

312/1
GEOGRAPHY
Paper 1
JULY 2018
Time: 2¾ hours

LANY ACHIEVERS F4 EXAMINATION 2018
Kenya Certificate of Secondary Education
312/1
Paper 1
GEOGRAPHY

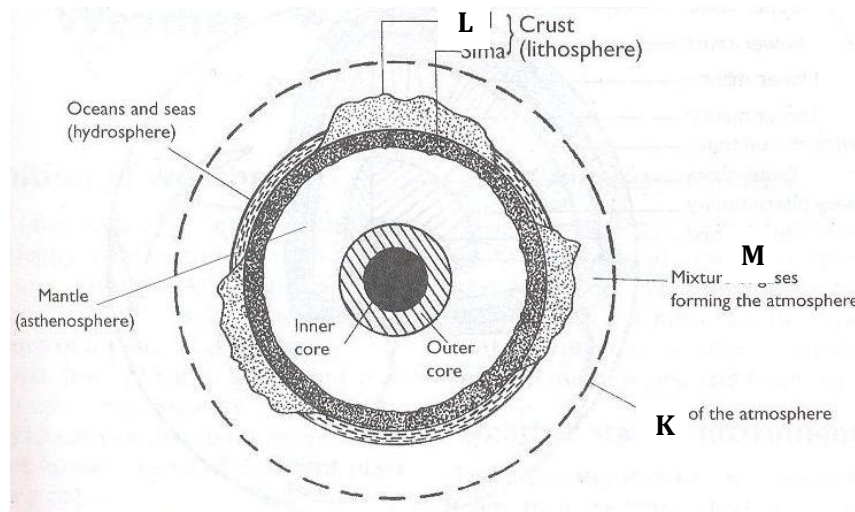
INSTRUCTIONS TO CANDIDATES

- *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.*
- *Candidates should answer the questions in English.*
- *All answers must be written in the answer booklet provided*

SECTION A

Answer all the questions in this section.

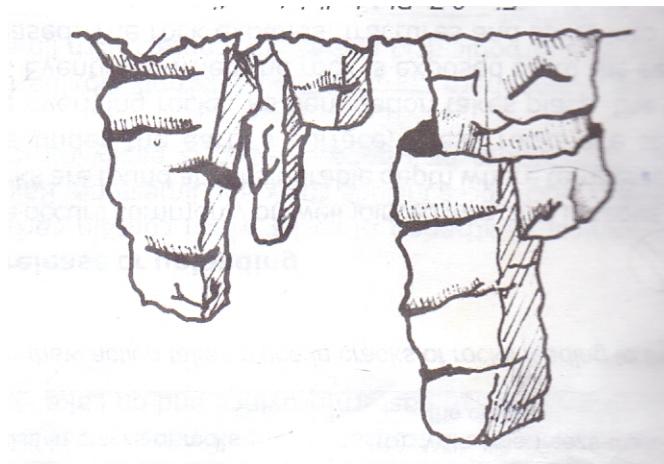
1. (a) Name any **two** constituents of the atmosphere. (2 marks)
- (b) The diagram below represent the structure of the earth. Use it to answer the questions that follow.



Name the parts marked **K**, **L** and **M**. (3 marks)

2. (a) Give **two** characteristics of plutonic rocks? (2marks)
- (b) State **three** ways in which rocks are significant to Kenya's economy. (3marks)

3. Use the diagram below to answer the questions that follows.



- (a) Identify the weathering process shown above. (1 mark)
- (b) Describe how rocks are weathered through the above process. (4 marks)
4. (a) Differentiate between till deposits and fluvio-glacial deposits. (2 marks)
- (b) Describe how roche moutonnee is formed. (4 marks)

5. (a) State **two** conditions which influence wind erosion. (2 marks)
- (b) Name **two** features from water deposition in arid areas. (2 marks)

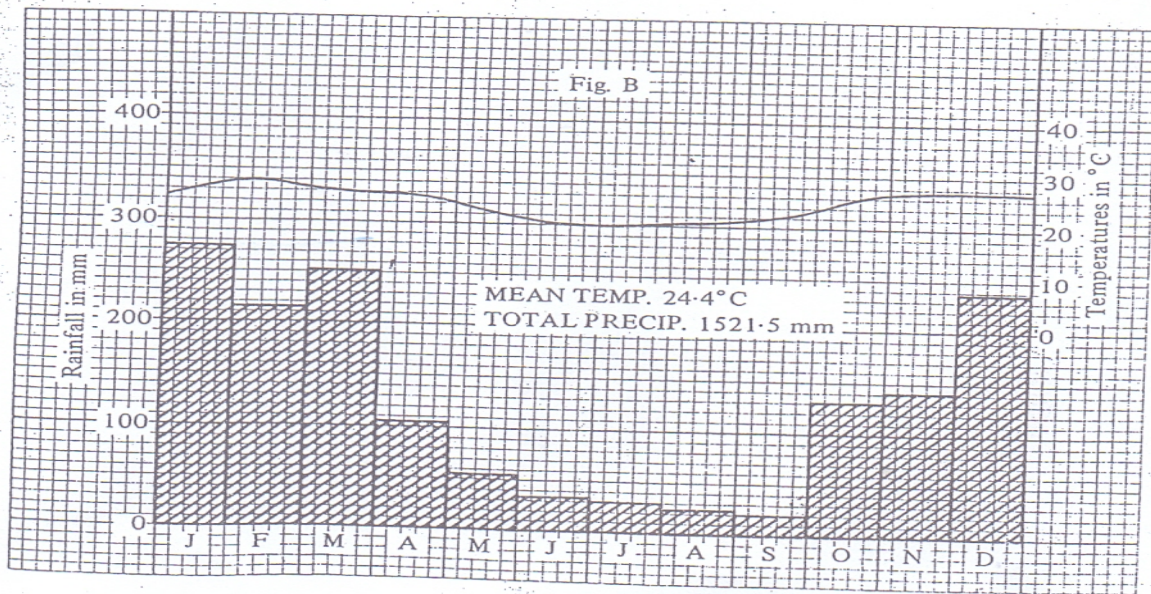
SECTION B

Answer question 6 and any other two questions

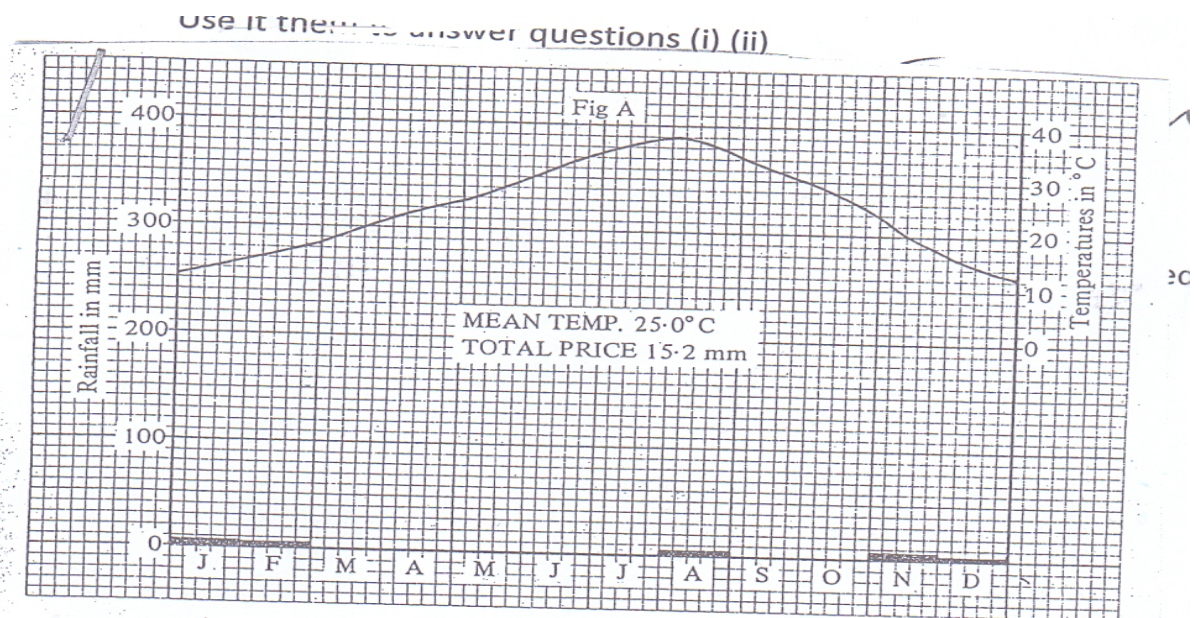
6. Study the map of Kitale 1:50,000 (Sheet 75/3) provided and answer the following questions.
- (a) (i) Give the longitudinal extent of the area covered by the map. (2marks)
- (ii) Identify the settlement patterns found on the Northern area covered by the map. (3marks)
- (b) (i) Measure the distance of the Kitale Municipality boundary. Give your answer in kilometers. (2marks)
- (ii) What is the bearing of the Air photo principal point on the grid square 2912 from the Air photo principal point on grid square 3516. (2marks)
- (c) (i) Draw a rectangle 15cm by 9cm to represent the area East of Easting 40 and North of Northing 20. (2marks)
- (ii) On the rectangle mark and name.
- Road C640. (1mark)
 - River Kapsara. (1mark)
 - Rogurr hill. (1mark)
 - District boundary. (1mark)
- (iii) Calculate the area to the East of the District boundary and to the South of Northing 23. (2marks)
- (d) (i) Identify **two** types of vegetation found in the area covered by the map. (2marks)
- (ii) Explain how drainage has influenced the distribution of settlement in the area covered by the map. (3marks)
- (e) Describe the Relief of the area covered by the map (3marks)
7. (a) (i) What is a weather station? (2 marks)
- (ii) Explain **two** characteristics of Stevenson screen. (4 marks)

- (b) (i) Describe how a hygrometer is used to measure relative humidity. (3 marks)
- (ii) State *two* reasons why the recording of data at the school weather station may be inaccurate. (2 marks)
- (iii) Give the reason why air cools as it rises. (2 marks)
- (c) The graphs below shows climate characteristics of two stations in Africa. Use them to answer questions (i) and (ii).

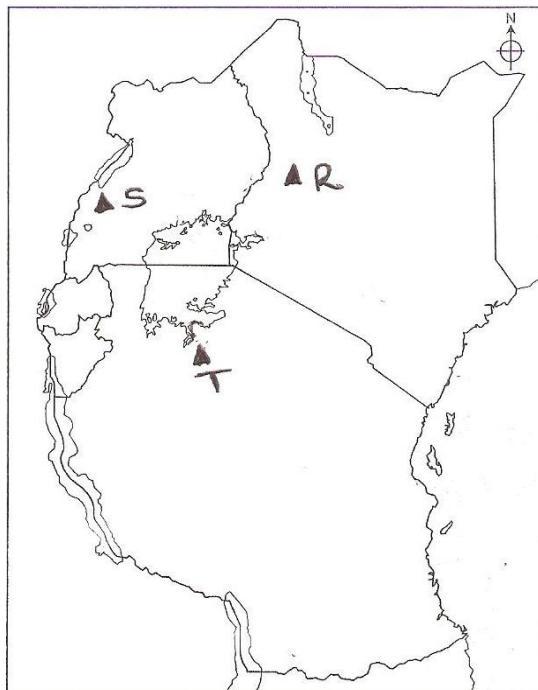
GRAPH 1



GRAPH 2



- (i) Name the type of climate represented by each graph. (2 marks)
 - (ii) Describe the characteristics of the climate represented by each graph. (8 marks)
 - (iii) State **two** negative effects of desertification. (2 marks)
8. (a) (i) What is folding? (2 marks)
- (ii) Apart from recumbent fold, name **three** other types of folds. (3 marks)
- (iii) With the aid of labelled diagrams, describe how a recumbent fold is formed. (6 marks)
- (b) The map below shows some features in East Africa. Use it to answer question (i).



Name;

- (i) the mountains marked **Q** and **R**. (2 marks)
 - (ii) the lake marked **S**. (1 mark)
- (c) (i) Give **two** differences between a normal and a reverse fault. (2 marks)
- (ii) Describe how fault block is formed. (3 marks)
- (d) Explain **three** negative effect of faulting on human activities. (6 marks)

9. (a) (i) What is a river divide? (1 mark)
- (ii) Describe **three** ways by which a river transports its load. (6 marks)
- (b) Describe the characteristics of a river in its old stage. (7 marks)
- (c) Describe each of the following drainage patterns.
- (i) Superimposed drainage patterns. (3 marks)
- ii) Centripetal drainage pattern (2 marks)
- (d) Draw a well labeled diagram of the hydrological cycle. (6 marks)
10. (a) (i) What is soil? (2 marks)
- (ii) Identify **two** components of soils. (2 marks)
- (iii) Differentiate between soil structure and soil texture. (2 marks)
- (iv) Name **two** types of soil according to soil texture. (2 marks)
- (b) Explain how the following factors influence the formation of soil.
- (i) Climate (2 marks)
- (ii) Topography (2 marks)
- (c) The diagram below shows a soil catena.

HILL TOP			VALLEY BOTTOM
W	X	Y	Z

- (i) Name the type of soils found in position **W** and **Z**. (2 marks)

- (ii) State *two* characteristics of soils found in section marked **W** and **Z**.
(4 marks)
- (d) Explain *two* causes of chemical soil degeneration. (4 marks)
- (e) State *three* measures of conserving soils. (3 marks)