3.10 GEOGRAPHY (312)

3.10.1 Geography Paper 1 (312/1)

SECTION A

*Answer all the questions in this section.*

1. (a) State *three* reasons why it is important to study Geography. (3 marks)

   (b) Identify *three* ways in which Geography is related to Agriculture. (3 marks)

2. (a) What is weather forecasting? (2 marks)

   (b) Give *three* elements of weather. (3 marks)

3. (a) Name *three* features that make up the hydrosphere. (3 marks)

   (b) Explain how the movement of magma causes earth movement. (2 marks)

4. (a) Distinguish between a river capture and a river rejuvenation. (2 marks)

   (b) Give *three* ways in which a river transports its load. (3 marks)

5. State *four* ways in which the savanna grasslands have adapted to climatic conditions. (4 marks)

SECTION B

*Answer question 6 and any other two 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 type of map is Oyugis map extract? (1 mark)

       (ii) Give *two* scales that have been used in the map extract. (2 marks)

       (iii) Measure the length of the township boundary shown on the map. Give your answer in kilometres. (2 marks)

       (iv) Calculate the area covered by Kodera forest. Give your answer in square kilometres. (2 marks)

   (b) (i) Identify the methods that have been used to represent relief of the area covered by the map. (2 marks)

       (ii) Name the physical features found in the grid square 6842. (2 marks)
(c) Describe the drainage of the area covered by the map. (6 marks)

(d) (i) Apart from agriculture, name two other economic activities in the area covered by the map. (2 marks)

(ii) Citing evidence from the map, give three reasons why the area covered by the map is suitable for agricultural activities. (6 marks)

7 (a) (i) Apart from metamorphic rocks, name two other categories of rocks. (2 marks)

(ii) Describe the following processes of formation of metamorphic rocks.

• Dynamic metamorphism (4 marks)

• Thermal metamorphism (4 marks)

(b) Explain three ways in which rocks are significant to human activities in Kenya. (6 marks)

(c) You intend to carry out a field study on the types of rocks within the school locality.

(i) Identify three items that you will carry during the study. (3 marks)

(ii) State three activities that you will be involved in during the study. (3 marks)

(iii) List three types of metamorphic rocks that you are likely to identify. (3 marks)

8 (a) (i) Apart from anticlinorium and synclinorium complex, name three other types of folds. (3 marks)

(ii) With an aid of a well labelled diagram, describe the formation of anticlinorium and synclonorium complex. (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) Describe the formation of fold mountains according to the convectional current theory. (4 marks)
(c) Explain four effects of folding on physical environment. (8 marks)

9 (a) (i) Define the term hydrological cycle. (2 marks)
(ii) Give three factors that influence the occurrence of surface runoff. (3 marks)
(iii) State the significance of the hydrological cycle. (4 marks)

(b) Describe how the following lakes were formed.
(i) moraine dammed lake (2 marks)
(ii) oxbow lake (4 marks)

(c) Explain ways in which lakes modify the climate of the surrounding areas. (6 marks)

(d) Give four reasons why some lakes have fresh water. (4 marks)

10 (a) (i) What is soil structure? (2 marks)
(ii) Explain how the following factors influence soil formation.

- Time (2 marks)
- Parent rock (4 marks)

(b) Describe the following properties of soil.
- Soil texture (2 marks)
- Soil porosity (2 marks)
- Soil colour (2 marks)

(c) State four negative effects of soil erosion. (4 marks)

(d) You are planning to carry out a field study on soil around your school.

(i) State four preparations that you will make for the study. (4 marks)
(ii) Give reasons why it is important to study soils through field study. (3 marks)