

GEOGRAPHY paper 2

312/2 MARKING SCHEME

SECTION A

1. (a) Name two minerals that occur as weathered products.
(2mks)
 - ❖ **Bauxite**
 - ❖ **manganese**
- b) State three uses of soda ash. (3mks)
 - ❖ **glass making**
 - ❖ **manufacture of paper**
 - ❖ **fixing dyes in textile industry**
 - ❖ **softening water**
 - ❖ **oil refining**
2. a) Give two examples of game sanctuaries in Kenya. (2mks)
 - ❖ **Ol Arti Nyiro sanctuary**
 - ❖ **Ngulia Rhino sanctuary**
 - ❖ **Maralal sanctuary**
- b) State three problems experienced by Kenya in wildlife conservation.
 - ❖ **Poaching especially for game trophies**
 - ❖ **Drought /unfavorable climatic conditions which cause drying up of pasture, water holes etc.**
 - ❖ **Human wildlife conflict esp over land use eg the pastoralists, farmers etc**
 - ❖ **Inadequate capital for maintainance of parks /reserves/ sanctuaries.**
 - ❖ **Inadequate trained personel to manage the wildlife.**
 - ❖ **Environmental pollution**
 - ❖ **Bush fires,pests and diseases**
 - ❖ **Migratory habits of many animals and birds makes it difficult for the country to protect them from poachers.**
3. a) Give two examples of non-renewable sources of energy.
(2mks)
 - ❖ **coal/ peat**
 - ❖ **natural gas**
 - ❖ **nuclear energy**
 - ❖ **petroleum**
 - ❖ **uranium.**
- b) State three physical factors influencing the location of H.E.P stations. (3mks)
 - ❖ **steep gradient**
 - ❖ **constant supply of water**
 - ❖ **hard basement rock**
 - ❖ **presence of a deep valley or a river gorge for the reservoir**

4. (a) Name two types of fish caught along the west coast of Canada. (2mks)
- ❖ **salmon**
 - ❖ **herring**
 - ❖ **halibut**
 - ❖ **flounder**
- b) State three human factors which favour fishing. (3mks)
- ❖ **a big supply of labour – fishermen and factory workers**
 - ❖ **a large market**
 - ❖ **high level of technology**
 - ❖ **a large capital outlay**
5. a) Name two major forest blocks found along the Kenyan coast. (2mks)
- ❖ **shimba hills**
 - ❖ **tana river**
 - ❖ **arabuko sokoke**
 - ❖ **mangrove forest**
 - ❖ **kaya forest**
- b) State three factors contributing to depletion of forests in Kenya. (3mks)
- ❖ **Natural calamities that destroy forests**
 - ❖ **Pest and diseases eg. Aphids**
 - ❖ **Devt of towns results in destruction of forests**
 - ❖ **Increased population creating demand for more land for agriculture**
 - ❖ **Illegal logging / charcoal burning.**
 - ❖ **Uncontrolled fires.**
 - ❖ **Excision of forest resources for settlements. Etc**

SECTION B

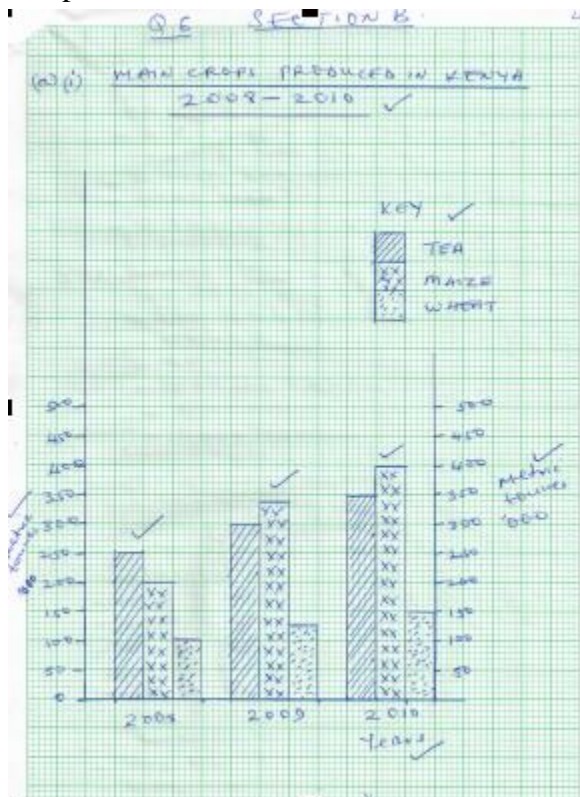
Answer question 6 and any other two questions in this section.

6. The table below shows three main crops produced in Kenya in the years 2008 – 2010.

Use it to answer question (a) (i) below (amount in metric tonnes)

Crop	2008	2009	2010
Maize	200,000	380,000	400,000
Wheat	100,000	130,000	150,000
Tea	250,000	300,000	350,000

- a) i) Using a scale of 1cm represent 50,000 metric tonnes, draw a comparative bar graph to represent the data above. (8mks)



- ii) State two advantages of using comparative bar graph. (2mks)
- ❖ it gives a good visual impression
 - ❖ values in the same group can be compared easily
 - ❖ the individual contribution made by the variables in each group can be easily identified.
- b) i) Name two counties in Kenya where wheat is grown in large scale. (2mks)
- ❖ Nakuru
 - ❖ Narok
 - ❖ Uasin Gishu
 - ❖ Nyandarua
- ii) State three conditions that favour wheat farming in Kenya. (3mks)
- ❖ Sloping land for ease of mechanization
 - ❖ High altitude (1500 – 2000m) above sea level

- ❖ Moderate rainfall (500mm – 1270mm)
 - ❖ Warm temperatures (15⁰c – 20⁰c) for at least three months.
 - ❖ Deep fertile volcanic soils
 - ❖ Warm dry sunny spell to enhance ripening and harvesting.
- c) State four benefits of wheat growing in Kenya. (4mks)
- ❖ Source of income for those involved in the activity
 - ❖ Source of food to the Kenyan people
 - ❖ Through wheat farming many are employed either directly or indirectly
 - ❖ Saves foreign exchange if it was to be imported.
 - ❖ Promotes industrialization in Kenya
 - ❖ Improvement of infrastructure eg roads
- d) Explain three factors that make Canada produce more wheat than Kenya.
- ❖ Canada has extensive tracks of land which has enabled large scale mechanization of wheat
 - ❖ Canada is a developed country therefore has more capital enabling farmers to sustain production unlike Kenya which lacks adequate capital.
 - ❖ Advanced scientific research in Canada enables the production of higher yielding seeds, better farming tools, seeds, pest control, disease control etc.
 - ❖ Wheat farmers in Canada specialize in wheat unlike Kenya where farmers practice mixed farming.
 - ❖ There is higher demand for wheat in Canada than in Kenya
 - ❖ Farmers in Kenya have a long experience in wheat production
7. a) i) Name two crops grown in Perkerra irrigation scheme. (2mks)
- ❖ onions
 - ❖ chillies
 - ❖ watermelons
- ii) Give three reasons why Perkerra irrigation scheme was started. (3mks)
- ❖ to develop land for agriculture and increase food production in Kenya
 - ❖ to settle pastoralists as farmers
 - ❖ to utilize the detainees (mau mau) labourers
- b) i) State five physical factor which favoured the location of Mwea irrigation scheme. (5mks)
- ❖ the plateau/gentle sloping land which allows water to flow by gravity
 - ❖ presence of black cotton soil which is suitable for rice cultivation
 - ❖ the warm climate conditions experienced in the area promotes rice growing

- ❖ the area receives low amounts of rainfall (625 mm) which is unreliable making irrigation necessary.

c) Explain five problems experienced by farmers in the Mwea irrigation Scheme.

(10mks)

- ❖ the stagnant water encourages the breeding of snails and mosquitoes which spread diseases to people.eg Malaria and Bilhazia
- ❖ Weeds growing in the canals and siltation interferes with the flow of water into the fields
- ❖ Unplanned irrigation developments have overstretched water supply
- ❖ Shortage of labour especially during the planting and harvesting seasons forcing farmers to hire labour.
- ❖ Pests eg quelea birds which feed on rice and cause major losses and low yields.
- ❖ Delayed payments which kill farmers morale.
- ❖ Unsuitable soils in some areas
- ❖ Mismanagement of the co operatives.

d) State five benefits of irrigation to the economy of Kenya.

(5mks)

- ❖ Saves foreign exchange by producing food stuffs and agricultural products that could have been imported.
- ❖ Foreign exchange earner when some of the crops are exported
- ❖ Creation of employment opportunities in related fields
- ❖ Increased food production due to increased farming land.
- ❖ Reclamation of unproductive land which has helped to reduced pressure on farming land.
- ❖ Settlement of the landless eg the Mwea and Perkerra for the landless and detainees
- ❖ Industrialization crops are raw-materials for food industries.

8. a) i) Define urbanization.

(2mks)

- ❖ The process by which an increasing number of people in the country settles in towns

ii) State three physical factors which influence the location of a settlement.

(3mks)

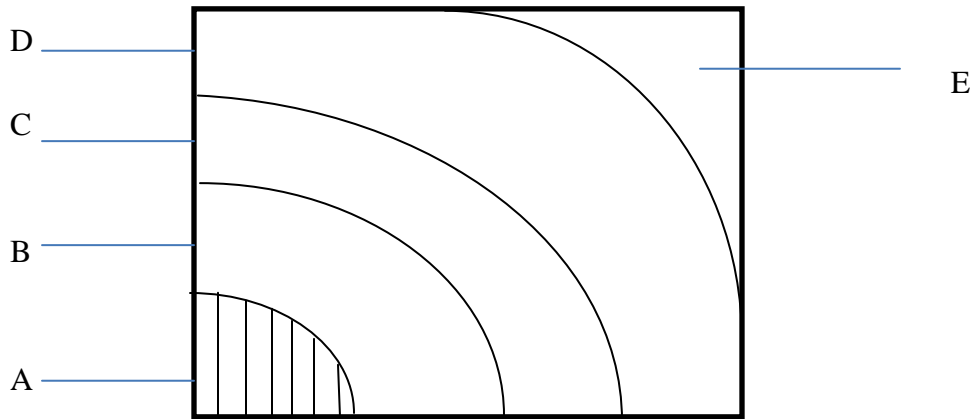
- ❖ Availability of water supply
- ❖ Availability of land for expansion
- ❖ Nature of relief/gently sloping land preferred
- ❖ Suitability of climate
- ❖ Free from pests and diseases
- ❖ Well drained land attracts settlement.

b) Give three social problems experienced in Kisumu town.

(3mks)

- ❖ high crime rate
- ❖ poor housing/ growth of slums
- ❖ shortage of social amenities eg schools
- ❖ poor sanitation / sewerage system

- c) Draw a well labelled diagram showing the concentric zoning of an ideal urban centre (5mks)



- A – central business district**
B – industrial zone
C – Residential zone/ low class
D – Residential (middle high class)
E –Commuter zone

- d) State four characteristics of the Central Business District (CBD) (4mks)

- ❖ **It has tall buildings /sky crappers**
- ❖ **It has high rental value**
- ❖ **It has very limited space**
- ❖ **It has verticle extension of buildings to maximize on space**
- ❖ **It has traffic jam / congestion esp during rush hours.**
- ❖ **Underground packings is common**
- ❖ **Traffic flow is constant and slow.**
- ❖ **Has very high day time population but very low at night.**
- ❖ **Value of land is very high.**

- e) Explain four factors that led to the growth of Eldoret Town. (8mks)

- ❖ **Eldoret has a rich agricultural hinterland which has led to its growth as an agricultural collecting centre.**
- ❖ **Eldoret started as a railway station along the Kenya – Uganda railway therefore attracted settlements around it**
- ❖ **Establishment of many education institutions has attracted settlement**
- ❖ **Undulating / gentle landscape allows room for expansion**
- ❖ **Modern infrastructural facilities eg international Airport.**
- ❖ **Investment by local entrepreneurs has led to its expansion**
- ❖ **High population in the surrounding regions provide market for agricultural product /labour for industries.**
- ❖ **Government policy of decentralization of industries has led to the setting up of some industries in the town**

- ❖ **Eldoret is the county headquarter for Uasin Gishu county hence has administrative functions.**

9. a) Differentiate between a forest and forestry. (2mks)

- ❖ **A forest is a plantation of trees / trees growing close together on a large track of land while forestry is the science of developing, cultivating, managing and protecting forests**

NB :MARK AS A WHOLE (2MKS)

b) State three advantages of planted softwood forests in Kenya. (3mks)

- ❖ **Fast maturing hence easy to maintain and exploit**
- ❖ **Grow uniformly since they grow at the same time and hence easy to exploit /harvest**
- ❖ **Normally of the same species hence easy to exploit valuable species.**

c) Explain three reasons why only a small part of Kenya is forested. (6mks)

- ❖ **High human population has led to cutting down of trees to give room for settlement and agriculture .**
- ❖ **High demands for timber / wood fuel has led to over exploitation of forests**
- ❖ **Government policy of degazetting of forest areas to resettle people who are landless has reduced forest areas**
- ❖ **Forest fires during the dry seasons**
- ❖ **Pests and diseases eg aphids destroying trees.**

d) Explain three measures that the government of Kenya is taking to conserve forests. (6mks)

- ❖ **Registering / recognizing effort of NGOS eg green Belt movement**
- ❖ **Gazetting forest area to reduce encroachment on forest lands **
- ❖ **Creating public awareness through mass media , barazes etc**
- ❖ **Enacting laws to prohibit cutting of trees without licences**
- ❖ **Practicing Agro-forestry**
- ❖ **Carrying out research through institutions like ICRAF to come up with better ways of disease and pest control**
- ❖ **Employing forest Guards to protect forest from illegal loggers etc:**
- ❖ **Encouraging recycling of papers /wood based products**
- ❖ **National tree planting day**

e) Give the differences between softwood in Kenya and Canada given the following sub-headings.

i) Tree harvesting. (2mks)

- ❖ **In Kenya harvesting is done throughout the year while in Canada harvesting is done in winter and early springs**
- ❖ **In Kenya harvesting is done selectively while in Canada clear /indiscriminate cutting of trees is done.**

ii) Transportation of logs. (2mks)

- ❖ **In Kenya transportation is done using tractors /lorries/ trucks while in Canada logs are skidded on ice in winter or floated in rivers in summer.**

f) Student from a local secondary school carried out a field study on forestry around their school.

i) Formulate two objectives for this study. (2mks)

- ❖ **To find out the uses of forests**
- ❖ **To find out the types of trees around the school**
- ❖ **To determine problems facing forestry around the school**
- ❖ **Any other correctly stated objective**

ii) State two possible ways in using the data you collected from the field. (2mks)

- ❖ **Use to determine the factors influencing forest growth**
- ❖ **Use it to educate the community on the best forestry practice.**

10. a) i) differentiate between environmental management and environmental conservation. (2mks)

- ❖ **Environmental management refers to sustainable use of resources to ensure that they are not depleted while environmental conservation refers to protecting natural resources from destruction**

ii) Name three environmental hazards resulting from human activities

- ❖ **Desertification**
- ❖ **Dereliction**
- ❖ **Soil erosion**
- ❖ **Pollution**
- ❖ **Disposal of toxic wastes / chemicals**

b) Explain four ways through which water is polluted in Kenya. (8mks)

- ❖ **Disposal of industrial wastes into rivers endangering aquatic life**
- ❖ **Farm chemicals /fertilizers which drain into water sources**
- ❖ **Poor disposal of garbage animal waste / chemical detergents from house holds.**
- ❖ **Poor farming methods which result into erosion and deposition of silt in water bodies / courses**
- ❖ **Oil spills from tankers / trucks etc.**

c) Give four reasons why conserving of the environment is important. (4mks)

- ❖ **for sustenance of life – humans ,animals and plant life**
- ❖ **recreation /aesthetic value where it form habitat for wild animals and birds attracts tourists helping a country to earn foreign exchange**
- ❖ **environmental resources have economic value to a country**
- ❖ **To preserve cultural heritage e.g the physical features.**
- ❖ **To protect catchment areas from drying up/ being interfered with by human activities.**

- ❖ **To protect endangered species from becoming extinct if their exploitation is not controlled.**

d) Explain four ways in which the ozone layer is important of life on earth. (8mks)

- ❖ **Protect life on earth by filtering dangerous /harmful ultra-violet radiation from the sun which cause skin diseases eg skin cancer.**
- ❖ **Helping in maintaining desirable temperatures on earth by absorbing long wave radiation from the earth and radiating it back to the earth.**
- ❖ **Enhances quality of the global environment by absorbing dangerous radiation from the sun.**
- ❖ **The ozone layer absorbs the ultra-violet radiation which can damage proteins and DNA resulting in plant and animals.**