**312/1**

**GEOGRAPHY**

**PAPER 1**

**FORM THREE**

**JULY/AUGUST 2015**

**TIME: 23/4 HOURS**

**FORM THREE**

**GEOGRAPHY PAPER 1**

**INSTRUCTIONS TO CANDIDATES**

1. This paper has two sections:**A** and **B**
2. Answer **all** the questions in section **A**
3. Answer question **6** and any other **two** questions from section **B**
4. All answers must be written in the answer sheets provided
5. Candidates should check the question paper to ascertain that no questions are missing

**SECTION A**

Answer **ALL** questions in this section

1. a) (i) What is meant by the term Equinox? (1 mark)

 (ii) Give **two** dates in a year during which the Equinoxes are experienced (2 marks)

b) Why do places on the Earth’s surface experience varying length of day and night? (1 mark)

1. a) Name **three** instruments to match three elements of weather that can be measured at a weather station (3 marks)

b) Give**two** reasons why the recording of data at a school weather station may be inaccurate

 (2 marks)

1. a) (i) What is a rock? (1 mark)

 (ii) Name**three** processes through which sedimentary rocks are formed (3 marks)

b) Give a reason why sedimentary rocks are dominant in the coastal plain of Kenya (1 mark)

1. The diagram below shows the processes of a hydrological cycle



1. Name the processes represented by the arrows marked X, Y and Z (3 marks)
2. Identify **two** sources of water found in rivers (2 marks)
3. a) What is natural vegetation? (1 mark)

 b) The diagram below represents zones of natural vegetation on a mountain



 (i) Name the vegetation zones marked P, Q and R (3 marks)

 (ii) Give**two** reasons why the mountain top is bare of vegetation (2 marks)

**SECTION B**

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

1. Study the map of Migwani 1:50,000 (sheet 151/1) provided and answer the questions that follow.
2. (i) Give the longitudinal extent of the area covered by the map. (2 marks)

(ii) State the magnetic declination of the map when it was drawn. (1 mark)

 (iii) Calculate the bearing of the school at grid square 0965 near Mutitu from the water tank in grid square 1169 (2 marks)

1. (i) Draw a rectangle 10 cm by 8 cm to represent the area bounded by Eastings 05 and 13, and by Northings 70 and 80. (1 mark)

(ii) On it mark and label the following:

* Dry weather road (1 mark)
* RiverIkoo (1 mark)
* MboniDam (1 mark)
* Ridge (1 mark)
1. Citing evidence from the map, identify **three** functions of Mutitu (Ndooa)township (6 marks)
2. Students of the school at Mutitu carried out a field study of the area covered by the map.
3. Name **three** features of relief they identified during the study (3 marks)
4. State **two** natural vegetation types they may have identified (2 marks)
5. Describe the characteristics of the long profile of river Ikoo they are likely to have studied

(4 marks)

1. a) (i) What is faulting? (1 mark)

 (ii) Using diagrams differentiate between a normal fault and a reverse fault(4 marks)

b (i)Name **three** types of tectonic plate boundaries (3 marks)

 (ii) Give **two** reasons why it is important to study the plate tectonics theory (2 marks)

1. With the aid of well labeled diagrams, describe how tensional forces can lead to the formation of a Rift Valley. (7 marks)
2. Explain **four** ways in which faulting influences the human environment (8 marks)
3. a) (i) What is the difference between weathering and mass wasting?(2 marks)

 (ii) Describe carbonation as a process of chemical weathering (5 marks)

 (iii) Other than carbonation, list **four** other processes involved in chemical weathering

 (4 marks)

b) Describe **five** ways in which soil creep occurs. (10 marks)

c) List any **three** evidences of soil creep in an area (3 marks)

1. a) The diagram below shows a river system



1. Name the parts marked A, B and C (3 marks)
2. Identify **two**different types of river flow (2 marks)

b) Describe how a river erodes by the following processes:

1. Attrition (2 marks)
2. Hydraulic action (4 marks)

c) Describe the processes by which a river transports its load (6 marks)

d) The diagram below illustrates river capture



1. Name the parts marked E,F, and G (3 marks)
2. Describe the process of river capture illustrated above (5 marks)
3. a) (i) What is a lake? (2 marks)

 (ii) List **four** external land forming processes that can lead to formation of lakes (4 marks)

b) (i) name **two** saline lakes found in the Rift Valley (2 marks)

 (ii) Explain **three** factors that make some lakes in the Rift Valley have fresh water

(6 marks)

1. Your class intends to carry out a field study of lakes
2. What preparations would you make before going for the study (4 marks)
3. State **two** methods you would use to record data during the study (2 marks)
4. Give **five** uses of lakes you are likely to find out (5 marks)