

### 3.10 GEOGRAPHY (312)

#### 3.10.1 Geography Paper 1 (312/1)

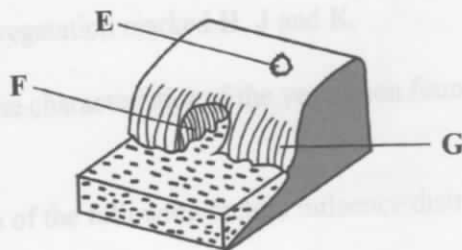
#### SECTION A

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

1. (a) Define the term *environment*. (2 marks)
- (b) Name **two** divisions of physical Geography. (2 marks)
2. (a) Give **three** characteristics of comets. (3 marks)
- (b) State **three** proofs that show the shape of the earth is spherical. (3 marks)
3. (a) Give **two** types of igneous rocks. (2 marks)
- (b) Identify **three** uses of rocks. (3 marks)
4. The table below shows the rainfall and temperature data for town Y. Use it to answer (a).

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temperature (°C)	21	21	20	18	15	14	13	13	15	16	18	20
Rainfall (mm)	24	25	30	74	17	143	131	126	70	55	31	27

- (a) (i) What is the mean annual range of temperature? (1 mark)
- (ii) Calculate the rainfall totals for town Y. (1 mark)
- (b) State **three** climatic conditions experienced in the hot deserts. (3 marks)
5. (a) Differentiate between ocean and sea. (2 marks)
- (b) The diagram below shows some coastal features. Name the features marked **E**, **F** and **G**. (3 marks)



SECTION B

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

6. Study the map of Kijabe 1:50,000 (sheet 134/3) provided and answer the following questions.

- (a) (i) Convert the scale of the map extract into a statement scale. (2 marks)
- (ii) What is the bearing of the pump house at grid square 3893 from the trigonometrical station at Mweri? (2 marks)
- (iii) Calculate the area of the part of the forest to the east of easting 40 and south of northing 97. Give your answer in square kilometres. (2 marks)
- (b) (i) Apart from forest, give **three** types of natural vegetation found in the area covered by the map. (3 marks)
- (ii) Identify the **three** river drainage patterns found in the area covered by the map. (3 marks)
- (c) (i) Using a vertical scale of 1 cm to represent 100 metres, draw a cross section from the water tank on grid square 2592 to the peak of Kijabe hill on grid square 2699. (4 marks)

On it, mark and label the following:

- I. All weather road-bound surface (1 mark)
- II. Railway line (1 mark)
- III. Steep slope. (1 mark)

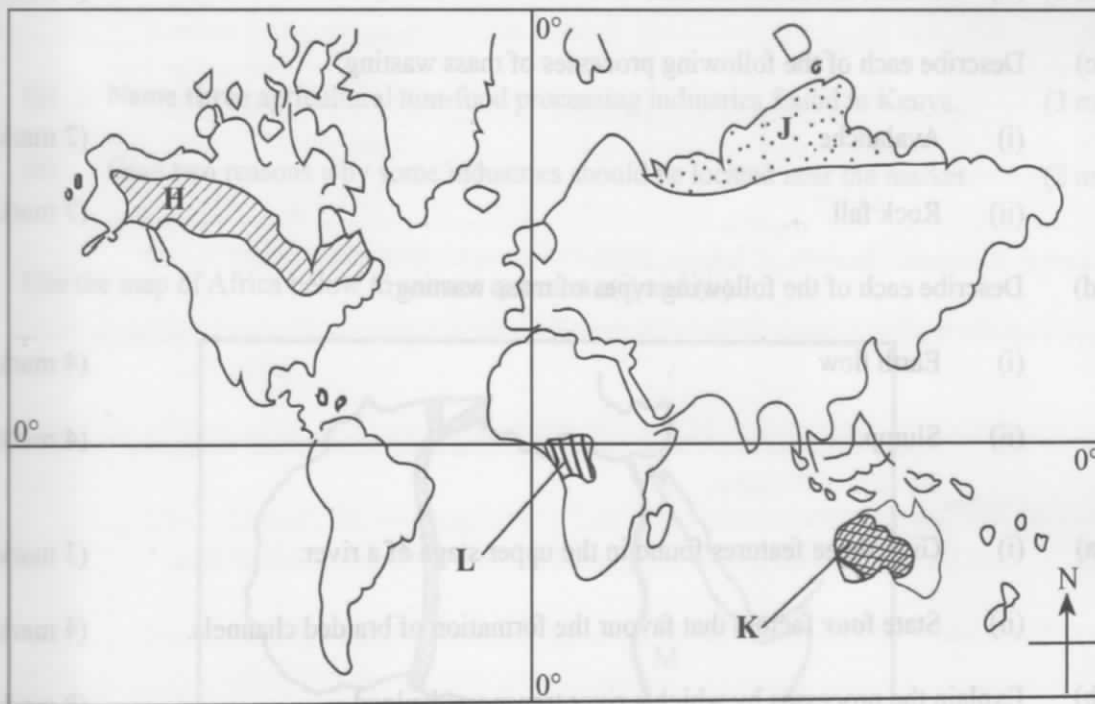
(ii) Calculate the vertical exaggeration of the cross section. (2 marks)

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



7. (a) (i) Define the term *vulcanicity*. (2 marks)
- (ii) Name the **three** stages in the life cycle of a volcano. (3 marks)
- (b) Describe how each of the following volcanic features are formed:
- (i) Lava plateau (4 marks)
- (ii) Geyser (4 marks)
- (iii) Caldera. (4 marks)
- (c) Explain **four** positive ways in which volcanic features influence human activities. (8 marks)

8. The map below shows some vegetation regions of the world. Use it to answer question a(i) and a(ii).



- (a) (i) Name the vegetation marked **H, J** and **K**. (3 marks)
- (ii) Describe the characteristics of the vegetation found in the area shaded and marked **L**. (6 marks)
- (b) Explain how each of the following factors influence distribution of vegetation:
- (i) Rainfall (2 marks)
- (ii) Soils. (2 marks)

- (c) State **five** uses of Savanna vegetation. (5 marks)
- (d) You intend to carry out a field study on vegetation within the local environment.
6. (i) State **three** objectives you would formulate for the study. (3 marks)
- (ii) Give **four** reasons why it is important to have a work schedule. (4 marks)
9. (a) (i) Apart from biological weathering, list **two** other types of weathering. (2 marks)
- (ii) Explain ways in which plants cause weathering of rocks. (6 marks)
- (b) Explain how each of the following physical factors influence mass wasting:
- (i) Earth movement (2 marks)
- (ii) Nature of rock materials. (2 marks)
- (c) Describe each of the following processes of mass wasting:
- (i) Avalanche (2 marks)
- (ii) Rock fall. (3 marks)
- (d) Describe each of the following types of mass wasting:
- (i) Earth flow (4 marks)
- (ii) Slump. (4 marks)
10. (a) (i) Give **three** features found in the upper stage of a river. (3 marks)
- (ii) State **four** factors that favour the formation of braided channels. (4 marks)
- (b) Explain the processes by which a river transports its load. (8 marks)
- (c) With the aid of well labelled diagrams, describe how a river capture occurs. (7 marks)
- (d) State **three** negative effects of rivers to human environment. (3 marks)