

**312/1**  
**GEOGRAPHY**  
**PAPER 1**  
**JULY/AUGUST 2016**  
**TIME: 2¾ HOURS**

**KIRINYAGA CENTRAL SUB-COUNTY EFFECTIVE FORTY  
JOINT EXAMINATION – 2016**

**Kenya Certificate of Secondary Education**  
**GEOGRAPHY**  
**PAPER 1**  
**TIME: 2¾ HOURS**

**INSTRUCTIONS TO CANDIDATES:**

- (a) This paper has **two** Sections **A** and **B**.
- (b) Answer all the questions in Section **A**.
- (c) Answer question **6** and **any** other **two** questions from Section **B**.
- (d) All answers must be written in the answer booklet provided.
- (e) Candidates should check the question paper to ascertain that no questions are missing.
- (f) Candidates should answer the questions in English.

## **SECTION A:**

Answer **all** questions from this section in the spaces provided.

1. (a) Differentiate between relative humidity and absolute humidity. (2mks)  
(b) State the significance of water vapour in the atmosphere. (3mks)
  
2. (a) What do you understand by the term; Vertical Earth movement. (2mks)  
(b) Identify **three** causes of earth movement. (3mks)
  
3. (a) Define the term block disintegration (2mks)  
(b) State **three** factors influencing the rate at which weathered materials move down slope. (3mks)
  
4. (a) Name **two** places in Kenya where karst scenery is relatively well developed. (2mks)  
(b) State **three** ideal conditions for development of an artesian well/basin. (3mks)
  
5. (a) Give **two** characteristics of plutonic rocks? (2mks)  
(b) State **three** ways in which rocks are significant to Kenya's economy. (3mks)

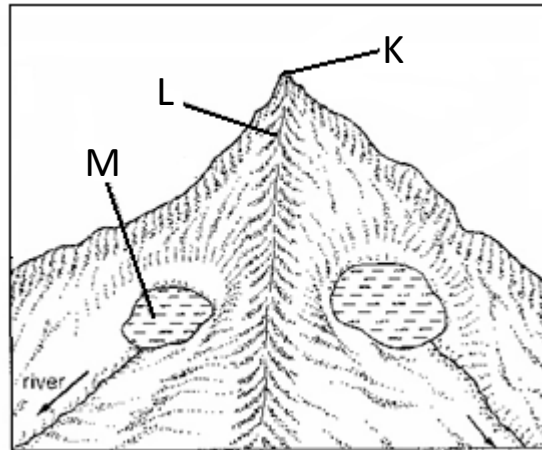
## **SECTION B: MAPWORK**

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

6. Study the map of Busia 1: 50,000 (Sheet 101/1) provided and answer the following questions.
  - (a) (i) What is the approximate height of Ndanyi Hill Peak in grid square 4032. (2mks)  
(ii) Identify **two** natural relief features in grid square 2837. (2mks)  
(iii) Name **two** types of natural vegetation to the North of Northings 45. (2mks)
  - (b) (i) What is the bearing of Principal photo point in grid square 3827 from principal photo point in grid square 3131. (2mks)  
(ii) Citing evidence from the map identify **two** social services offered in the area covered by the map. (4mks)

- (c) (i) Using a vertical scale of 1cm to represent 40 metres, draw across-section along Northing 36 from easting 29 to easting 34. (4mks)
- (ii) On it mark and label the following
- Ridge. (1mk)
  - Loose surface road. (1mk)
  - River. (1mk)
- (iii) From the cross-section you have drawn, test if the starting and end point are intervisible. (Give a reason for your answer). (2mks)
- (d) Describe briefly the drainage of the area covered by the map. (4mks)
7. (a) (i) Differentiate between a mineral and a rock. (2mks)
- (ii) Name any **two** intrusive igneous rocks. (2mks)
- (b) (i) Name **four** characteristics of minerals. (4mks)
- (ii) Describe **three** ways in which sedimentary rocks are formed. (9mks)
- (c) Explain **four** significances of rocks. (8mks)
8. (a) (i) Define the term vulcanicity. (2mks)
- (ii) Name **two** features resulting from fissure eruptions. (2mks)
- (b) With the aid of a diagram, describe the formation of the following intrusive features:- (9mks)
- (i) Sill.
  - (ii) Dyke.
  - (iii) Batholith.
- (c) Explain **three** positive effects of vulcanicity to human activities. (6mks)
- (d) You have been asked to carry out a field study in Mount Kenya on vulcanicity.
- (i) State **three** methods you would use to collect your data. (3mks)
  - (ii) Name **three** follow-up activities you will undertake. (3mks)

9. (a) (i) Define the term glaciation. (2mks)  
(ii) Give **two** processes of glacial movement. (2mks)  
(iii) Explain **three** factors that enhance glacial erosion. (6mks)
- (b) The diagram below shows features resulting from glacial erosion on a highland area.



- (i) Name the feature marked **K**, **L** and **M**. (3mks)  
(ii) Describe how the feature marked **M** is formed. (6mks)
- (c) Explain **three** negative effects of glaciation on the physical and human environment. (6mks)
10. (a) List **three** factors which contribute to the development of deserts. (3mks)  
(b) Name **three** processes through which wind erodes a desert landscape. (3mks)  
(c) Explain **three** ways through which wind transports its load. (6mks)  
(d) Describe how the following desert features are formed. (9mks)  
(i) Yardangs.  
(ii) Rock pedestals.  
(iii) Wadis.  
(e) State **four** ways in which desert features are significant to human activities. (4mks)