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**GEOGRAPHY**

**PAPER 1**

**2¾ HOURS**

**KENYA CERTIFICATE OF SECONDARY EDUCATION  
LAICOMET FORM FOUR EXAM 2010**

**INSTRUCTION TO CANDIDATES:**

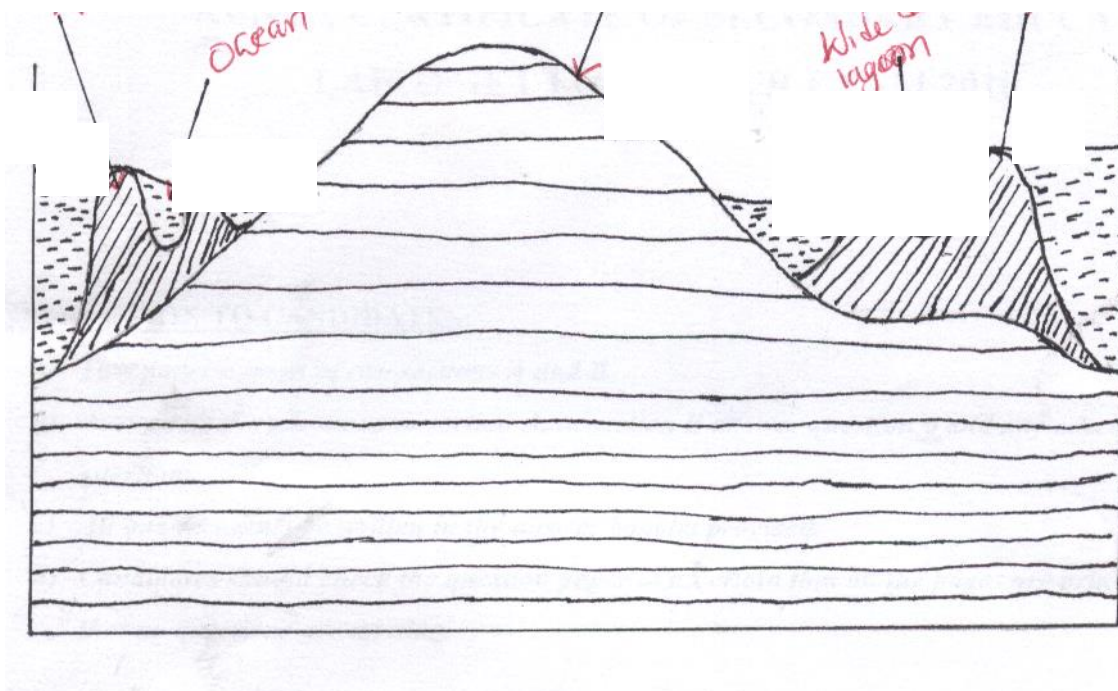
- a) This paper consist of two sections A and B*
- b) Answer all the questions in section A, in section B answer question 6 and any other two questions.*
- c) All answers must be written in the answer booklet provided.*
- d) Candidates should check the question paper to ascertain that all the pages are printed and that no questions are missing.*

**SECTION A**

**Answer all the questions in this section**

- 1. (a) Identify three mountain building periods (3mks)
- (b) Give two examples of volcanic ejected rocks (2mks)
- 2. (a) Give two reasons why there is no vegetation on top of mount Kenya (2mks)
- (b) Give three characteristics of the vegetation found in the Nyika plateau (3mks)

3. (a) (i) What do you call the rate of  $0.6^{\circ}\text{C} / 100\text{m}$  ascent at which temperature decreases with altitude in the lower atmosphere? (1mk)
- (ii) Give two reasons to justify the statement that ‘the higher we go the cooler it becomes’ in the atmosphere (2mks)
- (b) Explain two ways on how latitude determine the temperature of different places on the earth’s surface (2mks)
4. (a) Name the mode of formation of the following lakes (3mks)
- (i) Lake Victoria
- (ii) Lake Nasser on R. Nile
- (iii) Lake Bosumtwi in Ghana
- (b) Give two ways in which a lake may influence the climate of the surrounding area? (2mks)
5. The diagram below shows the island surrounded by coral formations



- (a) Name the feature marked X (1mk)
- (b) Explain the formation of feature X (4mks)

## SECTION B

Answer question 6 and any other two questions in this section

6. Study the map of Belgut 1:50000 (sheet 117/3) provided and answer the following questions
- (a) (i) Give the six figure grid reference of the road junction near Marumbasi (2mks)
- (ii) Measure the length of the all weather road from the junction at the grid reference 2456 to Marumbasi junction at the grid reference 2854 (2mks)
- (b) (i) What is the longitudinal extent of the area covered by the map? (1mk)

- (ii) Draw a rectangle 6cm by 10cm from 4048 to 4548 and 4551 to 4051. On the rectangle mark and name;
- (i) Jamji forest (2mks)
- (ii) All weather roads bound surface (2mks)
- (iii) River Haze (2mks)
- (iv) Identify three physical features along River Haze (3mks)
- (c) (i) What is the bearing of the trigonometrically station at the grid square 2952 from the air photo principle point at 3456. (2mks)
- (ii) What evidence shows that the area receive heavy rainfall (3mks)
- (d) Identify, giving evidence three economic activities carried out in the area covered by the map (6mks)
7. (a) (i) What is vulcanicity? (2mks)
- (ii) Name three causes of vulcanicity (3mks)
- (b) (i) Briefly describe the formation of intrusive volcanic land forms (5mks)
- (ii) Using well labeled diagram explain how the following intrusive feature are formed.
- Dyke (6mks)
- Sill (6mks)
- (c) Explain three negative significance of vulcanicity to human activities (6mks)
8. (a) (i) Distinguish between soil profile and soil catena (2mks)
- (ii) Give two characteristics of soil in the zone of eluviations and two characteristics in the zone of illuviation (4mks)
- (b) (i) What is the significance of humus in the soil? (4mks)
- (ii) Explain how any three components of soil determine the colour of soil (6mks)
- (c) (i) What is soil degeneration (1mk)
- (ii) Explain two natural and two man – made ways in which soil may experience degeneration (8mks)
9. (a) (i) Identify two processes of wind erosion (2mks)
- (ii) Name two features formed by wind erosion in deserts. (2mks)
- (b) Using a well labeled diagram explain how barchan is formed (6mks)
- (c) State four significance of desert land forms (4mks)
- (d) You carried out a field study on the Chalbi desert
- (i) Why would you require a route map? (3mks)
- (ii) During your study you realized that the area experiences acute water shortage. What recommendations would you give the government to alleviate this problem (3mks)
- (iii) What problems are you likely to encounter in the field? (5mks)
10. (a) State four causes of mechanical weathering (4mks)
- (b) (i) Describe the carbonation process of chemical weathering (3mks)
- (ii) Name two rocks that can be weathered through the carbonation process (2mks)

- (iii) Name two features that can be formed on the earth's surface as the carbonation process of weathering takes place (2mks)
- (c) (i) What is an exfoliation dome? (1mk)
- (ii) Explain how an exfoliation dome is formed (3mks)
- (d) Explain three ways in which weathering positively influence man's activities and two negative effects of weathering. (10mks)