

3.9 GEOGRAPHY (312)

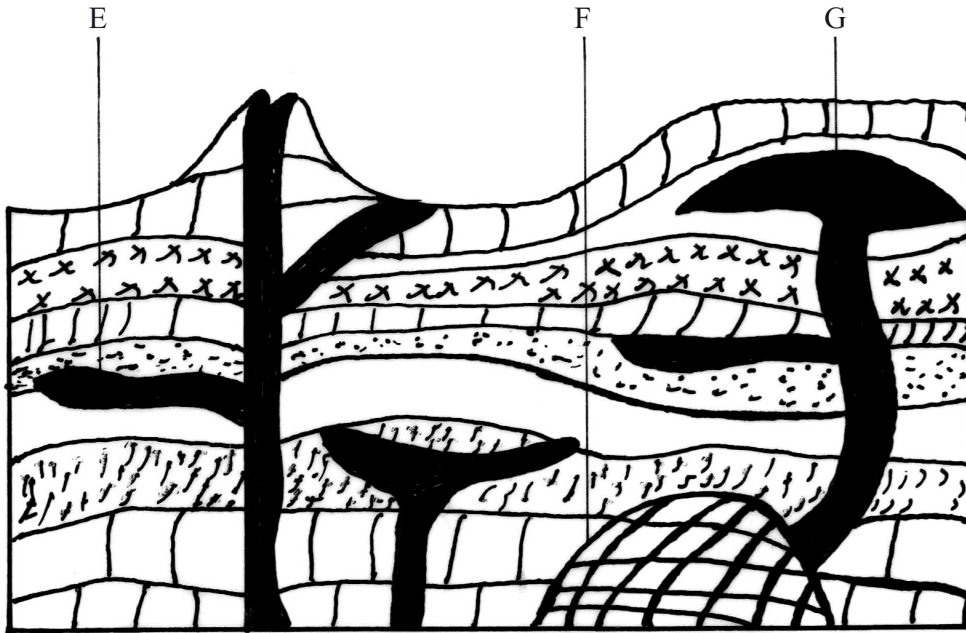
3.9.1 Geography Paper 1 (312/1)

SECTION A

Answer *ALL* the questions in this section.

1 Name **two** types of hypabyssal rocks. (2 marks)

2 (a) The diagram below shows intrusive volcanic features.



Name the features marked E, F and G. (3 marks)

(b) Name **two** active volcanoes in Kenya. (2 marks)

3 (a) Give **three** processes in the hydrological cycle. (3 marks)

(b) State **four** factors that facilitate **deposition** in rivers. (4 marks)

4 (a) Explain **two** reasons why wind is the dominant agent of erosion in arid areas. (4 marks)

(b) Identify **two** features formed as a result of wind deposition in arid areas. (2 marks)

5 (a) Describe podzolization as a process of leaching. (2 marks)

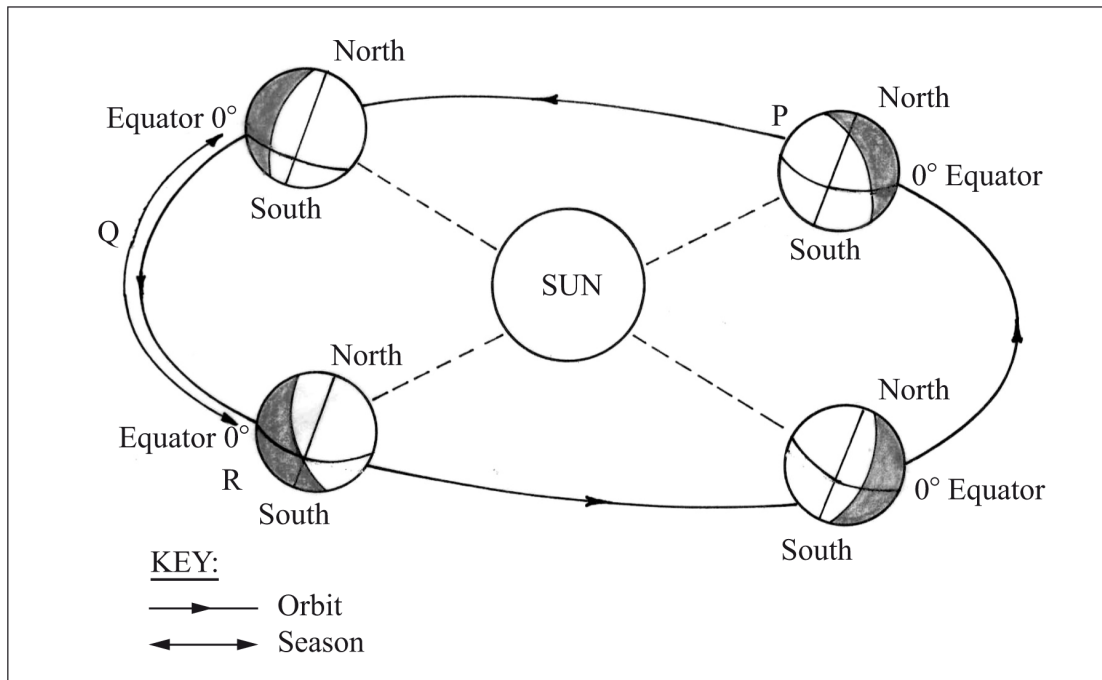
(b) State **three** ways in which mulching helps in soil conservation. (3 marks)

**SECTION B**

*Answer **question 6** and any other **TWO** questions from this section.*

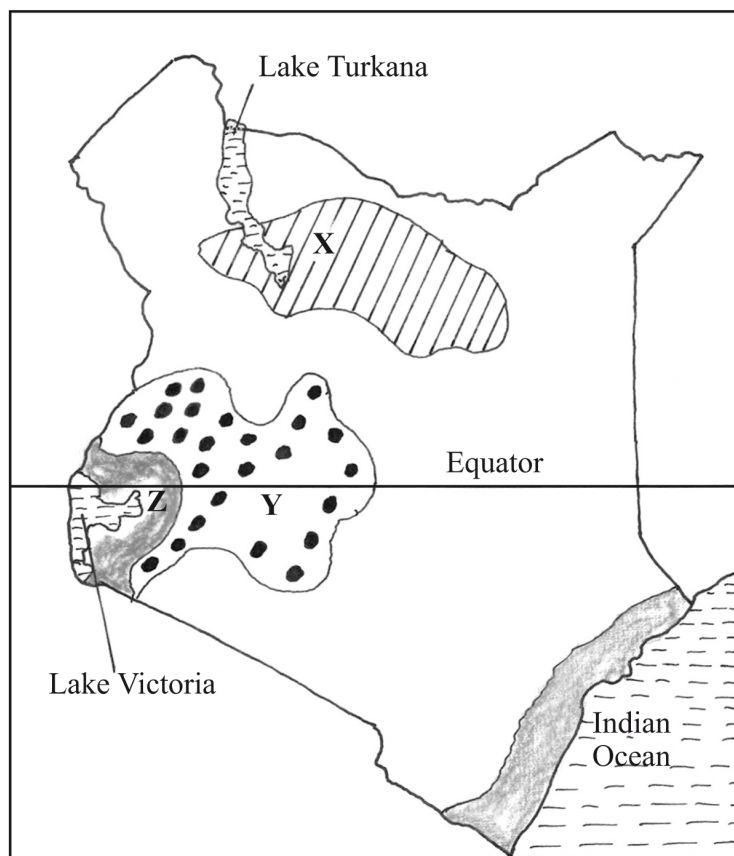
- 6** Study the map of Migwani 1:50,000 (sheet 151/1) provided and answer the following questions.
- (a) (i) Give the longitudinal extent of the area covered by the map. (2 marks)
- (ii) What is the magnetic variation of the map? (1 mark)
- (iii) Give the six-figure grid reference for the junction of the roads D503 and D507. (2 marks)
- (b) (i) Using a vertical scale of 1 cm to represent 100 metres, draw a cross section along the line marked J-K. (4 marks)
- (ii) On it, mark and label the following:
- footpath; (1 mark)
  - road; (1 mark)
  - water pipeline; (1 mark)
  - steep slope. (1 mark)
- (iii) Calculate the vertical exaggeration of the cross-section. (2 marks)
- (c) Citing evidence from the map, give **three** economic activities carried out in the area covered by the map. (6 marks)
- (d) Explain how relief has influenced the distribution of settlement in the area covered by the map. (4 marks)
- 7** (a) (i) Describe the solar system. (2 marks)
- (ii) The local time at Manual 60° W is 11.30 a.m. What is the time in Nairobi 37° E? (3 marks)
- (b) (i) State **five** characteristics of the mantle in the interior structure of the earth. (5 marks)
- (ii) Outline the evidence which support the theory of continental drift. (4 marks)

(c) The diagram below represents the revolution of the earth.



- (i) Name the solstice marked P. (1 mark)
- (ii) Identify the season represented in the region marked Q. (1 mark)
- (iii) Describe the climatic conditions in Europe when the Earth is in position R. (3 marks)
- (d) With the aid of a well labelled diagram, describe the occurrence of the solar eclipse. (6 marks)

8 The map below shows some climatic regions of Kenya. Use it to answer question (a).



- (a) (i) Name the climatic regions marked X and Y. (2 marks)
- (ii) State **three** characteristics of the climatic region marked Z. (3 marks)
- (b) Explain how each of the following factors influence climate:
- (i) Altitude; (4 marks)
- (ii) Ocean currents. (4 marks)
- (c) What are the negative effects of climate change on physical environment? (6 marks)
- (d) Students visited a weather station to study recording of weather elements.
- (i) State **three** qualities in the construction of a Stevenson screen they would have observed during the study. (3 marks)
- (ii) Identify **three** types of data they are likely to have collected during the study. (3 marks)

- 9**
- (a) (i) Name **two** types of submerged highland coasts. (2 marks)
  - (ii) Identify **two** resultant features of the emerged highland coasts. (2 marks)
  - (b) State **three** factors influencing deposition by ocean waves. (3 marks)
  - (c) With the aid of labelled diagrams describe the formation of the following coastal features:
    - (i) Fringing reef; (5 marks)
    - (ii) Spit. (5 marks)
  - (d) Explain the significance of oceans to human activities. (8 marks)
- 10**
- (a) (i) Name **two** mountains in East Africa which are ice capped. (2 marks)
  - (ii) Identify **three** ways in which ice moves. (3 marks)
  - (b) Describe the formation of the following glacial features:
    - (i) Hanging valley; (6 marks)
    - (ii) Pyramidal peak. (6 marks)
  - (c) You are required to carry out a field study on erosional features in glaciated lowland area.
    - (i) Give **two** reasons why you would require a working schedule. (2 marks)
    - (ii) Name **three** erosional features you are likely to observe during the field study. (3 marks)
    - (iii) Give **three** follow-up activities you would undertake after the field study. (3 marks)