**312/1**

**GEOGRAPHY**

**PAPER 1**

**JAN/ FEB 2020/02021**

**TIME: 2¾ HOURS**

PAVEMENT FORM 4 TRIAL 1 EXAMINATION 2021/2022

Kenya certificate of secondary education (K.C.S.E)

**GEOGRAPHY**

**PAPER 1**

**TIME: 2¾ HOURS**

**INSTRUCTIONS TO CANDIDATES:**

1. *This paper consists of* ***two*** *sections* ***A*** *and* ***B****.*
2. *Answer* ***ALL*** *questions in Section* ***A****.*
3. *In section B answer question* ***6 (compulsory)*** *and any other* ***two questions****.*
4. *All answers must be written in the answer booklet provided.*

**SECTION A**

***Answer ALL Questions.***

1. (a) Define asteroids? (2marks)

(b) State **two** weaknesses of the passing star theory. (2marks)

1. (a) Apart from rainfall, name two other forms of precipitation common in Kenya. (2marks)

(b) Name **three** instruments found in a Stevensons screen. (3marks)

1. (a) State **two** sources of underground water. (2marks)

(b) Highlight **three** significance of Karst regions. (3marks)

1. (a) Outline **two** external land forming processes that lead to formation of lakes. (2marks)

(b) Describe the formation of Lake Victoria. (4marks)

1. (a) State **two** factors that influence the leaching of soil. (2marks)

(b) Give t**hree** causes of soil degradation. (3marks)

**SECTION B**

**Answer question 6 and any other two questions*.***

1. Study the map of Oyugis 1:50,000 (Sheet 130/1) provided and answer the following questions:-
2. (i) What type of map is the Oyugis sheet? (1mark)

(ii) What is the latitudinal and longitudinal location of the South West edge of the map? (2marks)

(iii) Identify **two** man-made features in grid square 7717. (2mks)

1. (i) What is the lowest point of the area covered by the map? (1mark)

(ii) Citing evidence, identify **three** economic activities in the area covered by the map. (3marks)

(iii) Give the six figure grid reference for the spot height to the North West. (2marks)

(iv) Calculate the area of Kodera forest. Give your answer in kilometres. (2marks)

1. Describe the relief of the area covered by the map. (4marks)
2. (i) Draw a square of 5cm to represent area bound by Eastings 71&76 and Northings 32&37 .

(ii) On the sketch map, mark and name the following:-

* River Sare
* Oluso hill
* Kokungu dam
* All weather road loose surface
* Spot height number 4946 (7marks)

(iii) Calculate the new scale of the sketch map. (2marks)

1. (a) Define the term vulcanicity. (2marks)

(b) Differentiate between a sill and a dyke. (2marks)

(c) (i) Apart from volcanoes, name two other features resulting from extrusive volcanic activity.(2marks)

(ii) State **two** characteristics of a shield volcano. (2marks)

(d) Describe how the following features are formed:

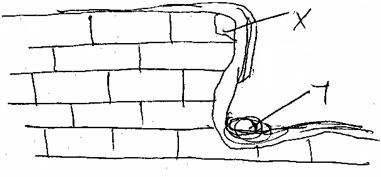
(i) Geyser (5marks)

(ii) A crater (4marks)

1. Explain **four** significance of vulcanicity to the economy of Kenya. (8marks)
2. (a) What is river regime? (2marks)

(b) State **two** factors that influence the velocity of water in a river. (2marks)

(c) Use the diagram below to answer the following questions:-



(i) Identify the feature drawn above. (1mark)

(ii) Name the parts X and Y. (2marks)

(iii) State **two** economic importance of the feature above. (2marks)

(d) (i) Name **three** types of river erosion. (3marks)

(ii) State **three** conditions for a river capture to occur. (3marks)

(e) (i) State **three** conditions for a river capture to occur. (3marks)

(ii) Describe the process of a river capture. (4marks)

1. Describe the centripetal drainage pattern. (2marks)
2. (a) (i) List **three** types of desert surfaces. (3marks)

(ii) Explain **two** processes of wind erosion. (4marks)

(b) Using well labeled diagrams, describe how the following features are formed.

(i) Mushroom blocks (4marks)

(ii) Seif dune (4marks)

(c) Explain **three** factors influencing wind transportation. (6marks)

(d) State **four** importances of desert landforms.

10. a) Differentiate between mass wasting and mass movement. (2 marks)

b) i) State **two** causes of soil creep. (2 marks)

ii) Explain **three** factors influencing mass wasting. (6 marks)

c) i) List **four** processes of chemical weathering. (4 marks)

ii) Describe the following physical weathering processes.

* Slaking (3 marks)
* Exfoliation (3 marks)

d) Students are planning to carry out a field study of on area affected by mass wasting.

i) How did they prepare for the field study? (2 marks)

ii) Identify **three** follow-up activities. You are likely to undertake after the study. (3 marks)