

NAME ..... INDEX NO .....

SIGN ..... DATE .....

GEOGRAPHY

PAPER 1

THEORY

MARCH/APRIL 2017

TIME:  $2\frac{1}{2}$  HOURS

**TABANI FRIENDS SECONDARY SCHOOL**

**INSTRUCTIONS**

**a) Answer ALL Questions in Section A**

**SECTION A (25MKS)**

1. (a) State the dominant minerals found in the continental crust. (2mks)  
(b) Give **three** characteristics of the Mantle. (3mks)
  
2. (a) State **three** sources of ground water. (3mks)  
(b) State **two** underground features common in Karst scenery. (2mks)
  
3. (a) Give **three** causes of volcanicity. (3mks)  
(b) Differentiate between weathering and mass wasting. (2mks)
  
4. (a) What is the difference between plutonic and volcanic rocks? (2mks)  
(b) Give an example in each of the following types of igneous rocks:  
(i) Plutonic  
(ii) Hypabyssal  
(iii) Volcanic (3mks)
  
5. (a) What is the solar system? (2mks)  
(b) Identify **three** planets that have satellites. (3mks)

## **SECTION B**

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

Study the map of Homa Bay sheet 129/2 provided and answer the questions that follow.

6. (a) i) Name the County administrative boundary of Kenya covered by the map of HOMA BAY. (1mk)
- ii) Give the value of the grid square enclosing God Nyamjini 129T35 • . (1mk)
- iii) What is the area in Kilometres square of the area covered by OLAMBWE VALLEY NATIONAL RESERVE? (2mks)
- (b) i) Draw a cross section between grid references 610350 and 660350. Use vertical scale 1cm represents 100ft. (7mks)
- ii) On the drawn cross section, mark and label the following features: (3mks)
- Kanyabala forest
  - River Hogo
  - Houses
- (c) Describe the relief of the area covered by the map. (6mks)
- (d) A group of students carried out a field study of the landscape in the area to the north of northing 42 and to the west of easting 50.
- i) Name **one** physical landform and drainage feature they identified. (2mks)
- ii) State **two** problems they might have encountered when carrying out the study. (2mks)
- iii) Give **one** advantage of studying landscape through fieldwork. (1mk)
7. (a) Define the term 'Aridity'. (1mk)
- (b) Describe the following wind erosion processes in arid areas.
- i) Deflation (2mks)
- ii) Attrition (2mks)
- (c) State and explain **three** factors that influence wind transportation. (6mks)
- (d) Explain the formation of a Zeugen. (5mks)
- (e) You are supposed to carry out a field study of a semi arid area in Kenya.
- i) Name **two** features you would identify formed as a result of water erosion in the area. (2mks)
- ii) State **two** ways through which you would prepare yourself for the field study. (2mks)
- iii) What information would you collect through observation that would indicate the area is turning into a desert? (2mks)

- iv) State **three** measures you would recommend to be put in place to control desertification in the area. (3mks)
8. (a) Differentiate between river capture and river rejuvenation. (2mks)  
 (b) Explain how the change in the base level leads to river rejuvenation. (6mks)
- (c) i) Explain the **three** processes of river transportation. (6mks)  
 ii) State **four** factors that lead to river deposition. (4mks)
- (d) Your class conducted a field study on the work of rivers around your school compound.  
 i) State **three** preparations you made before the field study. (3mks)  
 ii) Give **two** examples of rivers you identified to conduct the study on river capture. (2mks)  
 iii) Identify **two** problems you might have encountered during the field study. (2mks)
9. (a) i) What is ground water? (2mks)  
 ii) List **four** sources of ground water? (4mks)
- (b) i) Outline **four** ways through which springs form. (4mks)  
 ii) The diagram below shows various zones of ground water. Name the zones marked A, B and C. (3mks)
- (c) i) Name **three** features which form on the surface of a Karst scenery. (3mks)  
 ii) Draw a diagram to show an underground limestone cave. On it, mark and name:  
 • A stalactite. (1mk)  
 • A stalagmite. (1mk)  
 • A limestone pillar. (1mk)  
 • Underground River. (1mk)  
 iii) Describe how a stalagmite is formed. (5mks)
10. (a) i) Define a glacier. (2mks)  
 ii) Name **three** types of glacier. (3mks)
- (b) i) A part from a cirque, name **two** features found on the upland glaciated areas. (2mks)  
 ii) Describe the process through which a cirque is formed. (5mks)
- (c) Explain **three** ways in which upland glaciated features are significant to human activities. (6mks)
- (d) You are planning to carry out a field study of an upland glaciated area.

- i) Give **three** reasons why you would require a route map.  
(3mks)
- ii) Identify challenges you are likely to encounter during the field study.  
(4mks)

**LAST PRINTED PAGE**