**FORM 4 TERM 1 OPENER (ENTRY)**

**GEOGRAPHY PP1**

**FORM FOUR**

**TIME:2 HOURS**

**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 on the answer sheets provided.

5. Students should check the question paper to ascertain that all pages are printed as indicated and

 that no question is missing.

6. Students should answer the questions in English.

**SECTION A:**

**Answer all the questions from this section.**

1. (a) Name the minerals found in the core of the earth. (2 mks)

 (b) State three reasons why the interior of the earth is very hot. (3 mks)

2. (a) State three characteristics of the troposphere. (3 mks)

 (b) State two factors you will consider before positioning a rain gauge. (2 mks)

3. (a) Apart from soil creep, give two other types of slow mass wasting. (2 mks)

(b) Give three natural causes of soil creep. (3 mks)

4. (a) Give three conditions necessary for the formation of a Karst Scenery. (3 mks)

 (b) Name three zones of saturation of ground water. (3 mks)

5. State four different ways in which a water fall can occur. (4 mks)

**SECTION B:**

Answer question 6 and any other two questions from this section.

6. Study the map of Nyeri (1:50,000) sheet 189/4 provided and answer the questions.

 (a) (i) Identify two types of scale used on the map (2 mks)

 (ii) Give the six figure grid reference of the Trigonometrical station number 120 TT 27 in the north western part of the area covered by the map. (2 marks) (2 mks)

(b) Measure the length of the all weather road loose surface (E583) from Easting 57 to Easting 66.Give your answer in kilometres (2 mks)

(c) Draw a rectangle 12 cm by 16 cm to represent the area enclosed by eastings 64 and 67 and northings 51 and 55 (1 mk)

 On the rectangle, mark and name each of the following

1. Nyeri Hill forest (1 mk)
2. River Chanya (1 mk)
3. Trigonometrical station 120T 19 (1 mk)
4. Kagundu School (1 mk)

 (d) Describe the distribution of natural vegetation in the area covered by the map. (8 mks)

 (e) Citing evidence from the map, identify three economic activities carried out in the area covered by the map. (6 mks)

7. (a) (i) What is a fault:? (2 mks)

 (ii) Name the parts of a fault. (4 mks)

 (b) (i) Apart from the Rift valley, name three resultant features of faulting. (3 mks)

 (ii) With the aid of well labelled diagrams, describe how a rift valley is formed due to tension forces. (8 mks)

(c) (ii) State four characteristics of a composite volcano. (4 mks)

 (iii) State four positive influences of volcanicity. (4 mks)

8. (a) (i) Differentiate between Zero lapse rate and Environmental lapse rate. (2 mks)

 (ii) Name two types of fronts in air masses. (2 mks)

 (iii) State two effects of urbanization on climate. (2 mks)

 (b) (i) Name one type of hot climate. (1 mk)

 (ii) Describe the rainfall characteristics in equatorial climate. (8 mks)

 (c) (i) State four natural causes of the global climatic change. (4 mks)

 (ii) Give three examples of greenhouse gases. (3 mks)

 (iii) Briefly explain how burning of fossil fuels contribute to global warming.

 (3 mks)

9. (a) (i) What is a Lake? (2 mks)

 (ii) State four sources of water in lakes. (4 mks)

 (iii) What determines the size of a lake? (3 mks)

 (b) Describe how Lake Tanganyika was formed. (4 mks)

 (c) Explain three reasons why Lake Magadi is saline. (6 mks)

 (d) Explain three human activities have negatively impacted on lakes. (6 mks)

10. (a) (i) What is soil? (2 mks)

 (ii) Name three types of soil according to texture. (3 mks)

 (b) State four ways in which humus improves the quality of soil. (4 mks)

 (c) Explain how the following factors influence soil formation.

 (i) Climate. (5 mks)

 (ii) Living organisms. (5 mks)

 (d) You are required to carry out a field study on soils in the area around your schools.

 (i) State two objectives of your study. (2 mks)

 (ii) What information would you collect to indicate the area is severely eroded?

 (2 mks)

 (iii) Outline how you will record the data during the study. (2 mks)