## SECTION A

## ANSWER ALL QUESTIONS IN THIS SECT1ON.

1. (a) What is river rejuvenation?
(2mle
(b) State three conditions leadingatio river rejuvenation. (3mks)
2. Study the diagram below and answer the questions that follow.

a (i) Name the parts marked $x$ and Y. (2mks)
(ii) Give two minerals of the outer core. (2mks)
b. State three characteristics of the crust. (3mks)
3. The diagram below shows some features found in a Karst scenery.

(a)Name the features marked $\mathrm{x}, \mathrm{y}$ and z . ( 3 mks )
(b) Name 3 conditions favoring the location of an artesian well. ( 3 mks )
4. (a) What is a rock? (1mk)
(b)List two characteristics of sedimentary rocks. ( 2 mks )

5 Describe the continental drift theory. $(5 \mathrm{mks})^{2}$

STUDY THE MAP OF KITALEAT:50,000 (SHEET 75/3) PROVIDED AND ANSWER THE FOLLOWING
6.a (i) Give the position of the south west corner of the map by latitude and longitude. (2mks)
(ii) Name two mane features found in the grid reference 3910. (2mks)
(iii) What is the $0^{\varsigma^{x}}$ height of the trigonometric station in grid 2823. ( 1 mk )
(iv) Using the marginal information, give the magnetic variation of the area when the map extract was $e^{e}$ drawn. (2mks)
be (1) Draw a square 10 cm by 10 cm to represent the area enclosed by the Easting's 28 and 32 and Northings 11 and 16. (1mk)
(ii) On the square, mark and name the following features
-Dam (1mk)
-Bog (1mk)
-River (1mk)
-All weather road loose surface ( 1 mk )
-Air photo principal point (1mk)
c. Describe the distribution of settlements in the area covered by the map. (4mks)
d (i) Citing evidence from the map explain two physical factors that have influenced the location of Kitale town. (4mks)
(ii) Students from a school in Kitale were to carry out a field study in Kiptaberr Forest. Give four reasons why they would conduct a reconnaissance. ( 4 mks )

7(a) Describe three processes through which the wind transports its load in the desert. (6mks)
(b)Describe how the following features are formed:
(i) A Bajada. (3mks)
(ii) An Oasis. (4mks)
(c) Explain 3 ways in which plants have adapted themselyes to desert conditions. ( 6 mks )
(d) Some students carried out a field study in a deserearea.
(i) Apart from observation, what other methgis are they likely to have used to collect data. (3mks)
(ii) Identify 3 types of dunes they would have encountered. ( 3 mks )

8 a (i) What are earthquakes $(2 \mathrm{mks})$
(ii) Name three types of earthquake waves. ( 3 mks )
(iii) State five ways in ${ }^{5} h^{5}$ ich the earth's crust is affected by earthquakes. ( 5 mks )
b (i) With the aid of well-labelled diagrams, describe how the rift valley is formed by tensional forces. (8mks)
(ii) State foas effects of faulting. ( 4 mks )
(iii) Gize two advantages of studying faulted landscape through fieldwork. (2mks)

59a (i) what is climate ( 2 mks )
(ii) Explain two effects of climate change on the physical environment. (4mks)
b (i) State five characteristics of inter tropical convergence zone (ITCZ). (5MKS)
(ii) Describe how convectional rainfall is formed. (7mks)
(iii) Which problems are associated with convectional rainfall in the lake region of Kenya. (3mks)
c Explain how the following factors influence climate.
-Latitude (2mks)
-Aspect (2mks)
10. Differentiate between the terms.
(i)Vulcanicity and volcanicity. (4MKS)
(ii)Lava and Magma (2mks)
b)(i) What is an extinct volcano? (1mks)
(ii) State two examples of extinct volcanoes in Kenya (2mks)
c) The diagram below shows some intrusive features formed by vulcanicity use it to answer the questions.

(i) Name features A, B, Ciañad D (4mks)
(ii) Describe how a duke is formed ( 4 mks )
d Explain four positive effects of vulcanicity. ( 8 mks )
$e^{2^{2}}$

