**MARKING SCHEME**

**312/2**

**GEOGRAPHY**

**Paper2**

**Time: 2 ¾ Hours**

**September/October**

**WISDOM PRE-MOCK EXAMINATIONS 2021**

**Kenya Certificate of Secondary Education (K.C.S.E)**

**GEOGRAPHY PAPER 2**

**2 ¾ HOURS**

**INSTRUCTIONS TO CANDIDATES**

1. This contains two **sections A** and **B**.
2. Answer **ALL** questions in **section A**. In **section B** answer question 6 and **two other** questions.
3. All answers must be written in the booklet provided.

This paper consists of **3 printed pages**. Candidates should check the question paper to ascertain that all pages are printed as indicated and that no questions are missing.

**SECTION A**

**ANSWER ALL QUESTIONS IN THIS SECTION**

Q1. Use the map of East Africa below to answer question 1.

(a)Name the minerals found in the areas labelled **P,Q,R,S** and **T.**(5mks).

**P**-Flouspar

**Q**-Diamond

**R**-Copper

**S-**Trona

**T-**Limestone

(b)Identify the method of mining for the minerals labelled **S** and **T** (2mks)

**S-** Dredging

**T**- Sripping

2. (a) Define the term ‘Forest management’ (2mks)

Management of forests means careful planning and control of the use of forest resources .

(b) Explain **three** measures taken by the Kenya government to conserve forest (6mks)

-Registering /recognitising the efforts of NGO’s like the Green Belt Movement which have mounted campaign on planting trees.

-Gazetting forested areas to reduce encroachment by public.

-Creating public awareness through mass media/ public barazas on the importance of conserving forest resources.

-Enacting laws to prohibit the cutting of trees without a license/protecting indigenous tree species.

-Establishing NEMA / Ministry of Environment and Natural Resources to co-ordinate environmental management and conservation activities.

-Setting aside national tree planting day to encourage people to plant more trees.

-Advising people to practice agro-forestry so as to avoid cutting trees from the forests.

-Employing forest guards to protect forests from fires/other illegal human activities.

-Encouraging recycling of papers/wood based products/use of other sources of energy to reduce demand for trees.

-Carrying out research through KEFRI and ICRAF in order to come up with ways of controlling diseases/pests/develop species suitable for different ecological regions.

3. Name **three** areas in Kenya where sugar cane is grown.(3mks)

-Bungoma -Migori

-Busia -Mumias

-Kakamega -Rongo

-Mumias -Tana River

-Nyando

-Kwale

4. (a) Define the term fisheries.(2mks

-Fisheries are water bodies where aquatic organisms/fish are found/ reared foe exploitation.

(b) State **three** ways in which marine fisheries in Kenya can be conserved (3mks)

-Restocking the overfished areas.

-Standardising the mesh size of nets to be used in fishing.

-Licensing commercial fishermen to control their number.

-Restricting the disposal of untreated/ waste into the sea/ control of water pollution .

-Restricting fishing to specific seasons.

-Monitoring/ discouraging the entry of foreign fishermen off the Indian Ocean water/ 320km .

Enforcing the International conventions to protect endangered fish species.

5.Name **two** methods used in deep sea fishing (2mks)

-Trawling, Seining, Drifting, Line fishing/ Lining.

**SECTION B**

6**.** Study the photograph below and use it to answer question (a) and (b).

(a)Identify the type of photograph above.(1 mks)

Ground close-up photograph.

(b) (i) Identify the type of farming shown in the photograph .(1mk)

Dairy farming.

(ii) Name **two** main areas in Kenya where the type of farming identified in (i) above is practiced.(2mks)

-Thika

-Uasin Gishu

-Nakuru

-Trans-Nzoia

( C) Explain **three** human factors that influence the type of farming in the photograph in the Kenya highlands.(6mks)

-High population in the area offers ready market for milk and other dairy products/ provides labour.

-There are milk processing factories which help in milk processing/storage.

-Many parts of Kenya highlands has well served by road network which supports fast transport of milk to processing plants.

-Cooperative societies have been set up to market the dairy products.

-Provision of veterinary services that have helped to promote rearing of high quality breeds/treat the sick animals.

-Provision of extension officers to educate the farmers on cattle rearing.

(d)Explain **five** factors that favour horticulture in Kenya. (10mks)

-Diversified hot and wet climate that favours the growth of tropical crops while the cool and wet climate of the Kenya highlands encourages the growth of temperate crops.

-Lack of winter in Kenya favours the growth of horticultural crops all year round.

-Most parts of the country have well drained volcanic soils that are condusive for the growing horticultural crops.

-There is ready market , both locally and internationally.

-Capital is available to invest in horticultural farming in Kenya leading to its rapid development.

-The companies included the Thika, Oserian and Pan African Foods.

-There is technical and financial assistance from friendly countries like German.

-Most areas where horticultural crops are grown have good transport and communication network to both local and international markets.

(e)(i)Name **two** areas where horticulture is practiced in The Netherlands.(2mks)

-Limburg

-Venen district

-Rotterdam

-Guelderland province

-The Hague.

(ii)Give **three** difference between horticulture in Kenya and the Netherlands.(3mks)

|  |  |
| --- | --- |
| Kenya | Netherlands |
| Fruits are grown in the open fields | Horticultural crops are grown in the open as well as in the greenhouses. |
| Market is less organised | Market procedures are more organized with auction marts. |
| More problems facing horticulture farming. | Less/ fewer problems facing horticulture farming. |

7.(a) (i) What is agroforestry? (2mks)

-Is the deliberate growing of trees and crops/keeping of animals on the same piece of land.

(ii)Give **four** reasons why agroforestry is encouraged in Kenya (4mks)

-To ensure continuous supply of wood fuel/ to conserve forests.

-Provide raw materials for industries

-To conserve soil.

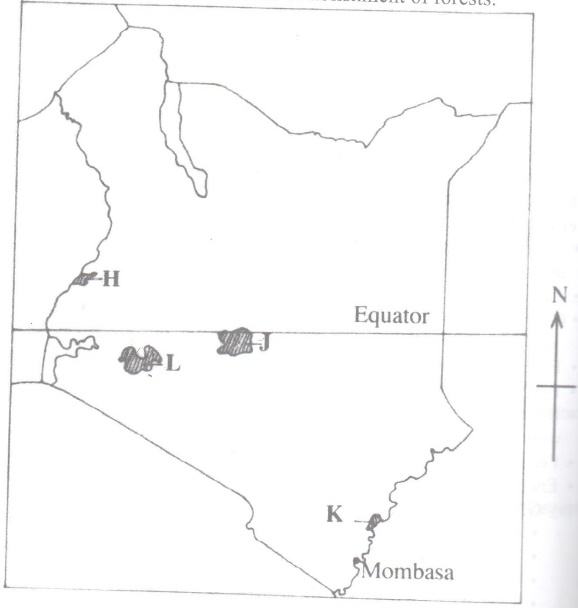
--To provide fruits for human consumption

To provide fodder for animals.

-Trees are a source of income to farmers when converted into timber.

-Trees act as windbreaker/ provide shade for young plants.

**(b) Use the map of Kenya to answer questions (b) (i) and (ii).**



(i) Name the forest reserves marked H,J, and K. (3mks)

H- Mt. Elgon

J-Mt. Kenya

K- Arabuko Sokoke

(ii)Explain **fou**r factors that favour the growth of natural forests in the area marked L.(8mks)

-The area receives high rainfall ( over 1000mm-1500mm) per year which encourages the growth of trees.

-The area has deep, well drained volcanic soils that allow roots to penetrate deep into the ground.

-The area has moderate to high temperatures of about 14-200C that allows for the growth of variety of trees.

-The area is a gazette forest hence settlement / cultivation is prohibited.

-Some areas are steep/ rugged and allow for forest growth..

-Enforcement of laws to allow re- establishment of forests.

(c)Explain **fou**r problems facing forestry in Kenya (8mks)

-Rapid increase in population has led to the destruction of large areas under forests.

-Illegal logging / indiscriminate cutting of trees has reduced/ depleted indigenous tree species.

-Attack by pests /diseases has led to destruction of valuable tree species.

-Some wild animals through debarking/ trampling and uprooting damages trees.

-At time , the government allocates land to private developers thus redcing the land under forests

-Prolonged drought leads to the dying up of some trees.

-Occurrence of forest fires has led to the destruction of large areas under trees.

8. (a) Describe the stages in the reclamation of land from the sea in the Netherlands.(6mks)

-Protective dykes/sea walls are constructed enclosing the part of the sea to be reclaimed.

-Ring canals are constructed.

-Pumping stations are installed to pump out sea water from the area enclosed by the dyke.

-Water is pumped out of the area enclosed by the dyke.

-Reeds are sown to help dry out the soil.

-Drainage ditches and more pumping stations are made on the land being reclaimed.

-Drainage pipes are laid below the soil.

-The area is divided into rectangular portions using inner dykes and ring canals.

-Soil treated with chemical to lower salinity.

-The drained land is flushed with fresh water to remove salt from the soil.

-Pumping out water from the polders is a continuous process to prevent water from accumulating.

(Students note: the sequence need to be followed).

(b) Explain **four** benefits of land reclamation in Netherlands.(8mks)

-Reclamation has created more land for agriculture/ settlement.

-Reclaimed land has improved agricultural output hence more food and more raw materials for industries.

-Land reclamation has resulted in improved fresh water supply for domestic, industrial and irrigation.

-Construction of dykes/walls around the polders has helped control floods/ sea invasion.

-Construction of dykes and canals has improved road transport network.

-Reclamation has created sceneries that have become tourists’ attractions and improved social amenities.

-Reclamation and associated activities have created more employment opportunities and improved the standard of living of citizens.

(C)(i) Explain **three** conditions that face irrigation farming in Kenya.(6mks)

-Gently sloping land which permits flow of water by gravity hence reducing the costs of pumping water to the fields.

-Presence of clay/back cotton soils which retain water for longer use by crops.

-Presence of rivers/reservoirs/ lakes which provide regular water supply/ permanent/constant making it possible to irrigate land throughout the year.

-High temperatures throughout the year which allows multiple cropping continuous farming activities throughout the year.

-Availability of large tracts of land make the project viable.

-Sparsely populated land reduces the costs of resettlement/provides land for large scale farming.

(ii) State **five** problems experienced in irrigation farming in Kenya,(5mks)

-Unreliable rainfall in the river catchment areas leading to fluctuating river volumes which reduces the amount of water available for irrigation.

-The constant moist conditions promote the breeding of pests. In the soil after irrigation encoura

-Flooding of the fields leads to sheet erosion.

-Leaching of nutrients from the topsoil occur when the water is seeping/percolating through ,leading to low yields.

-Stagnant water in the plots and canals encourage the breeding of snails and mosquitoes which spread bilharzia and malaria respectively.

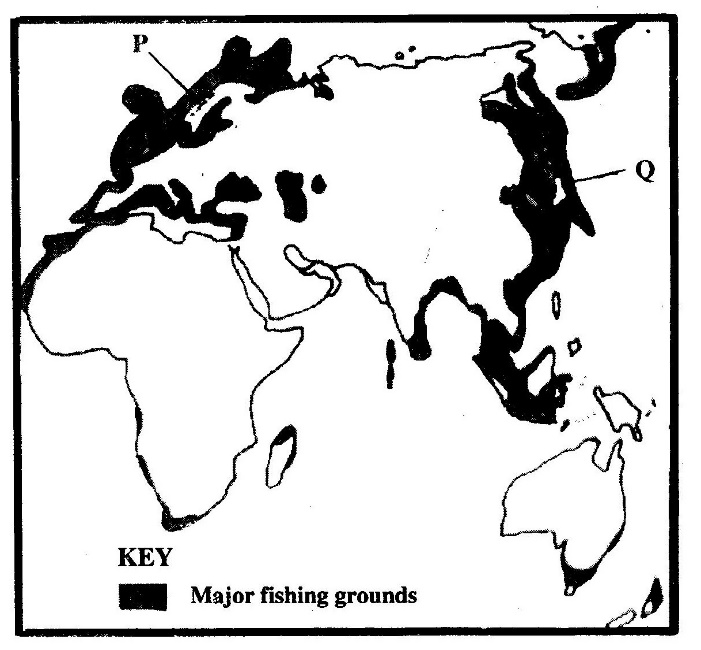
-Increased moisture in the soil after irrigation encourages the growth of weeds.

-Soil accumulation in the canals is quite frequent. It is expensive to dredge such canals continuously.

Prices of fertilizers, tractors and insecticides are quite high .

-Fluctuations of the world prices due to competition affects the agricultural produces.

**9.The map below shows some major fishing grounds in the world. Use it to answer question (a).**



(a) (i) Name the countries marked **P** an**d Q**.(2mks)

**P-**Norway

**Q**-Japan

(ii) Explain **four** conditions that favour fishing in the shaded coastal waters.(8mks)

-The are has cool waters which have abundant supply of planktons which is the main food for fish.

-The area has shallow continental shelves which allow light to penetrate to the sea below encouraging the growth of micro-organisms used as food by fish.

-The areas experience convergence of warm and cool currents which result in upwelling of ocean waters thus bringing minerals for fish and l from the sea bed to the surface.

-cool waters experiences in most of these coastal areas encourage thriving of numerous fish species.

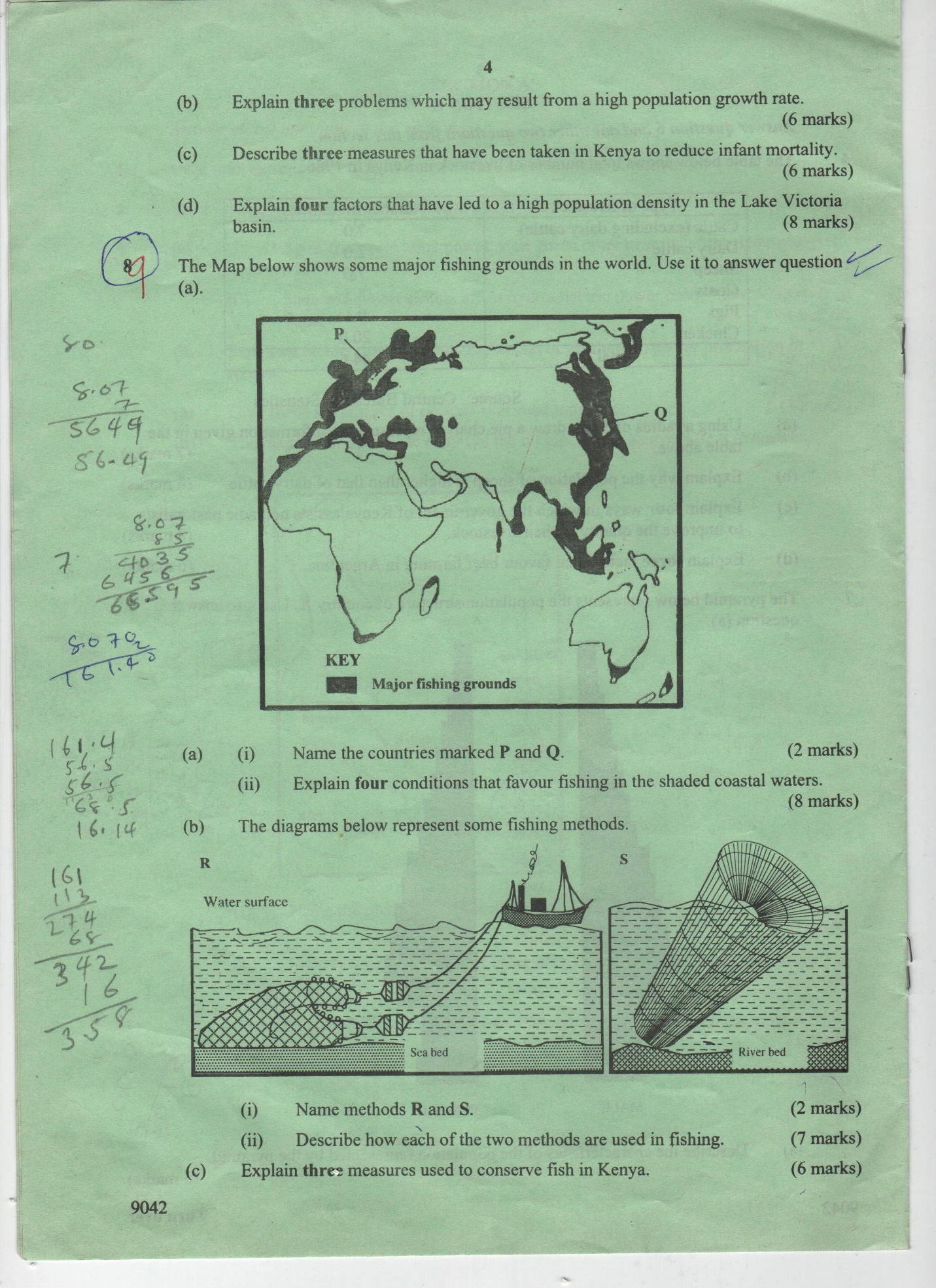
-Most of the coast are indented/ have numerous sheltered bays which provide secure breeding grounds for fish.

-The sheltered bays provide suitable sites for building fishing ports/fish-landing sites.

-The large population in these area limits agricultural activities thus people turn to fishing as an alternative economic activity/cold climate also limit agriculture.

-Cold climate provides natural preservation of fish.

(b) The diagram below represent some fishing methods.



(i) Name methods **R** and **S**.(2mks)

**R-**Trawling

**S**-Basket fishing

(ii)Describe how each of the two methods are used in fishing.(7mks)

**BASKET FISHING**

-The basket funnel shaped to allow easy entry for fish.

-At the mouth there is a non-return valve which restricts the out ward/escape movement of fish once inside the basket it is held in position with ropes/stones/ sticks to prevent it from being swept downstream.

-The basket is left in that position for sometime/overnight then removed for landing the fish.

**TRAWLING**

-A bag-shaped net is attached to a ship-trawler.

-The nets mouth is kept open by otter boards/ head beam.

-The upper part of the net is kept a float by corks/floats.

-Weights are used to keep the lower parts of the net at the seabed.

-The trawler drags along the net.

-After sufficient fish is caught, the net is hauled to the trawler.

(c)Explain **three** measures used to conserve fish in Kenya.(6mks)

-Fishing is restricted to specific seasons to allow for breeding and maturing of fish.

-The size of the nets used in fishing are standardized to ensure that fingerlings are not caught.

-Licenses are issued to prospective fishermen to control their number and to ensure that there is no overfishing .

-The law of the sea restricts fishing I the exclusive economic zones/ this ensure the protection of marine fisheries from external exploitation.

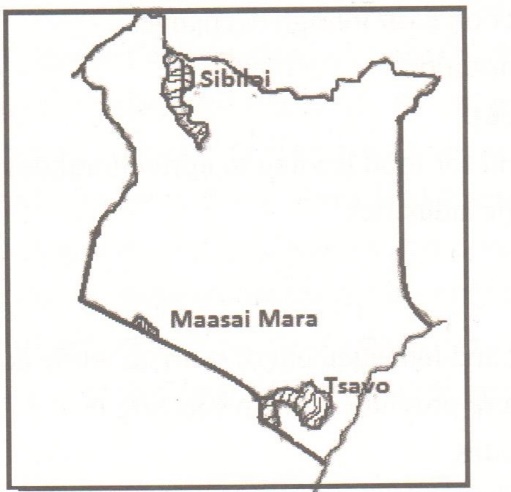
-Fish farming is being encouraged to ensure that there is sufficient supply of fish from other than the natural fisheries

-There is restriction of the disposal of untreated waste into the sea /lakes/rivers to ensure that the water remain artificial fertilization is carried out in special hatcheries to sustain the supply of fish/ restocking of over fished waters.

10 .(a) (i)Distinguish between a game sanctuary and a national park. (2mks)

A game sanctuary is a specific area established to give protection to a specific animal community which is either threatened with extinction or only found in a particular area while a national park is a large area set aside for the propagation , protection and preservation of wildlife in their natural habitat and in which hunting is prohibited.

(ii) Draw a map of Kenya and on it mark and name Sibiloi National park, Maasai Game Reserve and Tsavo National park.(4mks).



(b) (i) Give **three** factors that favour the establishment of the national Parks in the semi-arid areas of East Africa.(3mks)

-Availability of large tracts of sparsely populated land.

-Availability of a wide variety of vegetation which provides food for the wild animals.

-The harsh climatic conditions that discourage farming and settlement/ makes wildlife conservation the best alternative land use.

-The type of vegetation found in such areas provide suitable habitat for wild animals.

(ii) Explain **two** effects of drought on wildlife in Kenya. (4mks)

-It leads to shortage of pasture and water causing loss of life of animals and drying up of plant species.

-Prolonged drought leads to migration of animals to areas that have sufficient supply of food/water/some animals migrate to the neighbouring countries reducing the number of wild animals.

-Forest fires break out during drought causing environment degradation and destroying the habitat for wild animals.

-Wild animals invade farmlands destroying crops/some killed as they search for food.

( C )Explain **four** measures that the government of Kenya has taken to conserve wildlife other than establishing national parks and game reserves. (8mks)

-Enacting laws and regulations to curb poaching and game trade.

-Educating the general public on the need to conserve wildlife /to support conservation practices/encouraging joint ownership of parks with local authorities/ local communities who also benefit from the proceeds.

-Enhancing international cooperation to help enforce the existing laws and convections which protect wildlife especially the endangered species.

-promoting eco-tourism to reduce tourism related environment damage that may lead to extinction of wildlife species.

-Constructing electric fences around the parks to minimize human animal conflict.

-Establishing the ministry of wildlife to oversee the conservation process/ creating of the anti-poaching unit to track down and arrest poachers/ forest guards to protect forests.

-Encouraging individuals to set up game ranches for controlled/ hunting.

-Provision of veterinary services to treat animals/ translocation of game animals by law.

(d) State **four** ways in which wild animals are of significance to the economy of Kenya.(4mks)

-They create employment opportunities

-They are a major tourist attraction/ earn foreign exchange.

-They promote research activities

-Tourism creates a large demand for food leading to agricultural development.

-Some provide raw materials for industries

-They provide game meat .

-Government earns Revenue.