow up activities they engaged in after the visit; (2mks)
7. (a) (i) Differentiate between land reclamation and land rehabilitation. (2mks)
- (ii) Give three ways in which the government is trying to rehabilitate overgrazed lands in Kenya (3mks)
- (b) Explain three conditions that favour irrigation farming in Kenya. (6mks)
- (c)(i) Name three polders that make up the Zuyder Zee reclamation project in the Netherlands. (3mks)
- (ii) Describe the stages of reclamation of land from the sea in the Netherlands. (6mks)
- (d) Your school intends to carry out a field study in Mwea Tebere irrigation scheme.
- i. Identify the two types of hypothesis you would develop for the study. (2mks)
- ii. Give three reasons why you would need to sample the area of study. (3mks)
8. (a)(i) What is fossil fuel? (2mks)
- (ii) List two fossil fuels that have recently been discovered in Kenya (2mks)
- (iii) State three formations in which mineral ores occur. (3mks)
- (b) Explain how the following factors influence mining.
- (i) Value of minerals. (2mks)
- (ii) Transport (2mks)
- (c) (i) Describe how solution mining method is carried out; (5mks)
- (i) Give three negative effects of mining to the environment. (3mks)
- (d) (i) Name two areas where diamond is mined in South Africa. (2mks)

- (ii) Describe how diamond is processed. (4mks)
9. (a)(i) Name three trees species found in the soft wood forest of Canada. (3mks)
- (ii) State three physical factors that favour the growth of soft wood forest in Canada. (3mks)
- (b) State four characteristics of softwood forest in Canada. (4mks)
- (c) Give three reasons why it is necessary to carry out afforestation programs in Kenyan forests. (3mks)
- (e) State the difference between softwood forest in Canada and Kenya under the following subheadings. (6mks)
- (i) Tree species
 - (ii) Harvesting
 - (iii) Mode of transport of logs
- (e) Explain three significance of forests in Kenya to human activities. (6mks)
- 10.(a)(i) Name two types of fishing. (2mks)
- (ii) State three reasons why marine fisheries are under developed in Kenya. (3mks)
- (iii) Identify four solutions to the problems facing the fishing industry in Kenya. (4mks)
- (b) (i) Give two modern methods of fish preservation. (2mks)
- (ii) Describe the basket method of fishing. (5mks)
- (c)(i) Name three countries in the North West Atlantic fishing ground. (3mks)
- (ii) Compare fishing in Kenya and Japan under the following topics:
- a) Continental Shelf (2mks)
 - b) Coastline (2mks)
 - c) Ocean Currents (2mks)

SERIES 27

PAPER 1 SECTION A (25marks)

Answer all questions in this section

1. (a) What is the relationship between Geography and Mathematics? (2marks)
(b) State three reasons why it is important to study geography. (3marks)
2. (a) Name two layers of discontinuity that are part of the internal structure of the earth. (2marks)
(b) State three characteristics of the mantle. (3marks)
3. State four factors that influence mass wasting. (4marks)
4. (a) Explain two reasons why wind is a dominant agent of erosion in arid areas. (4marks)
(b) Identify two features that result from water action in arid areas. (2marks)
5. (a) Name two types of boundaries according to plate tectonic theory. (2marks)
(b) Give three effects of movement of tectonic plates. (3marks)

SECTION B (75marks)

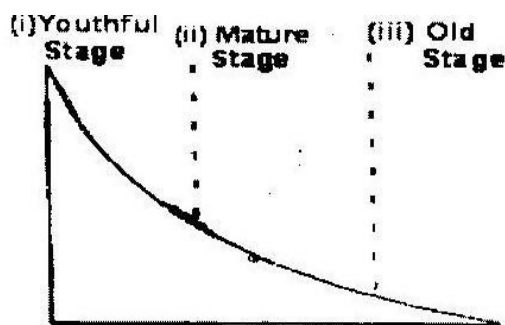
Answer question 6 and any other two questions in this section

Study the map of Mumias (1:50,000) sheet 101/2 provided and answer the following questions.

6. (a)(i) Give the magnetic variation of the area covered by the map. (2marks)
(ii) Give two scales used on the map extract. (2marks)
(iii) Measure the distance of the Dry-weather road to Musanda from the bridge in grid square 6434. Give your answer in Kilometers. (2marks)
- (b) (i) Name two districts covered by the map. (2marks)
(ii) Describe the drainage of the area covered by the map. (6marks)
- (c) (i) Using a vertical scale of 1cm to represent 40Metres, draw a cross-section along Northing 40 from Easting 51 to Easting 59. (4marks)
(ii) On the cross-section mark and label: (3marks)
 - Riverine tress
 - River Lari
 - All-weather road –Loose surface
- (d) Citing evidence from the map, give two social services offered in the area covered by the map. (4marks)

7. (a)(i) Define the term folding. (2marks)
- (ii) State three factors that determine the folding of rocks. (3marks)
- (b) Name the countries where the following young fold mountains are found.
- (i) Andes (1mark)
- (ii) Rockies (1mark)
- (iii) Alps (1mark)
- (iv) Himalayas. (1mark)
- (c) (i) With the aid of diagrams, describe the formation of fold mountains. (8marks)
- (ii) Explain four effects of Fold Mountains to human activities. (8marks)

8. (a)(i) Name two sources of rivers. (2marks)
- (ii) The diagram below shows the three stages of the long profile of a river.



- Give two features formed by the rivers in each of the three stages. (6marks)
- (b) Describe the processes by which a river transports its load (6marks)
- (c) Describe each of the following drainage patterns.
- (i) Dendritic pattern. (3marks)
- (ii) Trellis pattern. (3marks)
- (d) You are required to carry out a field study on the materials deposited by a river.

(i) State two methods you would use to collect data. (2marks)

(ii) State three advantages of studying the work of rivers through fieldwork. (3marks)

9. (a)(i) Give three sources of underground water. (2marks)

(ii) State three ways through which a spring can be formed. (3marks)

(b) Explain three reasons why Karst region has few settlements. (6marks)

(c) Describe how the following features in limestone areas are formed.

(i) Grike and Clint (4marks)

(ii) Uvala (5marks)

(iii) Stalagmite (5marks)

10. (a) Name two types of emergent coasts (2marks)

(b) Explain how the following factors determine the effectiveness of wave erosion along a coast

(i) Nature of the material transported by waves (4marks)

(ii) Nature of the coastal rocks (4marks)

(c) With the aid of labeled diagrams, describe the process through which a stack is Formed (5marks)

(d) You are planning to carry out a field study on the depositional features along the coast of Kenya

(i) State five objectives you would formulate for your study (5marks)

(ii) Give five methods you would use to record the information collected (5marks)

PAPER 2 SECTION A

Answer all the questions in this section

- 1.a) Distinguish between **forest** and **forestry** (2mks)
(b) Identify **three** activities that may be undertaken in your school to conservetress (3mks)
- 2.a) State **two** benefits of ecotourism. (2mks)
(b) Give **three** reasons why domestic tourism should be encouraged in Kenya. (3mks)
- 3.a) Name **two** non- food agriculture industries in Thika. (2mks).
(b) State **three** characteristics of Jua Kali industry in Kenya. (3mks)
- 4.a) Define **nomadic** pastoralism. (2mks)
(b) Give **three** breeds of beef cattle reared in Kenya. (3mks)
- 5.a) List **two** social factors that influence that influence agriculture in Kenya (3mks)
(b) State **three** physical factors that influence flower farming around Lake Naivasha. (3mks)

SECTION B

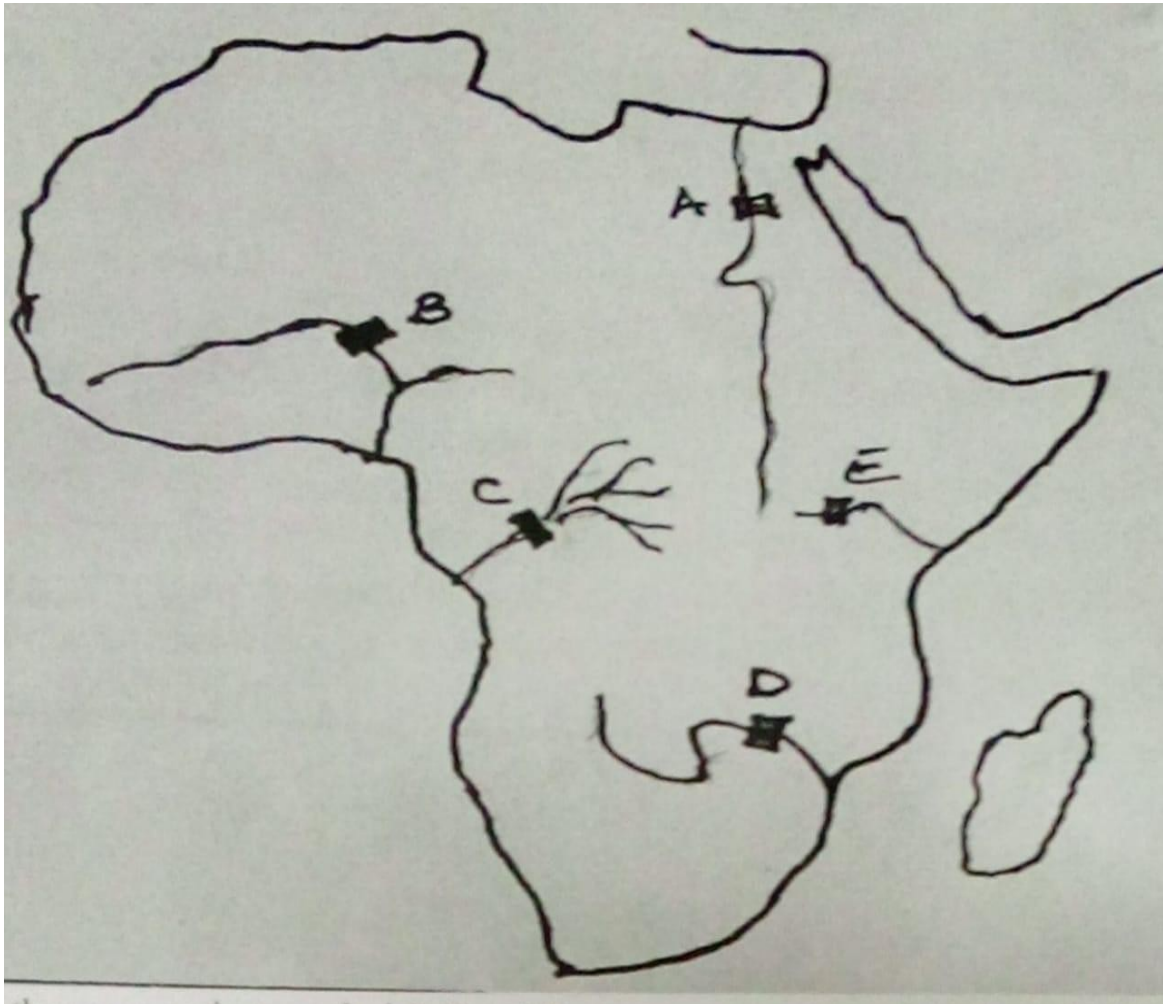
Answer question six and any two questions from this section

- 6) The table below shows four principle crops produced in Kenya in 2000 and 2001. Use it to answer Questions a and b.

Crop	AMOUNT IN METRIC TONS	
	2000	2001
Wheat	70,000	130,000
Maize	200,000	370,000
Coffee	98,000	55,000
Tea	240,000	295,000
TOTAL	608,000	850,000

- (a)(i) Which crop had the highest change in production between 2000 and 2001. (2mks)
(ii) Calculate the percentage increase in crop production in Kenya between 2000 and 2001. (2mks)
- (b) Using a scale of 1cm to represent 100,000 metric tons, draw compound bar graphs to represent data On the table above. (7mks)
- (c)(i) What is dairy farming? (2mks)
(ii) Name two exotic dairy breeds of cattle reared in Kenya. (2mks)
(iii) Explain the problems facing dairy cattle farming in Kenya. (4mks)
- (d) Explain why dairy farming is highly developed in Denmark than Kenya. (6mks)
- 7.a)(i) What is mining? (2mks)
(ii) Give **three** formations which minerals exist in the earth's crust. (3mks)
- (b) Describe how the open cast mining is carried out. (4mks)
- (c) Explain **four** significance of gold mining to the economy of South Africa. (8mks)
- (d) Explain four problems facing the mining industry in Kenya. (8mks)
- 8.a)(i) Differentiate between land reclamation and land rehabilitation. (2mks)
(ii) State **three** methods of land reclamation in Kenya. (3mks)
- (b)(i) State **four** physical factors that influence the location of Mwea Tabera irrigation scheme (4mks)
(ii) Explain **four** problems facing Mwea Tabera irrigation scheme. (8mks)
- (c)(i) Name **two** major land reclamation projects that were undertaken in Netherlands (2mks)
(ii) Give **three** differences between land reclamation in Kenya and the Netherlands (6mks)
- 9.a) Define international trade. (2mks)
- (b) Name **three** major visible imports from Europe to Kenya. (3mks)
- (c) State **four** factors that influence external trade in Kenya. (4mks)
- (d) Explain four measures which Kenya may take to reduce the unfavorable balance of trade. (8mks)
- (e) Form four students are set to carry out a field study in one of the major towns around the school.
 - (i) List any **three** forms of internal trade they are likely to identify. (3mks)
 - (ii) What could be the advantage of using observation as a method of data collection (3mks)
 - (iii) State two reasons for studying internal trade through fieldwork. (2mks)

10.a)The map below shows hydroelectric power projects in Africa. Use it to answer questions that follow



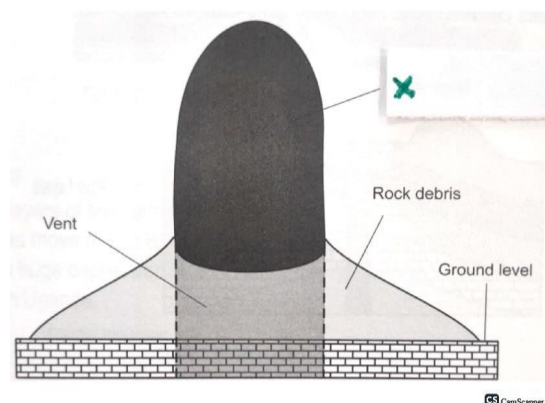
- (i) Name the power projects marked A, B and C. (3mks)
- (ii) Identify four main hydro-electric stations along the river E (4mks)
- b(i) Apart from providing electric power state four benefits of the dams along River Tana (4mks)
- (ii) Explain **four** physical factors that favors **HEP** generation on river Tana. (8mks)
- (c) Explain **three** ways in which energy contributes to the growth of the economy. (6mks).

SERIES 28
Paper 1

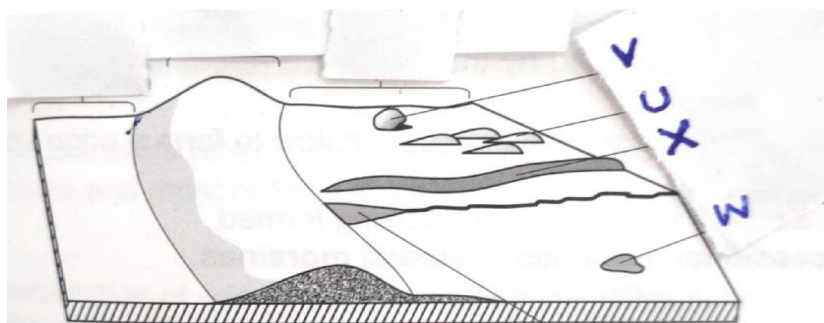
SECTION A

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

1. (a) State **three** reasons why it is important to study Geography. (3 marks)
(b) What is the relationship between Geography and Agriculture? (2 marks)
2. (a) What is weather forecasting? (2 marks)
(b) List **three** elements of weather. (3 marks)
3. Study the diagram below and use it to answer questions (a) and (b) below:



- (a) Identify the feature marked **X**. (1 mark)
 - (b) Describe how the feature is formed. (4 marks)
4. (a) What is karst landscape? (2 marks)
(b) State **three** factors that influence the occurrence of underground water. (3 marks)
5. The diagram below shows lowland glaciated features. Study the diagram and answer questions (a) and (b).



CS CamScanner

- (a) What is an outwash plain? (2 marks)
- (b) Name the features marked **U**, **V** and **W**. (3 marks)

SECTION B

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

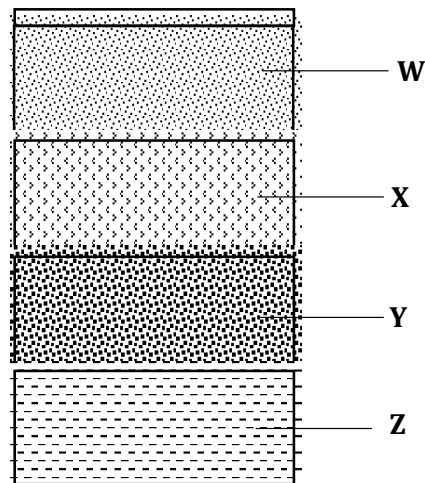
6. Study the map of Nyeri **1:50000** (sheet **120/4**) provided and answer the following questions
- (a) (i) Name the **two** districts in the northern part of the map extract. (2 marks)
- (ii) Give the latitudinal extent of they are covered by the map. (2 marks)
- (iii) According to the marginal information provided in the map, what is the magnetic variation of the area when the map was drawn. (2 marks)
- (iv) Calculate the area of Nyeri forest on the map. Give your answer in square kilometres. (2marks)
- (b) Describe drainage of the area covered by the map. (5 marks)
- (c) Citing evidence from the map, explain **three** factors that favours the growing of coffee in Nyeri area. (6 marks)
- (c) Explain **three** factors that have influenced settlement in the area covered by the map. (6marks)
7. (a) (i) Differentiate between rocks and minerals. (2 marks)
- (ii) Describe the following characteristics of minerals.
- Color. (2 marks)
 - Hardness. (2 marks)
- (b) (i) What are igneous rocks? (2 marks)

- (ii) State **three** differences between plutonic and volcanic rocks. (3 marks)
- (c) Describe the formation of the following rocks.
- (i) Mechanically formed sedimentary rocks. (3 marks)
- (ii) Chemically formed sedimentary rocks. (3 marks)
- (d) (i) Identify the missing type of rocks. (3 marks)

Original rock	Metamorphic rock
Limestone	(i)
(ii)	Graphite
Granite	(iii)

- (ii) Suppose you were to carry out a field study on rocks at the Kenyan coast. State **two** reasons as to why you would ask for permission from the school administration. (2marks)
- (iii) What reasons would you give for the widespread of sedimentary rocks at the coastal plain? (3marks)
9. (a) (i) Name **three** types of river erosion (3 marks)
- (ii) Describe the following river erosional processes.
- Abrasion (4 marks)
 - Solution (3 marks)
- (b) (i) What is river rejuvenation (2 marks)
- (ii) Identify **three** features that result from river rejuvenation. (3 marks)
- (c) (i) Name **two** types of submerged highland coasts. (2 marks)
- (ii) State **two** factors influencing deposition by ocean waters. (2 marks)
- (d) Explain **three** significance of oceans to human activities. (6 marks)
10. (a) (i) Differentiate between soil texture and soil structure. (2 marks)
- (ii) Apart from living organisms, name **four** other components of soil. (4 marks)
- (b) The diagram below shows different layers of soil. Use it to answer questions (b) (i), (ii) and (iii)

✓ ✓ ✓ ✓ ✓ ✓ ✓



- (i) Name the soil layers **X**, **Y** and **Z** (3 marks)
- (ii) Give **two** main processes of soil formation which takes place in horizon W. (2 marks)
- (iii) State **four** characteristics of soil in horizon X. (2 marks)
- (c) Explain how the following farming practices may result to loss of soil fertility
 - (i) Continuous irrigation. (2 marks)
 - (ii) Over grazing. (2 marks)
 - (iii) Over cultivation. (2 marks)
- (d) Explain ways in which natural vegetation may prevent soil from erosion. (4 marks)

GEOGRAPHY (312/2)

PAPER 2

SECTION A

(Answer all questions in this section)

1. (a) What is horticulture? (2mks)
- (b) State three advantages of using green house in horticulture farming (3mks)
2. (a) Name two minerals mined in South Africa (2mks)
- (b) Give three problems facing mining industry in South Africa (3mks)
- 3.a) State **any two** problems facing wildlife conservation (2mks)
- b) Give any **three** historical sites at the Kenyan coast that are tourist attractions (3mks)
4. (a) State three factors necessary for a land to be reclaimed (3mks)
- (b) Give three uses of polder land in Netherlands (3mks)
5. Give four ways in which Kenya will benefit as a result of oil discovery and exploration in Turkana County (4mks)

SECTION B

(Answer Question 6 and ANY OTHER TWO)

.6. World Wheat production by region.

Region	% of Wheat Production
Asia	35
Europe	22
North America	19

USSR	16
Others	8

- a) Draw a Pie Chart to illustrate the information given above. *(5mks)*
- b) Name
- i) **Two** districts in Kenya where wheat is grown on Commercial Scale. *(2mks)*
- ii) **Two** Wheat producing provinces of Canada. *(2mks)*
- c) Explain **three** conditions that favour Wheat farming in Kenya. *(6mks)*
- d). Explain **five** factors which enable Canada to produce more Wheat than Kenya. *(10mks)*

- 7.(a) i) Define the term deforestation. *(2mks)*
- (ii) State the causes of deforestation? *(4mks)*
- (b) Outline the stages involved in the extraction of timber from natural forests. *(4mks)*
- (c) Explain **four** characteristics of the tropical rain forest. *(8mks)*
- (d) Describe the ecological uses of forests. *(7mks)*

- 8.(a) Name **four** ways in which minerals occur. *(4mks)*
- (b) State the factors affecting exploitation of minerals. *(5mks)*
- (c) i) Name **one** area where gold is mined in South Africa. *(1mk)*
- (ii) Describe methods of mining gold in South Africa. *(5mks)*
- (d) i) What are the problems of mining in South Africa? *(5mks)*

(ii) In what ways had gold contributed to the economic growth of South Africa? (5mks)

9. (a) i) Define the term Nomadic Pastoralism. (2mks)

(ii) Name **two** Nomadic Pastoralists Communities in Africa. (2mks)

(b) Give **five** factors that have favoured the development of beef farming in Argentina. (5mks)

(c) State **six** problems that face Nomadic Pastoralists in Africa. (6mks)

(d) Explain **five** changes that are taking place to improve Nomadic Pastoral area in Kenya.

(10mks)

10. (a) Define the term fisheries. (1mk)

(b) (i) State **three** human conditions necessary for fishing. (3mks)

(ii) Name **two** examples of anadromous fish. (2mks)

(c) Explain how the line-fish method of fishing is used. (4mks)

(d) (i) Explain the reasons why the North East Atlantic is extensive and highly developed.

(10mks)

(ii) State the problems facing fishing in Marine fishing in Kenya. (5mks)

SERIES 29

PAPER 1

- 1.(a) State how the Coriolis force affects the direction of wind. **(2 marks)**
- (b) Give **three** characteristics of cumulonimbus clouds **(3 marks)**
2. The table below shows the mean monthly rainfall and temperature for station

Months	J	F	M	A	M	J	J	A	S	O	N	D
Mean monthly rainfall (mm)	15	8	8	13	31	51	51	51	28	25	18	20
Mean monthly temperature ^o C)	-22	-18	-12	-1	4	10	11	11	5	-11	-18	-22

Describe the climatic characteristics represented by the mean monthly rainfall and temperature table station X. **(5 marks)**

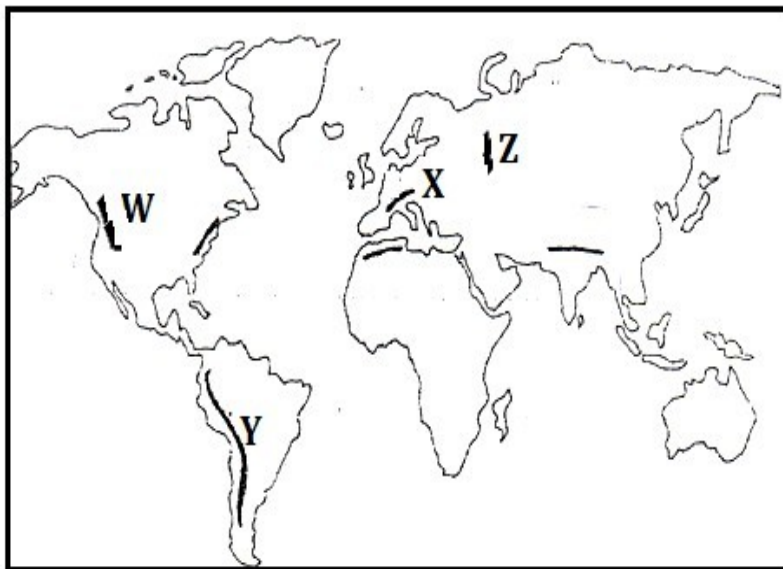
3. (a) What is an earthquake **(2 marks)**
- (b) Identify the scales used to measure; **(2 marks)**
- (i) The intensity of earthquake
- (ii) The magnitude of earthquake
4. (a) Name **three** types of boundaries according to the plate tectonic theory **(3 marks)**
- (b) Give **three** effects of the movement of tectonic plates. **(3 marks)**
5. (a) State **three** conditions that influence the process of solifluction in mass wasting. **(3 marks)**
- (b) Give **two** negative effects of mass wasting on the physical environment **(2 marks)**

SECTION B

Answer question 6 and ANY OTHER TWO questions from this section.

6. Study the map of Mumias 1:50, 000 (Sheet 101/2) provided and answer the following questions.
- (a) (i) What type of map is the Mumias map? **(1 mark)**
- (ii) State **two** methods used to represent relief in the area covered by the map **(2 marks)**

- (iii) Give the general direction of flow of R. Nzoia. **(1 mark)**
- (b) (i) Convert the linear scale of the map into a statement scale. **(2 marks)**
- (ii) Give **six** figure grid reference of Air Photo Principal Point with Sortie No. 92/KE/4 157 in the southern part of the map. **(2 marks)**
- (c) On the graph paper provided, reduce the area enclosed by Eastings 50 to 56 and Northings 38 to 44 by a scale factor of 2. **(2 marks)**
- (i) On the new map, accurately mark the following;
- (a) All weather road loose surface **(1 mark)**
 - (b) Provincial boundary **(1 mark)**
 - (c) Bumala Dam **(1 mark)**
- (ii) Calculate the new scale of the reduced map **(2 marks)**
- (d) Describe the distribution of settlements in the area covered by the map **(6 marks)**
- (i) Citing evidence from the map, explain two factors influencing trade in the area covered by the map **(4 marks)**
7. (a) (i) Differentiate between faulting and folding. **(2 marks)**
- (ii) Name **five** features formed as a result of faulting. **(5 marks)**
- (b) The world map below shows the location of some fold mountains. Use it to answer question (a) (i)



- (i) Identify the fold mountains marked **W, X, Y** and **Z** **(4marks)**
- (ii) Citing relevant examples, explain how Fold Mountains were formed according to the plate tectonics theory. **(6 marks)**

(c) Explain the effects of Fold Mountains on the following

Transport. (2 marks)

Agriculture. (2 marks)

Tourism. (2 marks)

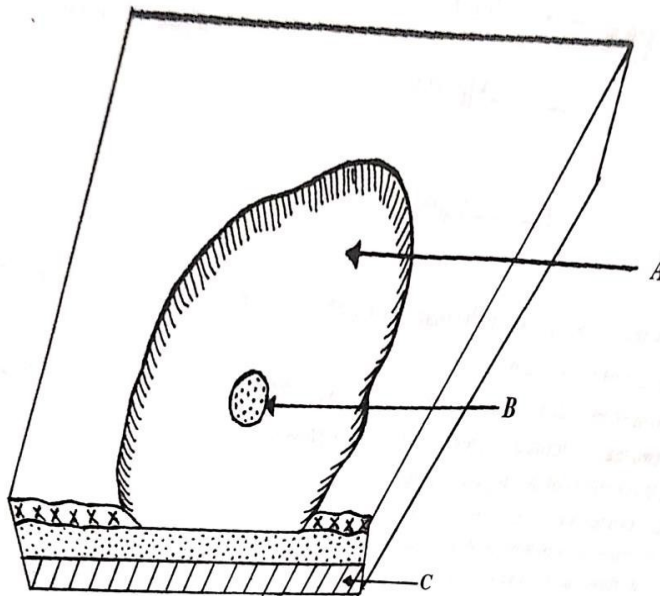
Mining. (2 marks)

8.(a) Describe the following wind erosion processes

(i) Abrasion (2 marks)

(ii) Deflation (2 marks)

(b) Use the diagram below to answer the following questions.



(i) Name the feature marked A and B (2 marks)

(ii) State **three** significance of feature A to the human environment (3 marks)

c) i) Explain how a canyon is formed (5 marks)

ii) Using well labelled diagrams describe how Zeugen are formed (8 marks)

(d) State **three** characteristics of a barchan (3 marks)

9. (a) (i) Define a coastline (2 marks)

(ii) Give **three** types of a coral reefs (3 marks)

(b) i) Describe how a Tombolo is formed (4marks)

- (ii) Using well labelled diagrams describe how a stack is formed **(8 marks)**
- (c) (i) Give **three** factors that determine the size of a wave in the open sea. **(3 marks)**
- (ii) State **three** uses of coral reefs **(3 marks)**
- (iii) Students from Mombasa high school carried out a field study along the coastline of Indian Ocean. Give the reason for carrying the following items **(2 marks)**
- Stop watch
- Camera
10. (a) (i) State **three** characteristics of a maximum thermometer. **(3 marks)**
- (ii) Explain how a maximum thermometer is used to measure temperature **(6 marks)**
- (b) Describe;
- (i) How Lake Victoria influences the temperature of the surrounding region. **(4 marks)**
- (iii) How south east trade wind. Influence temperature at the coast. **(2 marks)**
- (c) (i) Explain **two** ways in which vegetation adapts to hot climate. **(4 marks)**
- (ii) Describe the characteristics of equatorial climate **(6 marks)**

PAPER 2

SECTION A:

Answer all the questions in this section

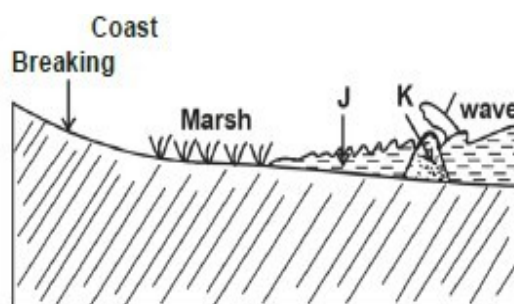
- 1a) What is the meaning of human geography (2marks)
- b) Give three sub division of human geography (3marks)
- 2a) State the characteristics of shifting cultivation. (2 marks)
- b) Identify **three** problems facing nomadic pastoralists in Kenya (3marks)
- 3a) Name **three** ways in which placer method of mining can be done. (3Marks)
- b) State **two** problems facing iron mining in lake Magadi (2 marks)
- 4a) Give **two** counties in the Rift Valley region of Kenya where cattle ranching is practiced (2marks)
- b) Name **three** exotic breed reared by beef farmers in Kenya (3marks)
- 5a) Give **three** reasons why it is necessary to study geography through fieldwork (3marks)
- ii) Give **two** disadvantages of using cumulative bar graph in data presentation. (2marks)
- b) Name **five** areas in Kenya where horticulture is practiced (5marks)
- c) Explain **four** reasons why horticultural produce is exported by air to the European market. (8marks)
- 7 a) Give **two** varieties of tea grown in Kenya (2marks)
- b) Name **two** counties in central Kenya where tea is grown in large scale (2 marks)
- c) State **five** physical conditions required for growing of tea in Kenya (5 marks)
- d) Describe the stages of tea processing to the time it is ready for marketing (6 Marks)
- e) Explain **four** problems experienced in small scale tea farming in Kenya . (8marks)
- f) Give **two** ways through which coffee farming in Kenya differs from coffee in Brazil (6Marks)

8. (a).Define the term indigenous forests (2marks)
- (b).Outline how the following factors influences the distributions of forests
- (i) Temperature (3marks)
- (ii) Human activities (3Marks)
- b (i) State **three** problems of exploitation of tropical rain forest in Africa .(3Marks)
- ii) Explain the cause of forest depletion in Kenya today. (6Marks)
- C i) Give **three** problems Canada faces exploiting her forests (3Marks)
- ii) Name **three** major lumbering provinces in Eastern Canada (3Marks)
- iii) Give **two** differences between forestry in Kenya and Canada (4Marks)
- 9 ai) Differentiate between land reclamation and land rehabilitation (2Marks)
- ii) State **two** methods of land reclamation used in Kenya (2marks)
- iii) Explain **three** conditions that favour irrigation farming in Kenya. (6Marks)
- b i) State **two** physical factors that influence the location of Mwea Tebere irrigation scheme. (2Marks)
- ii) Explain **two** human problems that farmers face in irrigation farming in Kenya. (4 Marks)
- C i) Give **three** benefits of the polders in Netherlands. (3Marks)
- ii) Describe the stages of land reclamation in Netherlands (6 Marks)
- 10 a i) Define the term mining (2Marks)
- ii) State **four** formations in which mineral occur (4 Marks)
- b i) Name **three** methods of underground mining apart from shaft method (3Marks)
- ii) Describe how shaft method is carried out (6Marks)
- iii) State **two** disadvantages of direct observation as a method of data collection. (2Marks)
- c) Explain **four** benefits of the oil mining to the local community in Turkana. (8Marks)
- d) Name **two** parts through which minerals in East Africa are exported (2Marks)

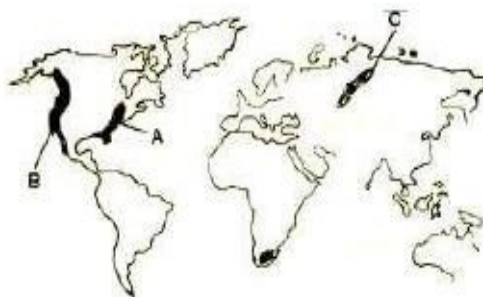
SECTION A (25 marks)

Answer **all** questions in this section.

1. (a) State the uniqueness of Geography as compared to other subjects. (2 marks)
(b) List **three** broad aspects studied under physical Geography. (3 marks)
2. (a) Give **two** types of coastal beaches. (3 marks)
(b) The diagram below shows features formed by wave deposition. Identify the features marked **J** and **K**. (2 marks)



3. (a) What is an avalanche? (2 marks)
(b) Identify **three** factors that influence the rate at which materials move down a slope. (3 marks)
4. (a) Name **two** isothermal layers of the atmosphere. (2 marks)
(b) State **three** ways in which the atmosphere is heated. (3 marks)
5. (a) Study the world map below answer the questions that follow:



- Name the fold mountain found in the area marked **A**, **B** and **C**. (3 marks)
- (b) Give **two** negative effects of faulting. (2 marks)

SECTION B (75 marks)

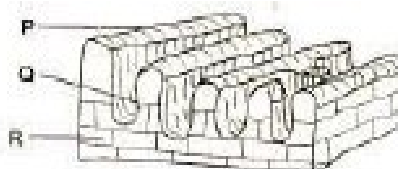
Answer question **6** and any other **two** questions from this section.

6. Study the map of **Migwani 1 : 50,000 (sheet 151/1)** provided and answer the questions that follow.

- (a) (i) Give the title of the Map. (1 mark)
- (ii) Which type of Map is this? (2 marks)
- (iii) list **two** types of scales shown on the map. (2 marks)
- (b) (i) Name **three** natural features found in grid square 0570. (3 marks)
- (ii) Identify **two** methods that have been used to show relief on this map. (2 marks)
- (c) (i) Draw a rectangle measuring 12cm by 8cm to represent the area covered between Eastings 10 to 13 and Northings 82 to 84. (1 mark)
- (ii) On the rectangle drawn, show the following feature;
 - River Ngoo
 - Dry weather land.
 - Scrub
- (iii) Calculate the new scale of the rectangle drawn. (2 marks)
- (d) Describe the drainage of the area shown by the map. (4 marks)
- (e) Citing evidence from the map, give **three** functions of Migwani. (6 marks)

7. (a) (i) Differentiate between river regime and river discharge. (2 marks)
- (ii) State **four** characteristics of a river in its youthful stage. (4 marks)
- (iii) Give **two** reasons why a river may have a large volume in its old stage. (2 marks)
- (b) Describe **three** ways in which river gorges may form. (6 marks)
- (c) Using diagrams, describe how a flood plain forms. (7 marks)
- (d) Explain **two** conditions necessary for river capture to occur. (4 marks)

8. The diagram below shows some surface features in a karst region. Use it to answer question (a)



- (a) Name the features marked **P**, **Q** and **R**. (3 marks)
- (b) Outline **three** factors that influence the development of karst scenery. (3 marks)

- (c) Using suitable diagrams, describe how the following features which are found in limestone areas are formed.
- (i) A shallow hole. (5 marks)
 - (ii) A doline. (5 marks)
- (d) Explain **three** ways in which limestone landscapes influence human activities. (6 marks)
- (e) Form four students of your school undertook field work on a karst landscape.
- (i) State **two** objectives of their study. (2 marks)
 - (ii) Give **one** reason why they need to pre-visit the area. (1 mark)
9. (a) (i) What is a desert? (2 marks)
- (ii) Name **two** types of deserts landscapes. (2 marks)
- (b) Describe how wind transport materials on the desert surface using the following processes.
- (i) Surface creep. (2 marks)
 - (ii) Saltation. (2 marks)
- (c) Using well labelled diagram(s) explain how Barchan is formed. (8 marks)
- (d) You intend to carry out a field study in an arid area near your school.
- (i) State **two** reasons for carrying out a pre-visit. (2 marks)
 - (ii) Apart from Barchan state **three** depositional features they are likely to have identified. (3 marks)
 - (iii) State **four** positive effects of deserts features to man that you are likely to identify. (4 marks)
- 10.(a) (i) Describe the following characteristics of minerals:
- Texture. (1 mark)
 - Tenacity. (1 mark)
- (ii) Describe how extrusive igneous rocks are formed. (4 marks)
- (b) For each of the following rocks, name the resultant rock that forms after metamorphism.
- (i) Sandstone. (1 mark)
 - (ii) Limestone. (1 mark)
 - (iii) Granite. (1 mark)
- (c) Explain **three** economic significance of rocks in Kenya. (3 marks)
- (d) Students carried out a field study on rocks around their school.
- (i) State **two** importance of stating the objectives for their study. (2 marks)

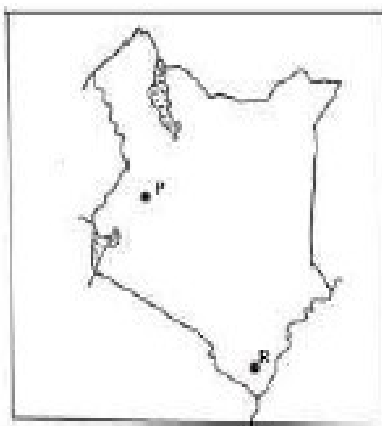
- (ii) Give **three** reasons why they prepared a route map of the study area.
(3 marks)
- (iii) Give **three** activities that the students were involved in during the field study.
(3 marks)

PAPER 2

SECTION A (25 marks)

Answer **all** questions in this section.

1. (a) Name **two** indigenous softwood tree species found in Kenya. (2 marks)
(b) State **three** factors that favour the development of softwood forests in Canada. (3marks)
2. Use the map of Kenya below to answer question (a).



- (a) Name the minerals mined in the areas marked **P** and **R**. (2 marks)
- (b) State **three** benefits of Gold mining to the economy of South Africa. (3 marks)
3. (a) Explain the term soil erosion. (2 marks)
(b) List **four** ways in which soil erosion can be controlled. (3 marks)
4. (a) State **two** negative effects of tourism in Kenya. (2 marks)
(b) State **three** social-economic factors that attract tourists in Switzerland. (3 marks)
5. (a) explain the following terms:
 - (i) Fishing. (1 mark)
 - (ii) Fisheries. (1 mark)
(b) Describe long lining as a method of fishing. (3 marks)

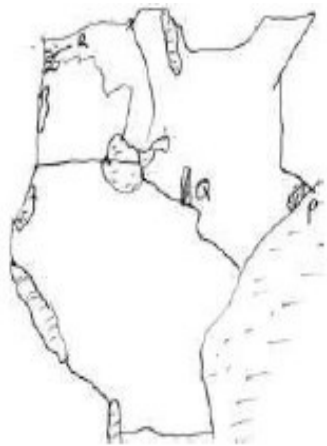
SECTION B (25 marks)

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

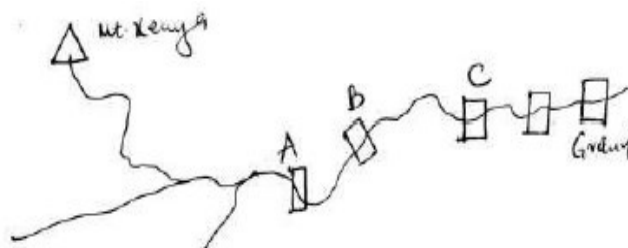
6. The table below shows the prices of sugar in Kenya shillings per ton in some countries in Africa. Use it to answer question (a).

Year	Kenya	South Africa	Tanzania	Zambia
2010	95,400	61,927	68,702	84,447
2011	111,713	67,462	66,985	93,798
2012	110,878	65,173	90,649	86,832

- (a) (i) Draw a divided rectangle 16cm long to represent the prices of sugar in the year 2012. (7 marks)
- (ii) State **two** advantages of using divided rectangles to represent data. (2 marks)
- (b) State **three** physical conditions that favour large scale sugarcane farming in Western Kenya. (3 marks)
- (c) Describe the stages involved in sugar production from harvesting to marketing. (7 marks)
- (d) Explain **three** problems facing sugarcane farming in Kenya. (6 marks)
7. (a) Differentiate between land reclamation and land rehabilitation. (2 marks)
- (b) (i) List **three** ways in which tsetse fly menace has been controlled in Lambwe valley. (3 marks)
- (ii) Name **two** areas in Kenya where swamps have been reclaimed. (2 marks)
- (iii) State **four** factors which influenced the establishment of Perkerra Irrigation Scheme. (4 marks)
- (c) You intend to carry out a field study on Budalangi Flood control.
- (i) Name **two** methods that have been used to control flooding in Budalangi. (2 marks)
- (ii) Give **three** reasons why flood control in Budalangi is important. (3 marks)
- (iii) List **three** activities that you would undertake prior to the study. (3 marks)
- (iv) Explain **three** methods that you would use to present your findings after the study. (6 marks)
8. Use the map of East Africa below to answer question (a) (i) below.



- (a) (i) Name the National Parks P, Q and R. (3marks)
- (ii) Differentiate between a game sanctuary and an animal orphanage. (2marks)
- (b) (i) State and explain **three** measures being undertaken in Kenya to conserve wildlife. (6 marks)
- (ii) List **four** problems facing Tourism in Kenya. (4 marks)
- (iii) Name **three** tourist destinations in Uganda. (3marks)
- (c) (i) What is ecotourism? (2marks)
- (iii) State **one** community in Kenya engaged in ecotourism. (1mark)
- (iv) Outline **four** significance of tourism to an economy of a country. (4marks)
9. (a) Give **three** advantages of using solar energy. (3marks)
- (b) Identify the hydro-powered stations marked A, B and C in the diagram below. (3marks)



- (c) Explain any **five** ways in which energy contributes to the growth of the economy. (10 marks)
- (d) (i) Discuss any **three** problems associated with energy crisis. (6 marks)
- (ii) Suggest any **three** ways to minimize energy wastage. (3marks)
- 10.(a) (i) Name **two** species of coffee grown in Kenya. (2 marks)

(ii) explain how the following factors favour coffee growing in the central Highlands of Kenya.

- High altitude; (2 marks)
- High population; (2 marks)

(b) (i) Explain **three** ways in which government promotes coffee growing in Kenya. (6 marks)

(ii) compare coffee growing in Kenya and Brazil under the following.

- Marketing; (2 marks)
- Climatic hazards; (2 marks)

(c) Suppose you carried out a field study on coffee plantation;

- (i) State **three** problems facing coffee farmers you are likely to observe during the field study. (3 marks)
- (ii) Give **two** methods you would use to collect data other than observation. (2 marks)
- (iii) In what **two** ways will you advice farmers to avert the problems identified in (c) (i) above? (4 marks)

**SERIES 31
PAPER 1**

SECTION A

Answer all the questions in this section

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

SECTION B

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

6. Study the map of Mumias (Sheet No. 101/2) provided and answer the following questions.
- a) i) What type of map is Mumias? (1 mark)
ii. What is the name of the map provided? (sheet name) (1 mark)
iii. What is the title of the map provided? (sheet title) (1 mark)
iv. What information is contained on the sheet title? (4 marks)
- b) Give two ways of identifying the map provided. (3 marks)
- c) Name two types of scales found on the map. (4 marks)
- d) Convert the scale of the map into statement scale. (4 marks)

- e) i. What is the contour interval of the map? (1 mark)
 ii. What is the magnetic variation of the map? (2 marks)
 iii. What is the magnetic declination of the map as at 1970? (2 marks)
 f) Name an area bordering Mumias to the east. (2 marks)
- 7 a) i) What is a rock? (2 marks)
 ii) Give **two** examples of plutonic igneous rocks (2 marks)
- b) Describe the processes of formation of each of the following types of sedimentary rocks:
 i) Mechanically formed (4 marks)
 ii) Organically formed (4 marks)
- c) State five characteristics of rocks (5 marks)
 d) You are planning to carry out a field study on rocks within the local environment.
 i) List **three** methods you would use to collect data (3 marks)
 ii) State **three** problems you are likely to encounter during the study. (3 marks)
 iii) Give **two** economic uses of rocks. (2 marks)
8. a) i) Apart from an over thrust fold, name **three** other types of folds (3 marks)
 ii) Describe the formation of an over thrust fold (6 marks)
- b) i) Name the young fold mountains found in the following continents
 • Africa (1 mark)
 • Europe (1 mark)
 • Asia (1 mark)
 • North America (1 mark)
 ii) Apart from Fold Mountains, name four other features resulting from folding. (4 marks)
 c) Explain **four** effects of folding on physical environment (8 marks)
- 9 a) i) Define an ocean (2 marks)
 ii) Explain the **three** causes of variation in the amount of salt in ocean water. (6 marks)
- b) i) Identify **three** processes involved with wave erosion (3 marks)
 ii) With the aid of well labelled diagrams, describe the process through which a wave cut platform is formed (8 marks)
- c) You intend to carry out a field study on types of features resulting from wave deposition along the coast

i) Identify **three** methods you would use to record data (3 marks)

ii) Give **three** depositional features you are likely to observe during field study (3 marks)

10 a) i) What is soil structure

ii) Explain how the following factors influence soil formation (2 marks)

- Time (2 marks)
- Parent rock

b) Describe the following properties of soil (2 marks)

- i. • Soil texture (2 marks)
- ii. • Soil porosity (2 marks)
- iii. • Soil colour (2 marks)

c) State **four** negative effects of soil erosion

You are planning to carry out field study on soil around your school (4 marks)

i) State **four** preparations that you will make for the study (4 marks)

ii) Give **three** reasons why it is important to study soils through the field study (3 marks)

THE END

PAPER 2

312/2

SECTION A

Answer *all* the questions in this section

1 a) State **three** factors that contribute to growth of slums in urban centers. (3mk)

b) List **two** types of settlement patterns in Kenya. (2mk)

2a) State **three** physical conditions that favour growing of maize in Kenya. (3mk)

b) Give **two** problems facing maize farming in Kenya. (2mk)

3a) What is air pollution?(2mk)

b) State **three** ways that Kenya has adopted to manage air pollution. (3mk)

4a) Differentiate between a national park and a game reserve. (2mk)

b) State **three** effects of human encroachment into wildlife habitats. (3mk)

5 a) Name **two** places where diamond mining is done in South Africa. (2mk)

b) State **three** problems facing gold mining in South Africa. (3mk)

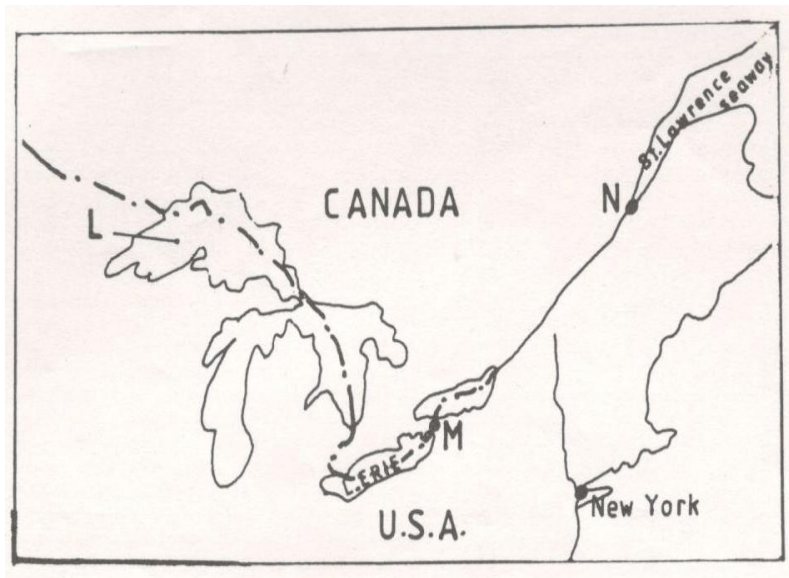
SECTION B

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

6 a) The photograph below shows a crop cultivated under horticultural farming.



- a i) identify the type of photograph shown above. (1mk)
- ii) Using evidence from the photograph, identify **two** indicators that show the area receive high rainfall. (2mk)
- iii) Draw a rectangle measuring 15 cm by 10 cm and on it sketch and show the main features. (4mk)
- b) State **four** reasons why growing of vegetables in green houses in Kenya would be preferred. (4mk)
- c) Explain **four** difficulties that the Kenyan farmer face in marketing horticultural produce. (8mks)
- d) Explain **three** similarities between horticultural farming in Kenya and Netherlands. (6mk)
- 7a) Differentiate between pelagic fishing and demersal fishing. (2mk)
- b) State **four** reasons why marine fisheries are not well developed in Kenya. (4mk)
- c i) Explain **three** reasons why Lake Victoria is a major fishing ground in Kenya. (6mk)
- ii) Give **five** ways in which fresh water fisheries in Kenya can be conserved. (5mk)
- d) Explain **four** differences between fishing in Kenya and Japan. (8mk)
- 8 The sketch map below shows the Great Lakes and the St. Lawrence sea way. Use it to answer question (a)

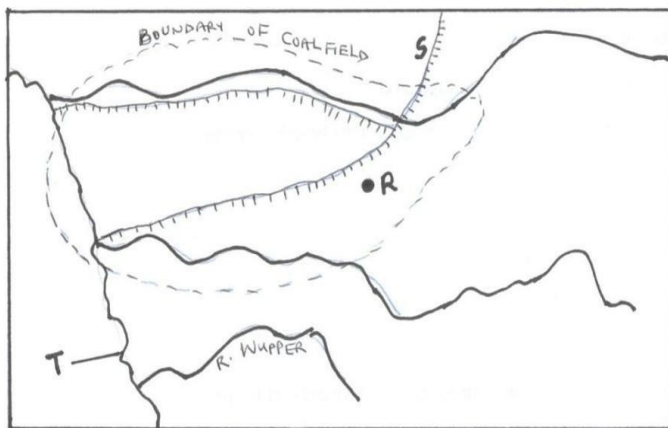


- a) i) Name the lake marked **L**.(1mk)
- ii) Name the waterfall marked **M**.(1mk)
- iii) Name the sea port marked **N**. (1mk)
- b) i) List **three** objectives that led to the construction of the St. Lawrence sea way. (3mk)
- ii) Explain **four** ways in which the St. Lawrence Sea way has benefited the economies of Canada and the USA. (8mk)
- c) State **three** causes of the decline in use of letters as a mean of communication in Kenya. (3mk)
- d) Explain **four** efforts made by the Government of Kenya to solve the problems facing communication in the country. (8mk)
- 9** a) i) Name **two** places in Kenya where wind energy is being harnessed. (2mk)
- ii) Give **four** reasons why Kenya has not been able to fully exploit her geothermal power potential. (4mk)
- b) Explain **four** benefits that would result from rural electrification in Kenya.(8mk)
- c) Apart from petroleum oil, name **three** other sources of non -renewable energy. (3mk)
- d) i) What is energy crisis. (2mk)
- ii) Explain **three** effects that the increase in petroleum oil prices has had on the economy of Kenya.(6mk)

10. ai) Name **two** towns in Kenya with motor vehicle assembly industries. (2mks)

ii) State **four** ways in which Kenya has benefited from the motor vehicle assembly industries. (4mk)

b) The sketch map below shows the Ruhr Industrial region of Germany.



i) Name the town marked **R**. (1mk)

ii) Name the canal marked **S**. (1mk)

iii) Name the river marked **T**. (1mk)

c) Explain **four** factors that have led to the growth of the iron and steel industries in the Ruhr region of Germany. (8mk)

d) Your class has decided to undertake a field study in a factory near your school.

i) Give **three** reasons why it is important to seek permission from the school. (3mk)

ii) State **two** reasons why administering questionnaires may not be an appropriate method to collect data. (2mk)

iii) State **three** advantages of using statistical tables to record data. (3mk)