

312/1
GEOGRAPHY
Paper I
Jan/Feb 2011

BUNYORE MARANDA ENROLMENT EXAMINATIONS 2011
Kenya Certificate of Secondary Education
GEOGRAPHY
Paper I
2 hours

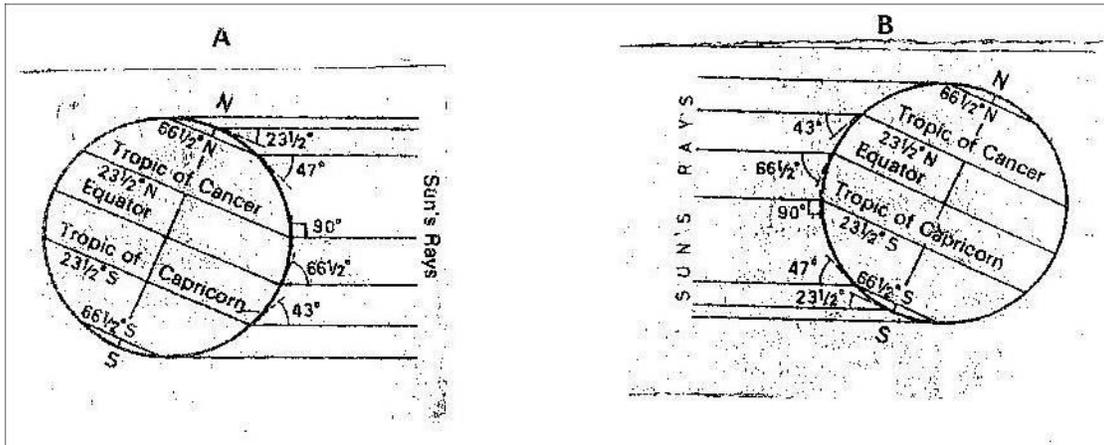
Instructions to candidates

- (a) This paper has two sections: A and B
- (b) Answer all the questions in section A. In Section B answer question 6 and any other two questions
- (c) All the answers must be written in the answer booklet provided.

SECTION A

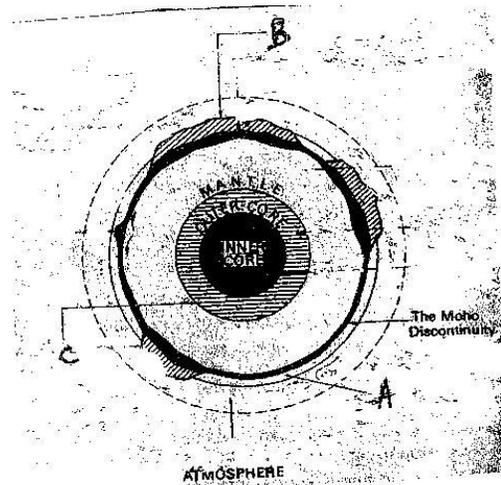
Answer ALL the questions in this section.

1. The diagrams below show the two solstices in a year. Study them and use them to answer the questions that follow



- (a) (i) Name the solstice represented by the diagram A (1mk)
- (ii) Give the date of the year for the solstice represented by the diagram marked B (1mk)
- (iii) State the cause of the solstices (1mk)
- (b) State two characteristics of any one of the solstices (2marks)
2. (a) Name two most abundant gases in the atmosphere (2marks)
- (b) State two functions of water vapour in the atmosphere (2marks)
3. (a) Distinguish between intrusive and extrusive vulcanicity (2marks)
- (b) State three causes of vulcanicity (3marks)
4. (a) Name three surface features in karst areas (3marks)
- (b) State three reasons why karst regions are sparsely settled (3marks)

5. The diagram below shows the structure of the earth. Study it and use it to answer the questions that follow



- (a) Name the parts marked A, B and C (3 marks)
- (b) State two characteristics of the mantle (2 marks)

SECTION B

Answer question 6 and any other TWO questions from this section

6, Study the map of Homa Bay (sheet 129/2, 1: 50 000) provided and answer the following questions

- (a) (i) Give the magnetic declination of the map as at the time of publication (2 marks)
- (ii) Give the latitudinal and longitudinal location of Homa Bay Township (2 marks)
- (b) (i) What is the distance by road from Ohanda market to the flour mill at Kamin Otiya?
Give your answer in kilonmetres (2 marks)
- (ii) Calculate the area of part of Olambwe valley national reserve shown on the map.
Give your answer iii square kilometres (2 marks)
- (c) (i) Apart from road transport, identify and give evidence of two other modes of transport in the mapped area (4 marks)
- (ii) Explain one problem associated with road transport in the area covered by the map extract (2 marks)
- (d) Describe the relief of the area covered by the map (4 marks)

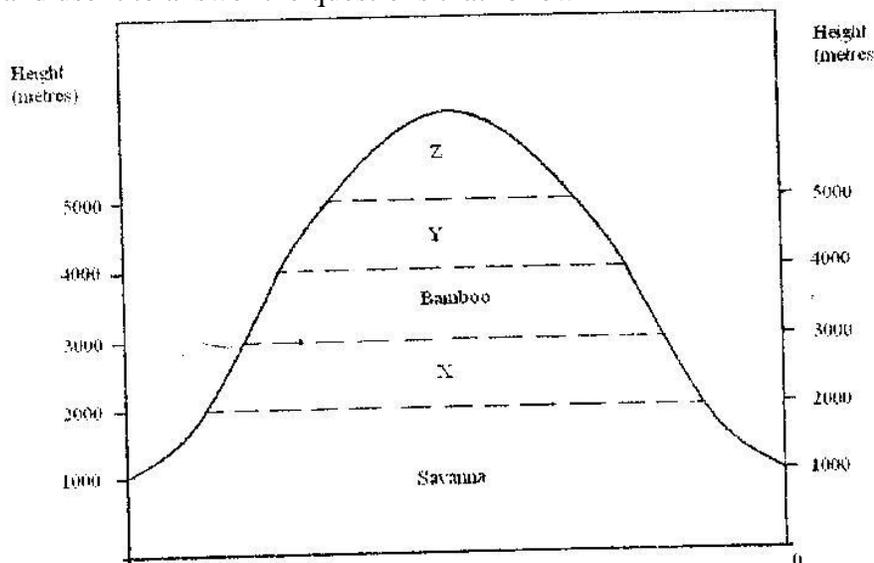
- (e) Identify three functions of Homa Bay town and its environs (3 marks)
- (f) Assume your class intends to carry out a field study of the area covered by the map, explain two ways in which this map would be useful to you (4 marks)

7. (a) (i) Name three types of vegetation (3 marks)
- (ii) Name two types of grasslands vegetation found in Kenya (2 marks)
- (iii) State three ways in which human activities influence the distribution and types of vegetation in Kenya (3 marks)

- (b) (i) Explain two ways in which desert vegetation is adapted to the climatic conditions experienced in the areas where they are found (4 marks)

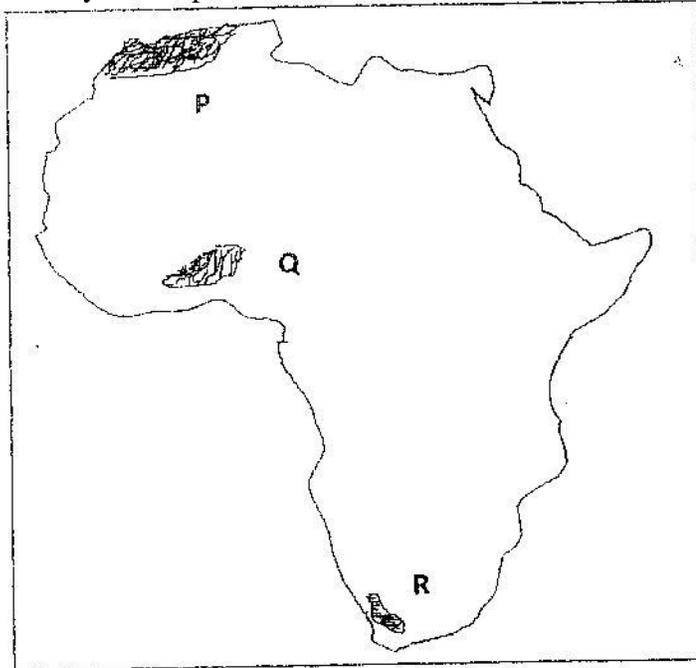
- (ii) State two problems experienced during the exploitation of the tropical rainforest (2 marks)

- (c) The diagram below shows the zones of natural vegetation on a mountain. Study it and use it to answer the questions that follow



- (i) Identify and name the vegetation zones marked Y and Z (2 Marks)
- (ii) Give four characteristics of the vegetation zone marked X (4 marks)
- (d) Suppose your class intends to conduct a field study on uses of vegetation around your school
- (i) Name two methods of data collection you would use during the study (2 marks)
- (ii) State three uses of vegetation you are likely to have identified during the study (3 marks)

8. Study the map of Africa below and answer the questions that follow



- (a) Identify the mountain ranges marked P, Q and R (3 marks)
- (b) Give three fold mountain building periods known in geological history (3 marks)
- (c) Name three features formed along the compressional tectonic plate boundaries apart from fold mountains (3 marks)
- (d) With the aid of well labeled diagrams, describe the formation of fold mountains according to the plate tectonics theory (8 marks)
- (e) Explain four ways in which fold mountains influence climate (8 marks)
9. (a) (i) Apart from rivers, name three other sources of lake water (3 marks)
- (ii) State two reasons why some lakes in the Rift valley of Kenya contain fresh Water (2 marks)
- (b) Describe how lakes may form due to faulting (4 marks)
- (c) Explain how the following factors have influenced the existence of lakes in Kenya
- (i) Water weeds (2 marks)
- (ii) Industrialization (2 marks)
- (d) (i) Name three features of river erosion other than waterfalls (3 marks)
- (ii) Explain two ways in which waterfalls may form (4 marks)

- (e) You intend to conduct a field study on the lower course of a river.
- (i) Name two features you are likely to identify on the flood plain (2 marks)
 - (ii) State three characteristics of the river in the lower course that you are likely to observe during the study (3 marks)
10. (a) (i) Define the following terms:
- Aridity (1 mark)
 - Desertification (1 mark)
 - (ii) Explain two processes of wind erosion (4 marks)
- (b) (i) State two factors that influence transportation of eroded materials in arid areas (2 marks)
- (ii) Explain four ways in which aridity and desertification can be controlled (8 marks)
- (c) Describe the formation of an oasis (4 marks)
- (d) Students from your school intends to conduct a field study on arid landscape
- (i) Give two ways in which a camera would be useful to you during the study (2 marks)
 - (ii) State three problems you are likely to encounter during the field study (3 marks)