

GEOGRAPHY PAPER II FORM 3 MARKING SCHEME TERM 2 2019

SECTION A: 25 MARKS

Answer all the questions

1. (a) Name two areas where gold is mined in Tanzania. (2 mks)

- Geita
- Mpanda
- Musonka near Sekenke in central Tanzania.
- Lupa in southern Tanzania.

2 x 1 = 2mks

(b) State three industrial use of copper as a mineral. (3 mks)

- Used in electrical engineering
- Used as an alloy
- Used in metallurgical industries
- Used for manufacture of boilers, radiation pipes and tubes.

3 x 1 = 3mks

(c) Name three methods of alluvial mining (placer mining). (3 mks)

- Panning
- Dredging
- Hydraulic mining

3 x 1 = 3mks

2. (a) A photograph is divided into 3 parts. Name them. (3 mks)

- Foreground
- Middle ground
- Background

3 x 1 = 3mks

(b) State three limitations of using photographs. (3 mks)

- Expensive ie require a camera or a photographic device/must travel to where the feature is.
- May not be useful to visually impaired persons.
- Blurred images may not be clear hence can lead to wrong interpretation.
- Black and white photograph of some features may give wrong impression of a different feature eg wheat and oats/grass.
- Requires a skilled person who knows how to capture photographs using devices such as video cameras.

3 x 1 = 3mks

3. (a) List three main types of sampling. (3 mks)

- Random
- Systematic
- Stratified

3 x 1 = 3mks

(b) Name the methods that are used to analyse statistical data. (3 mks)

- (i) Calculation of percentages
- (ii) Measures of central tendencies
- (iii) Measures of dispersion.

3 x 1 = 3mks

4. Name two types of questionnaires. (2 mks)

- Personal (interview) questionnaire
- Rigid questionnaire

5. Outline three types of field work.

(3 mks)

- Field research
- Field excursions
- Field teaching/study

3 x 1 = 3mks

SECTION B:

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

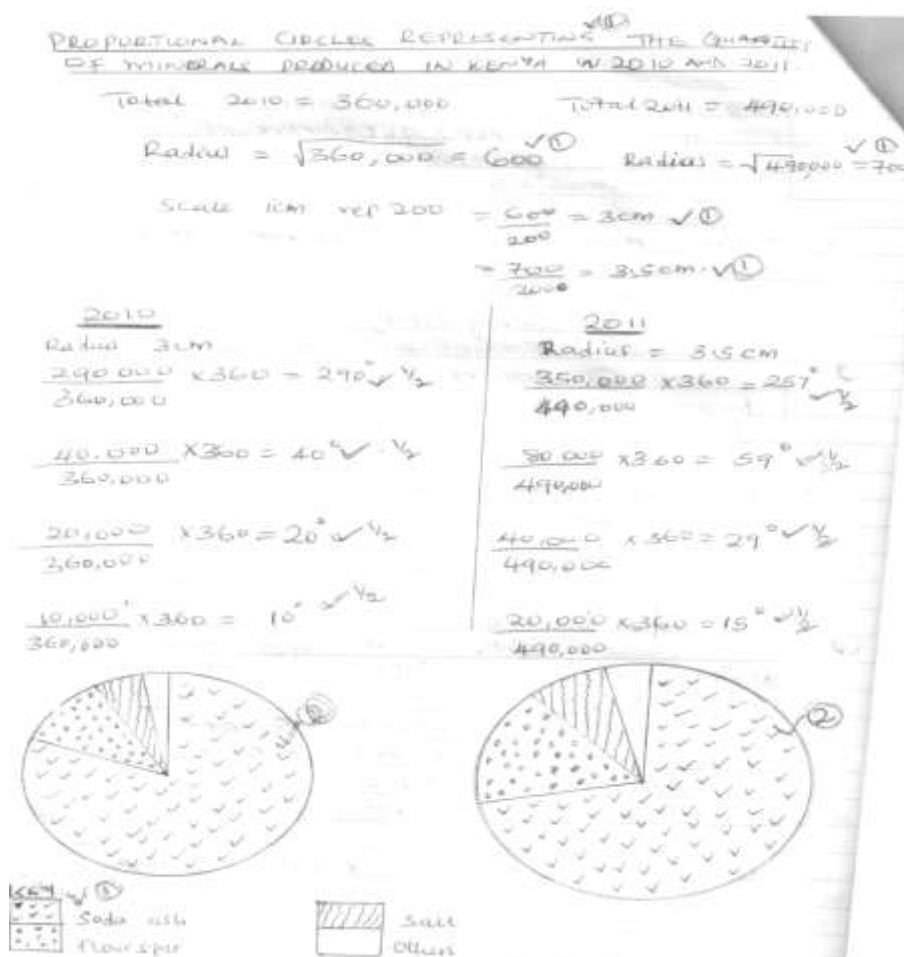
6. Use the table below to answer the questions that follow.

(a) The table below shows the quantity of minerals produced in Kenya in tones in 2010 and 2011.

MINERALS/YEARS	2010	2011
Soda ash	290,000	350,000
Fluorspar	40,000	80,000
Salt	20,000	40,000
Others	10,000	20,000
TOTAL	360,000	490,000

(i) Draw proportional circles to present the information above.

(14 mks)



Total 14 mks

(ii) State two advantages of using proportional circles in data representation.(2 mks)

- i. Can be used to present varying types of data.
- ii. Easy to compare individual segments.
- iii. It gives a clear visual impression since the various quantities in different segments can be clearly seen since they are shaded differently. $2 \times 1 = 2\text{mks}$

(b) (i) Name any two fuel minerals. (2 mks)

- Coal
- Oil
- Natural gas

$2 \times 1 = 2\text{mks}$

(ii) Name three major oil producers in the Middle East. (3 mks)

- Saudi Arabia
- Iraq
- Iran
- Kuwait
- United Arab Emirates

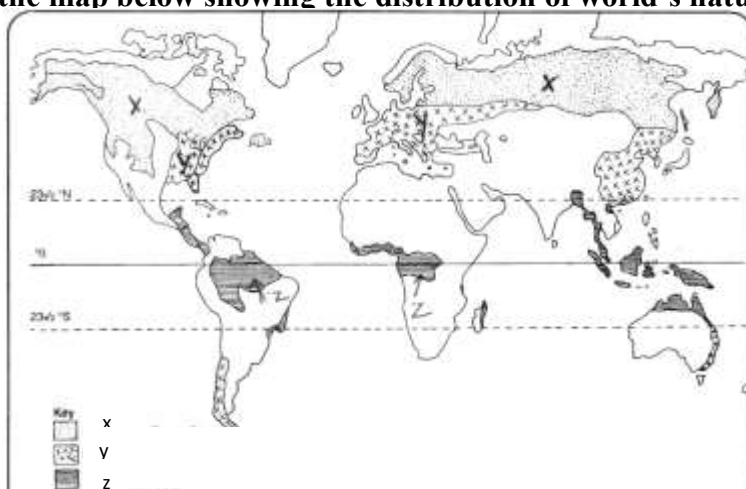
$3 \times 1 = 3\text{mks}$

(iii) State four contribution of oil to the economies of the Middle East countries. (4 mks)

- The revenue and royalties earned from oil have enable Arab investments overseas to increase immensely hence increasing their source of wealth.
- The profit has also enabled the Middle East countries to have a high per capita income.
- The countries are able to develop other sectors of the economy eg roads, health services, education etc.
- It has created employment opportunities for the people in the region.
- Industrial linkages have led to the development of other oil related industries eg. Petro-chemical industries.

$4 \times 1 = 4\text{mks}$

7. Study the map below showing the distribution of world's natural forests.



a) Name the types of forests found in the regional marked X, Y and Z. (3 mks)

- X – coniferous forests

- Y - Deciduous and mixed temperature forests
- Z – tropical rain forests 3 x 1 = 3mks

b) State three characteristics of temperate hardwood forests. (3 mks)

- The trees are deciduous.
- They have trees with broad leaves
- Although a variety of species of trees exist, the number of units per unit area is less compared to those in the tropics.
- Deciduous hardwoods are durable and strong. 3 x 1 = 3mks

c) (i) Differentiate between afforestation and Re-afforestation. (2 mks)

- Afforestation is the process of planting trees where there was none before while reafforestation is the process of deliberate replacement of trees which have been cut. 2 x 1 = 2mk

(ii) Explain four measures the government has taken to realize effective management of the forests. (8 mks)

- Carrying out public campaigns on the value of forests through mass media.
- Carrying out research on suitability of soils and the effects of pests and diseases on forests.
- Establishment of training institutions dealing with forestry eg. Londiani forestry training college and Kenya forestry research institute.
- Infrastructural facilities like roads, machinery, tractors and seedbeds are being provided to improve the management of resources.
- Employment of forest guards and forest officers to guard against destruction of forests.
- Laws have been enacted to govern the management of forests.
- Creation of forest reserves on mountain slopes and river banks to prevent soil erosion and conserve river catchment areas.
- Agro-forestry is being encouraged. 2 x 4 = 8mks

(iii) State five problems facing forests in Kenya. (5 mks)

- Clearing of forests to create land for farming and settlement.
- High demand for timber products causing many people to cut trees.
- Illegal logging.
- Forest fires caused by hunters and honey harvesters.
- Biological conflicts eg. The number of animals increases in the forests causing animals like elephants to trample and cause a lot of damage to trees.
- Drug growing – some people clear illegally some portions of forests to grow drugs especially bhang.
- Pests and diseases eg. Aphids which affects forests with exotic trees.
- Prolonged drought has resulted to shrinking of forests and retarded the rate of generation of forest cover.
- Degazettement of forests eg in 2002, thousands of hectares were degazetted causing a reductive of total acreage under forests. 5 x 1 = 5mks

(d) Explain two importance of forest exploitation in Canada. (4 mks)

- It provides employment for those working in the forests eg felling trees, lumberjacks, tree farmers, those employed in timber industry etc hence raising their standards of living.
- The country earns a lot of income from the timber products through taxation hence its able to develop other sectors.
- It has led to the establishment of many pulp and paper factories in Canada.
- It has led to the improvement of infrastructure and hydro-electric power in lumbering areas.

2 x 2 = 4mks

8. (a) Name two major types of aerial photographs. (2 mks)

- (i) Vertical aerial photograph
- (ii) Oblique aerial photographs.

2 x 1 = 2mks

(b) To describe the major reliefs features in a photograph, some clues are used. Name four of them. (4 mks)

- Hilly landscapes – indicating a hilly area.
- Human activities taking place in the photograph eg. Irrigation suggests gently sloping area.
- The type of drainage in a photograph eg. Swamp indicates a plain.
- Different forms of communication lines eg. A road between two hills indicates the area is characterized by passes.
- Vegetation types shown in a photograph i.e different vegetation grows on different landscapes.

4 x 1 = 4mks

(c) Explain how each of the following features would be indentified in a photograph. (8 mks)

(i) Settlement

This is shown in photographs by houses. The arrangement of the houses in different ways gives different settlement patterns.

2 x 1 = 2mks

(ii) Planted trees

These are identified by the appearance of the trees. Ie. Their similar heights species and appear in rows.

2 x 1 = 2mks

(iii) Mining

Its indicated by a mine or quarry people undertaking a mining activity or a mineral processing factory.

2 x 1 = 2mks

(iv) Manufacturing

Its indicated by factory buildings with large chimneys of people engaged in processing activity like jua kali artisans.

2 x 1 = 2mks

(d) (i) Name two methods of open cast mining. (2 mks)

- a. Stripping
- b. Hill-slope boring

2 x 1 = 2mks

(ii) Briefly explain the shaft method of underground mining. (5 mks)

- Its used in cases where the mineral bearing rocks occurs deeply underground.
- Vertical shafts are sunk deep underground.

- From the shaft, horizontal tunnels are driven outwards until the mineral bearing rock is reached.
- The mineral bearing rock is blasted using explosives.
- Its then transported along the tunnel to the shaft by light railway or conveyor belt.
- Its brought to the surface in a type of lift called a cage.
- The cages are also used to transport the miners and their equipment.
- The galleries are supported by timber pit props or steel concrete beams to hold up the roofs.

5 x 1 = 5mks

(NB: The procedure must be systematic)

(iii) Name the areas where the following minerals are mined in Kenya. (4 mks)

- Fluorspar – Kimwarer (Kario valley)
- Diatomite – Kiriandusi (Near Gilgil)
 - Gicherio (in the Aberdare ranges)
- Gold – Kakamega } Migori District
 - Macalder }
- Titanium – Kwale District

4 x 1 = 4mks

9. (a) What is field work? (2 mks)

This is the scientific study of geography which applies practical techniques and uses the environment as the laboratory and source of information.

2 x 1 = 2mks

(b) Name three types of fieldwork. (3 mks)

- Field study
- Excursion
- Fieldwork research

3 x 1 = 3mks

(c) You plan to carry out a field study of an open air market near your school.

(i) State four types of information you would collect during the field study. (4 mks)

- The traffic flow
- The layout of the market
- Origin of the good sold in the market
- Types of goods sold in the market.
- Prices of various items sold in the market.
- The history of the market.
- Means of transport used.
- Types of taxes paid to the local authority.
- The special market days.
- The problems faced by the traders.

(Any other relevant point)

4 x 1 = 4mks

(ii) List four methods you would use to collect the data. (4 mks)

- Administer the questionnaire
- Interviewing
- Observation
- Collecting samples
- Taking photographs

4 x 1 = 4mks

(iii) Explain three ways in which the local authority would use your findings to improve the open air market. (6 mks)

- To plan roads connecting the market in the source areas.
 - To improve the layout of the market.
 - To improve the services in the market.
 - To improve revenue collection in the market.
 - To plan other markets in the area.
- (Each point must be supported by an explanation relating it to the learners research.)

2 x 3 = 6mks

(iv) State two hypothesis for the study.

(2 mks)

- Most of the goods sold in the market originate from the surrounding areas.
 - The market was established ten years ago.
 - Donkey carts are the main means of transport used to deliver goods to the market.
- (Any other relevant hypothesis)

2 x 1 = 2mks

(v) What are the advantages of learning geography through fieldwork. (4 mks)

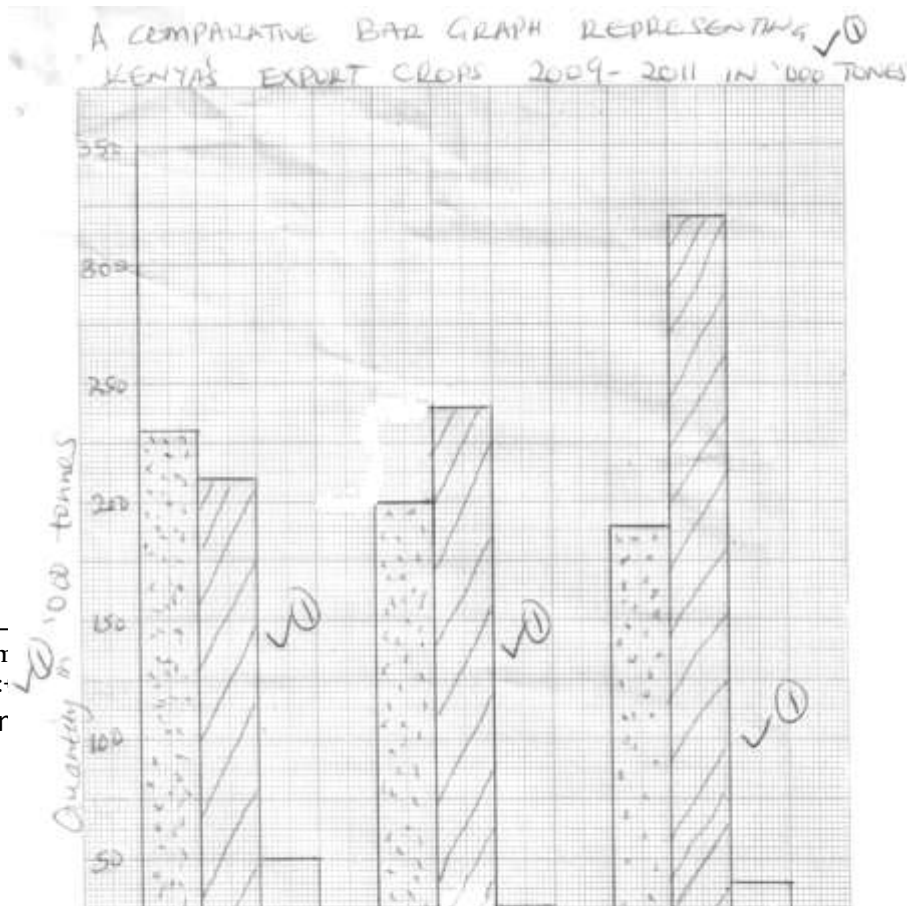
- It enables students to learn through experience.
- It enables the students to apply the theory learnt in class.
- It enables the students to develop skills such as observation, measuring, evaluating and judging.
- Students learn to cooperate with others.
- It improves the students understanding of geography.
- It breaks the monotony of classroom learning.
- It enables students to familiarize with the environment in which they live.
- It enables the students to identify specific problems that may require geographical investigation.

4 x 1 = 4mks

10. (a) The table below represents Kenya's export crops 2009-2011 in '000 tonnes.

COMMODITY	2009	2010	2011
Coffee	230	200	190
Tea	210	240	320
Sisal	50	30	40

(a) (i) Using the table above, draw a comparative bar graph to present the data. (7 mks)



Total 7 mks

(ii) State two advantages of using comparative bar graphs to present data. (2 mks)

- The individual contribution made by variables in each group is easily identified.
- Values in the same group can be compared easily.
- It gives a good visual impression due to the different shading of the different bars.

2 x 1 = 2mks

(iii) Name three other methods of data presentation that can be used to present the data above. (3 mks)

- Proportional circles.
- Comparative line graphs.
- Compound divided rectangle.
- Cumulative/compound bar graph.

3 x 1 = 3mks

(b) Name two methods used in taking measurement as a way of collecting statistical data. (2 mks)

- Pacing
- Estimating
- Counting
- Using instruments

2 x 1 = 2mks

(c) Name three secondary sources of statistical data. (3 mks)

- Journals
- Periodicals
- Census reports
- Text books
- Maps

3 x 1 = 3mks

(d) Explain four factors you would consider when setting up questions in a questionnaires. (8 mks)

- (i) The questions should be simple and clear and not ambiguous so that they may not solicit (attract) the correct responses.
- (ii) The number of questions should not be too many as they may discourage the respondents. The respondent may also not have enough time to fill in the questions.

- (iii) The questions should be arranged in a logical order beginning with the simplest to the more difficult ones.
 - (iv) The questions should be strictly related to the topic under research and those that can assist the researcher obtain the information needed.
 - (v) The questions should not annoy the respondents, and should not touch on the respondents privacy or personal life.
 - (vi) The questions should be free of bias. i.e leading questions that help the respondents decide on the answers should be avoided.
- 4 x 2 = 8mks