GEOGRAPHY
MARKING SCHEME
TERM 3 2025
OPENER EXAMINATION

INSTRUCTIONS: ***Answer all the Questions*** **TIME: 1 HR 30 MIN**

1a).Name the two major types of earth movements that occur within the earth's crust. (2mks)

- Horizontal/lateral/orogenic earth movement
- Vertical/epeirogenic earth movement

b) Explain how the movement of magma causes earthquake (2mks)

- When the rocks within the crust and mantle get so hot that they melt the liquid rock (magma) may flow forcefully (intrude through the lines of weakness). By so doing the magma occupies the space within these rocks. These makes the displaced rocks to move away vertically or horizontally. If the movement of rock is vertically the land becomes uplifted and the surface bulges and if the crustal rocks move sideways, horizontal earth movement is experienced.

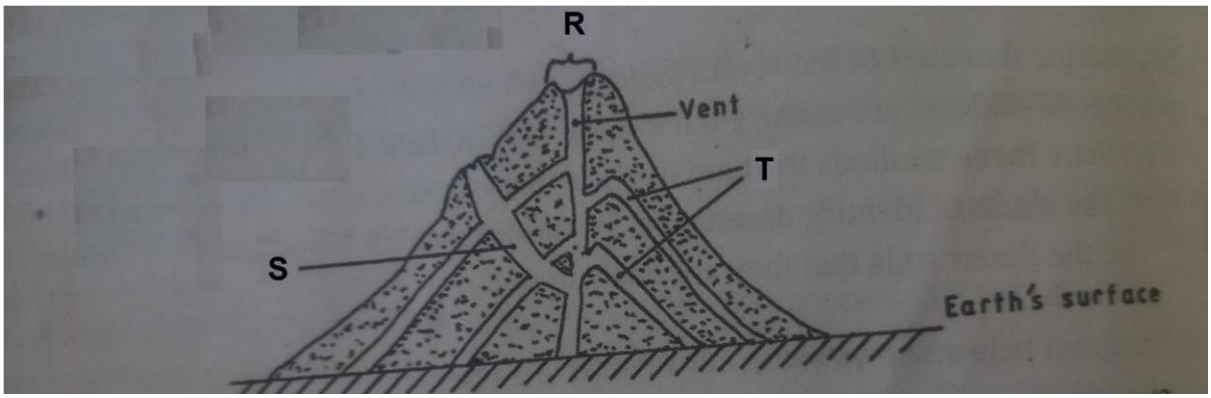
2 a) Differentiate between a magma and lava. (2mks)

- Magma is the molten rock material which originates from the interior of the earth, cools while below the earth's surface and has large crystals while lava is the molten rock materials that has reached the surface, solidifies and has small crystals.

3. a) what is vulcanicity?. (2mks)

- Vulcanicity is the process through which gaseous or liquid or molten rock or solid materials are forced into the earth's crust or ejected onto the earth's surface

b) The diagram shows a composite volcano.



i) Name the features marked R, S and T. (3mks)

- R……crater
- S……lava layers
- T……dyke or side vent

ii) How is a parasitic cone formed? (3mks)

- Pressure is reduced causing the magma from the interior of the earth to fail to reach the top of the volcano. The upper part of the main vent of the volcano is blocked, pressure builds up and magma escapes through a side vent. The successive outpouring of mama through the side vent builds alternating layers of ash and lava to form a conelet on the side of the composite volcano. This conelet is the parasitic cone.

4. Draw a diagram to show a sime fold and on it mark and name (2mks)
i)an anticline ii)limb

Iii)a syncline

5.a) give three causes of earthquakes. (3mks)

- Gravitative pressure
- Isostatic adjustment
- Collision of tectonic plates
- Violent volcanic eruptions
- Energy release in the mantle
- Nuclear explosions
- Building reservoirs
- Mama movement within the crust

b) Identify two types of scales that is used to measure earthquakes. (2mks)

- Mercalli scale

- Ritcher scale

c) Name three major earthquake zones in the world. (3mks)

- The circum-pacific belt
- Around mid ocean ridges/mid-Atlantic belt
- The great rift valley belt
- Along the boundaries of plate tectonic
- Regions of crustal compressions(Mediterranean –Himalayan belt)

6. a) apart from contours, name three other methods of relief representation on topographical maps. (3mks)

- Form lines
- Pictorial representation
- Hill shading
- Colouring
- Cliff /rock drawing • Use of spot heights

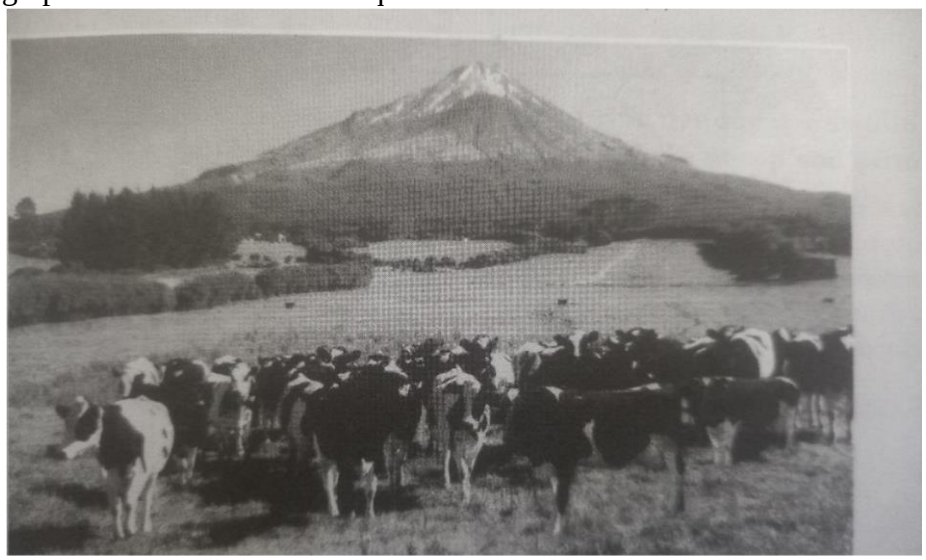
b) Give the main difference between hachures and formlines. (2mks)

- Hachures are small lines drawn to represent slopes. The lines are drawn thicker to represent steeper slopes and thinner for gentle slopes while form lines are like contours representing features that are not accurately surveyed. They are shown by broken lines.

c) State four ways of locating places on a map. (4mks)

- By use of direction, bearing and distance
- By use of place names
- By use of latitudes and longitudes
- By use of grid reference

7. Study the photograph below and answer the questions that follow.



a) Identify the type of photograph shown above. (1mk)

- Ground general view

sb) Draw a rectangle measuring 15cm by 10cm to represent the area covered by the photograph. (1mk)
c)on the rectangle,sketch and label four main features shown on the photograph. (4mks)

- Dairy cows
- Grass
- Mountain • trees

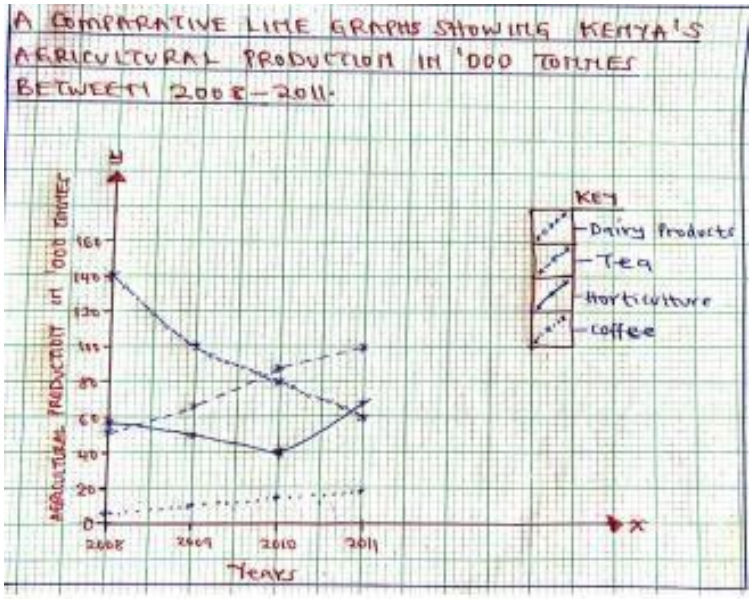
d) Using evidence from the photograph, Identify two indicators which show that the area experience high rainfall. (2mks)

- presence of dairy cows
- vegetation(grass)

10a). The table below shows Kenya's agricultural production in `000` tonnes between 2008 and 2011.

ITEMS/YEARS	2008	2009	2010	2011
Horticulture	58000	49000	40000	68000
Tea	55000	65000	88000	100,000
Coffee	7000	9000	15000	18,000
Dairy products	140,000	100,000	80,000	60,000

Using a vertical scale of 1cm to represent 20,000 tonnes, draw a comparative line graph to represent the above data. (7mks)



b)State two advantages of using line graphs in representing data. (2mks)

- time consuming while drawing the graph
- represent a few variables/items
- variables cannot be read at a glance