

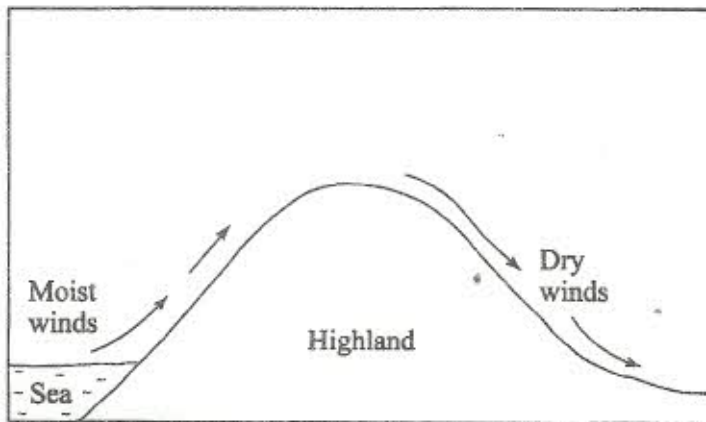
K.C.S.E GEOGRAPHY 2009
PAPER 1 (312/1)

SECTION A

Answer ALL the questions in this section.

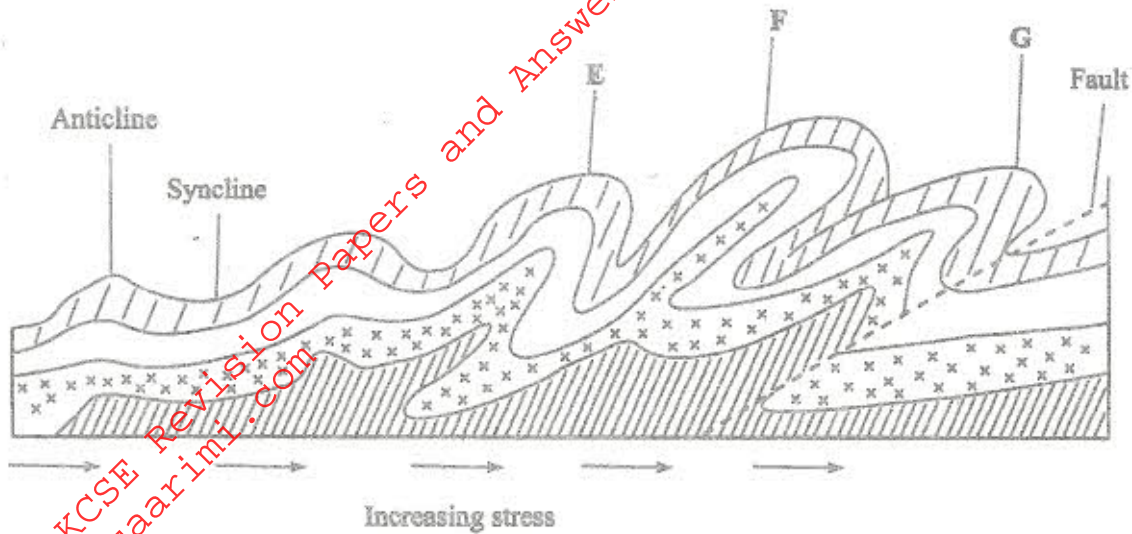
1. a) Differentiate between the processes of the formation of plutonic rocks and volcanic rocks. (2 marks)
- b) For each of the following sedimentary rocks, name the resultant rock that forms after metamorphism:
- i) Sandstone (1 mark)
 - ii) Limestone (1 mark)
 - iii) Clay (1 mark)

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)

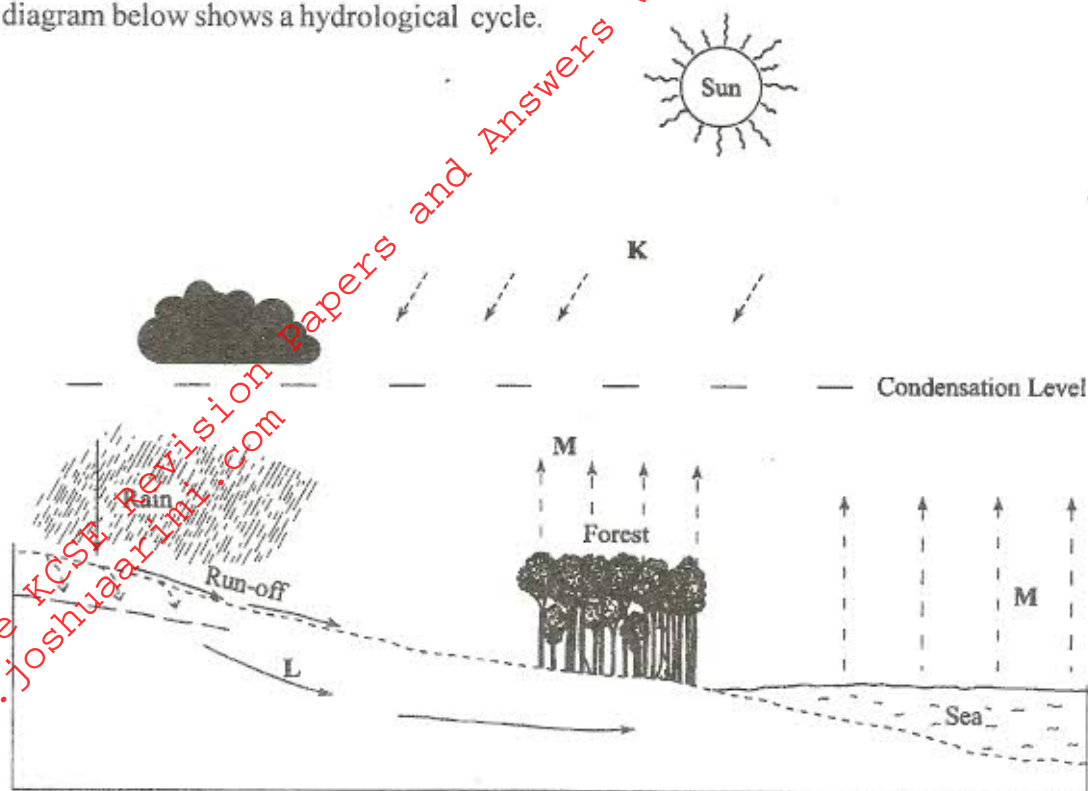
SECTION B

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.

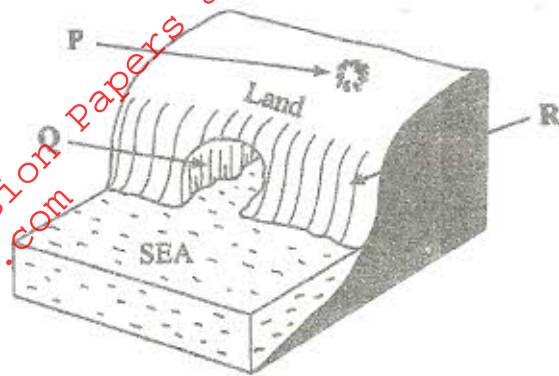
- a) i) Name the **three** districts crossed by the all-weather road (bound surface) in the north-western part of the map extract. (3 marks)
- ii) Using the marginal information, give the magnetic variation of the area when the map extract was drawn. (2 marks)
- iii) Measure the **shortest** distance 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)

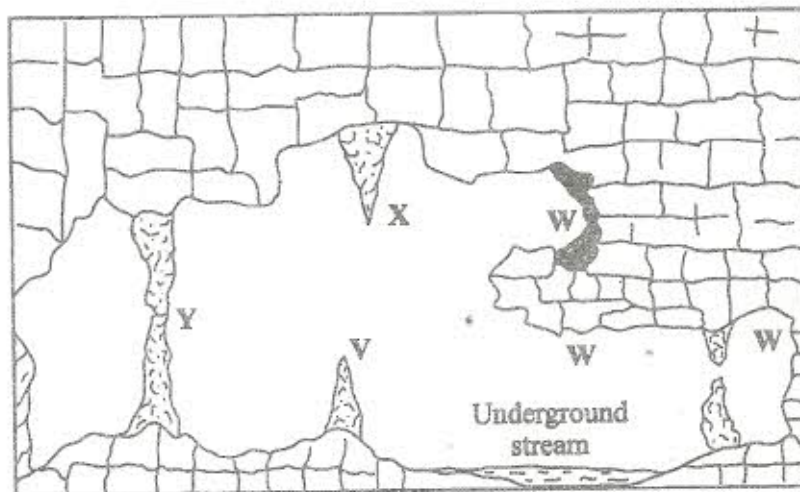
- b) Explain **four** factors that influence the development of coasts. (8 marks)
- c) i) Differentiate between a barrier reef and a fringing reef? (2 marks)
- ii) The diagram below represents some coastal features. Name the feature marked P, Q and R. (3 marks)



- 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)