

312/1
GEOGRAPHY
PAPER 1
MARCH/APRIL 2015
3¾ HOURS

CROSS COUNTRY EXAMS 2015

The Kenya Certificate of Secondary Education

GEOGRAPHY
PAPER 1
2½ Hours

Instructions to candidates

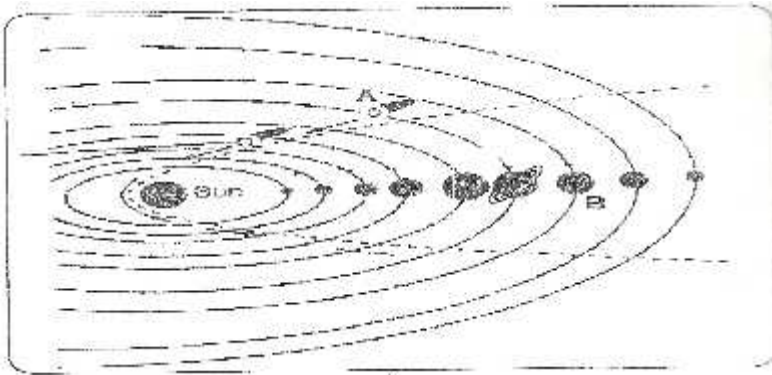
- (a) This paper consists two section A and B
- (b) Answer all the questions in section A
- (c) Answer question 6 and any other two questions from section B.
- (d) All answers must be written in the answer booklet provided.
- (e) This paper consists of 6 printed pages.
- (f) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.

SECTION A

Answer all questions in this section

1. (a) What do you understand by the following ?
 - (i) Micro climate (2mks)
 - (ii) Greenhouse effects (2mks)
- (b) State two conditions necessary for formation of fog. (2mks)
2. (a) Name two types of tectonic plates (2mks)
- (b) State two effects of earthquakes on the human environment (2mks)
3. (a) State three factors that influence the occurrence of underground water. (3mks)
- (b) Give two processes involved in the formation of Karst scenery. (2mks)

4. The diagram below represents the solar system. Use it to answer question (a)



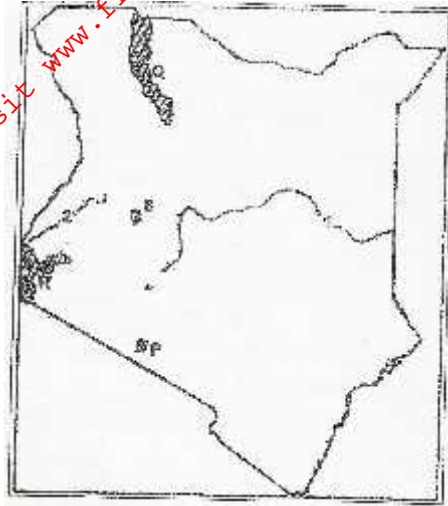
- a) Name the heavenly bodies labeled A and B (2mks)
 - b) Give two characteristics of Jupiter planet. (2mks)
5. (a) Identify categories of desert surfaces (3mks)
 - (b) State three reasons why wind is an active agent of erosion in hot deserts. (3mks)

SECTION B

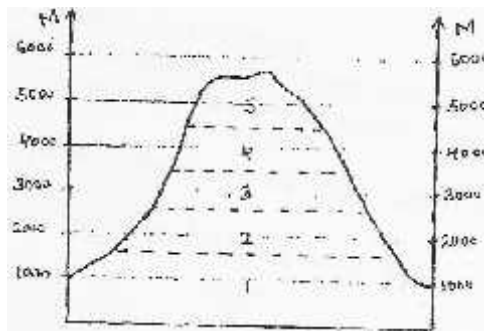
Answer question 6 and any other two questions from this section

6. Study the map of Kitale (sheet 75/3, Scale 1:50,000) provided and answer the questions that follow.
- (a) (i) Name the features found in g rid reference 395328. (1mk)
- (ii) Name two drainage features other than rivers shown in the mapped area (2mks)
- (b) (i) MEASURE THE length of the all- weather loose surface road C 638 from its junction with they dry weather road C 640 at grid square 4314 to Northing 11. Give your answer in Kilometres.
- (ii) Calculate the area of Kapolet Forest Area in square kilometers. (2mks)
- (c) (i) Give the approximate position of Kitale Township in latitude and longitude (2mks)
- (ii) What is the general direction of flow of River Noigameger? (2mks)
- (d) (i) Draw a frame of dimensions 14cm by 10cm to represent the area bound by the eastings 23 and 30 and the northings 11 and 16. (1mk)
- (ii) On the frame, mark and name:
- railway line:
 - Papyrus swamp;
 - All weather loose surface road C 641. (3mks)
- (iii) State the scale of the sketch drawn in (b)(i) above. (1mk)
- (e) Students from a school in grid square 2614 conducted a field study of Kitale township.
- (i) Citing evidence from the map, state three functions of Kitale Township they are likely to identify. (3mks)
- (ii) State two physical problems they could have encountered during the study. (2mks)
- (f) Describe the vegetation of the area covered by the mapped area. (4mks)
7. (a) (i) Define the term lake (2mks)
- (ii) Name three sources of water in the lakes other than rivers. (3mks)
- (b) (i) State three reasons why some lakes my contain fresh water (3mks)
- (ii) Give two examples of lakes formed due to vulcanicity in East Africa. (2mks)

- (c) The map below shows some lakes and rivers in Kenya. Study it and use it to answer the questions that follow.

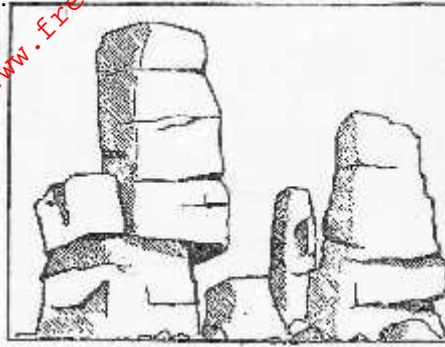


- (i) Name the rivers marked 1 and 2. (2mks)
- (ii) Identify and name the lakes marked P, Q, S. (3mks)
- (iii) Briefly explain how the lake R was formed. (5mks)
- (d) State five significances of lakes. (5mks)
8. (a) Differentiate between natural vegetation and derived vegetation. (2mks)
- (b) (i) Outline three characteristics of tropical grasslands (3mks)
- (ii) Explain three factors that have led to a decline of the natural grasslands in Kenya (6mks)
- (c) The diagram below shows vegetation succession on a mountain in the tropics. Study and use it to answer the questions that follow.

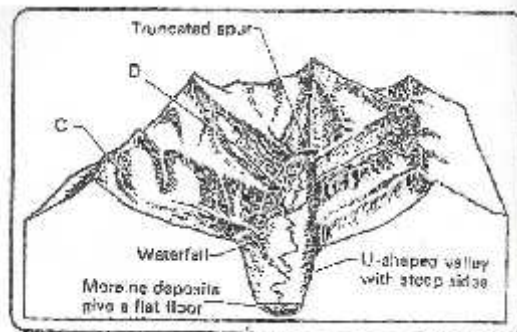


- (i) State two reasons why the line region marked 5 has poor/scanty vegetation (2mks)
- (ii) Give three uses of vegetation region marked 1 (3mks)
- (iii) Name two species of tree found in vegetation region marked 2. (2mks)
- (d) Students of Bunyore Girls intend to conduct a field study on vegetation in an arid and semi-arid land in Kenya.
- (i) Explain two adaptations of desert vegetation they are likely to observe during the study. (4mks)
- (ii) State three methods of data collection you would employ during the study. (3mks)
9. (a) (i) Give two differences between weathering and mass wasting. (2mks)

- (ii) Name two other processes of denudation apart from weathering and mass wasting. (2mks)
- (b) The diagram below shows a process of physical weathering. Study it and use it to answer the questions that follow.



- (i) Identify the process shown in the diagram (1mk)
- (ii) Describe how the process named in (b) (i) above takes place. (4mks)
- (iii) Give two other processes of physical weathering apart from the one named in (b) (i) above. (2mks)
- (c) (i) Describe two processes through which sedimentary rocks may change into metamorphic rocks. (4mks)
- (ii) Give two examples of each of the following igneous rocks;
- Plutonic
 - Hypabyssal
 - Volcanic
- (3mks)
- (d) Suppose members of your class were to conduct a field study on rocks within the vicinity of school.
- (i) Name two secondary sources of information you would use to prepare for the study. (2mks)
- (ii) State three activities you would carry out during the study (3mks)
- (iii) State two importance of rocks you are likely to find out during the study. (2mks)
10. (a) Differentiate between a valley glacier and an ice sheet. (2mks)
- (b) Briefly describe how the ice moves through the following processes.
- (i) Basal slip; (3mks)
- (ii) Extrusion flow. (3mks)
- (c) State two processes through which glaciers erode (2mks)
- (d) The diagram below shows various features that result from glacial erosion. Use it to answer the questions (i)



- (i) Identify and name the features labeled C and D. (2mks)
- (ii) Describe the formation of a cirque. (4mks)
- (e) With the aid of clear labeled diagram(s), name three types of moraines. (3mks)
- (f) Explain three benefits of glaciations to human activities. (6mks)