

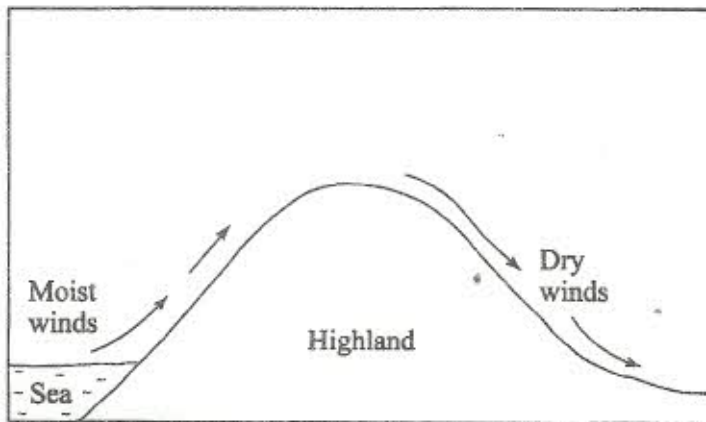
K.C.S.E GEOGRAPHY 2009
PAPER 1 (312/1)

SECTION A

Answer ALL the questions in this section.

1. a) Differentiate between the processes of the formation of plutonic rocks and volcanic rocks. (2 marks)
- b) For each of the following sedimentary rocks, name the resultant rock that forms after metamorphism:
- i) Sandstone (1 mark)
 - ii) Limestone (1 mark)
 - iii) Clay (1 mark)

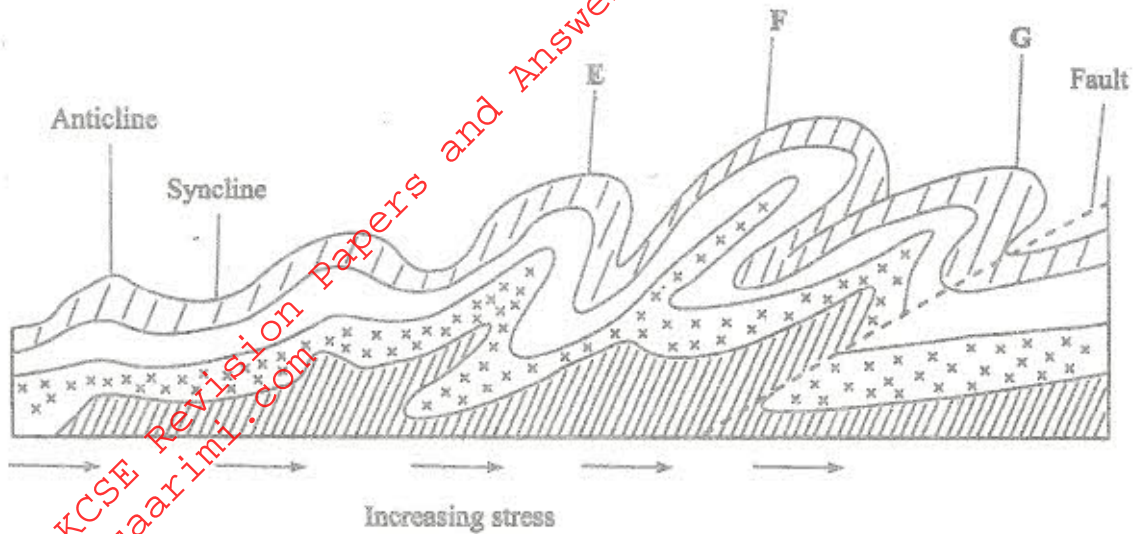
2. Use the diagram below to answer the question that follows.



Outline the process through which the moist winds shown go through to eventually become dry winds. (5 marks)

3. a) What is a line of longitude? (2 marks)
- b) What is the local time at Alexandria 30°E when the local time at Malindi 40°E is 12.00noon? (2 marks)
4. a) **Outline** the steps followed when measuring humidity using a hygrometer. (3 marks)
- b) Give **two** factors that influence relative humidity. (2 marks)

5. The diagram below shows some types of folds. Use it to answer question (a).



a) Name the types of folds marked E, F and G. (3 marks)

b) In which countries are the following fold mountains found?

- i) Andes (1 mark)
- ii) Cape Ranges (1 mark)
- iii) Alps (1 mark)

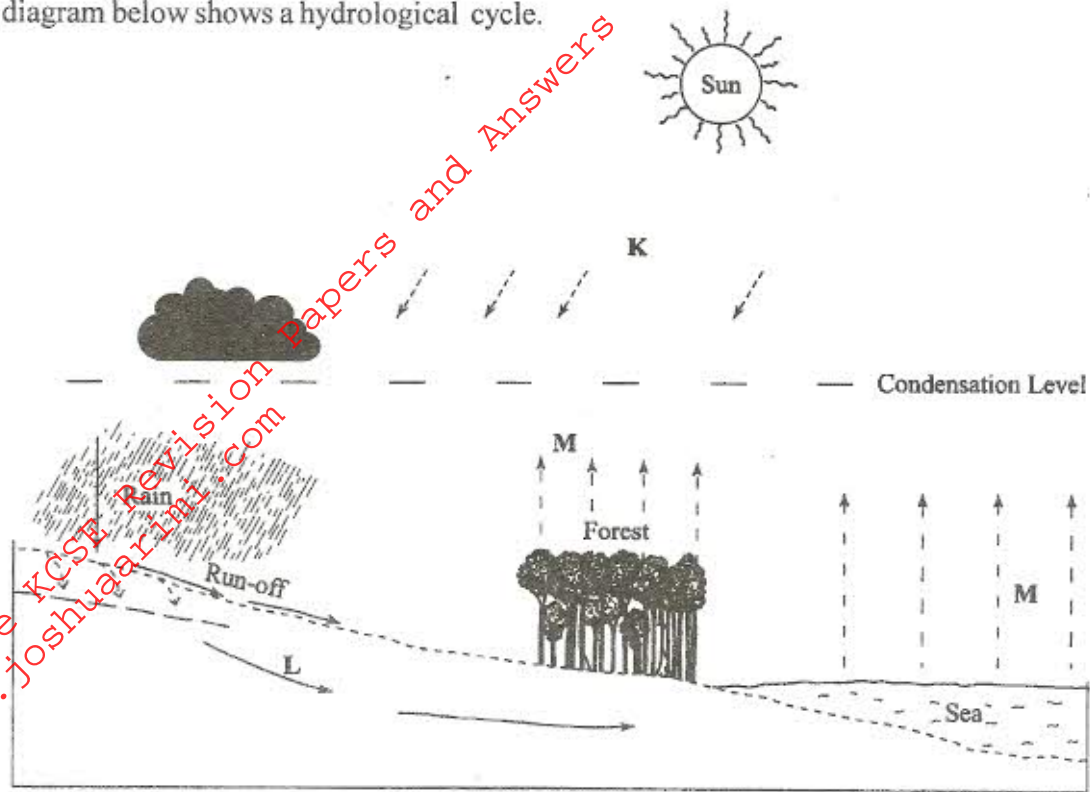
SECTION B

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

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

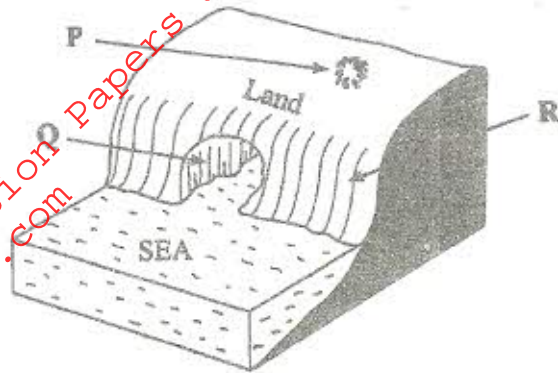
- a) i) Name the **three** districts crossed by the all-weather road (bound surface) in the north-western part of the map extract. (3 marks)
- ii) Using the marginal information, give the magnetic variation of the area when the map extract was drawn. (2 marks)
- iii) Measure the **shortest** distance along the loose surface road from the junction at Marumbasi (grid reference 286548) to the school at Chebirbei (grid reference 344 518). Give your answer in kilometres. (2 marks)
- iv) What is the approximate height of the papyrus swamp to the north-east of Kabianga Farm Institute (grid square 3750) (2 marks)
- b) Describe the characteristics of the long profile of river Yurith. (6 marks)
- c) Describe the relief of the area covered by the map. (4 marks)
- d) Citing evidence from the map, explain **three** factors that favour the growing of tea in Belgut area. (6 marks)

7. The diagram below shows a hydrological cycle.



- a) i) What do the arrows labelled **K**, **L** and **M** on the cycle represent? (3 marks)
- ii) Explain **three** factors that influence the occurrence of surface run-off. (6 marks)
- b) i) What is mass wasting? (2 marks)
- ii) Give **two** processes of slow mass movement. (2 marks)
- iii) State **two** physical conditions that may influence landslides. (2 marks)
- c) Describe the following processes of mass wasting:
- i) rock fall; (2 marks)
- ii) subsidence; (2 marks)
- iii) mudflows. (2 marks)
- d) Explain the effect of mass wasting on the following:
- i) Tourism; (2 marks)
- ii) Soil fertility (2 marks)
8. a) i) Name **three** types of faults. (3 marks)
- ii) Apart from compressional forces, explain **two** other processes that may cause faulting. (4 marks)
- b) With the aid of diagrams, describe how compressional forces may have led to the formation of the Great Rift Valley. (8 marks)
- c) Explain **five** ways in which faulting is of significance to human activities. (10 marks)
9. a) i) Apart from Bird's Foot delta, name **two** other types of coastal deltas. (2 marks)
- ii) Draw a diagram to show a Bird's Foot delta. (3 marks)
- iii) Describe how a Bird's foot delta is formed. (4 marks)

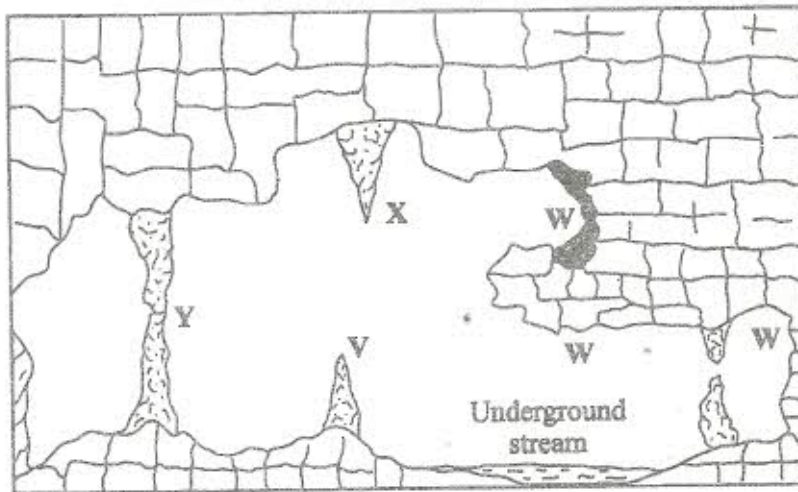
- b) Explain **four** factors that influence the development of coasts. (8 marks)
- c) i) Differentiate between a barrier reef and a fringing reef? (2 marks)
- ii) The diagram below represents some coastal features. Name the feature marked P, Q and R. (3 marks)



- iii) State **three** conditions necessary for the formation of a beach. (3 marks)

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

(a).



- a) i) Name the features marked X, V and W. (3 marks)
- ii) Describe how the feature marked Y is formed. (6 marks)
- b) i) What is an artesian basin? (2 marks)
- ii) Explain **three** factors which influence the formation of features in limestone areas. (6 marks)
- c) You are supposed to carry out a field study of an area eroded by water.
- i) Give **three** reasons why you would need a map of the area of study. (3 marks)
- ii) Name **two** erosional features you are likely to identify during the field study. (2 marks)
- iii) State **three** recommendations that you would make from your study to assist the local community to rehabilitate the eroded area. (3 marks)