**CONFIDENTIAL**

312/2

GEOGRAPHY

FORM 4

PAPER 2

MARCH / APRIL, 2019

TIME: 2 ¾ HOURS

CHAMPIONS JET JOINT 2019

***Kenya Certificate of Secondary Education***

**Instructions to the candidates,**

1. ***This paper has two Sections: A and B.***
2. ***Answer all questions in Section A.***
3. ***In Section B Answer question 6 and any other two questions.***
4. ***All answers must be written on a separate answer sheet provided.***
5. ***All answers MUST be written in Blue Pen.***

**FOR OFFICIAL USE ONLY**

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| **SECTION A** | 1 | 2 | 3 | 4 | 5 |  |  |
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| --- | --- | --- | --- | --- | --- | --- | --- |
| **SECTION B** | 6 | 7 | 8 | 9 | 10 |  |  |
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| **TOTAL** |  |

***This paper consists of five printed pages.***

***Candidates should check to ensure that all pages are printed as indicated and no question(s) is missing.***

SECTION A (25 MARKS)

***Answer all questions in this Section***

1. (a) Differentiate between **Land Reclamation** and **Land Rehabilitation**. (2 marks)
* ***Land reclamation is the practice by which less useful and is converted into more useful land while land rehabilitation is the process of recovery of land that has been misused and destroyed;***

(b) Give **three** methods of **Land Reclamation** and **Land Rehabilitation** in Kenya.

 (3 marks)

* ***Drainage of swamps;***
* ***Irrigation of dry lands;***
* ***Planting of drought resistant crops;***
* ***Afforestation;***
* ***Eradication / control of insects / tse tse flies;***
* ***Filling up quarries / mines, derelict land;***
* ***Application of manure;***
1. (a) Distinguish between a **Game Sanctuary** and a **National Park**. (2 marks)
* ***A game sanctuary is a specific area established to protect endangered animal species or only found in a particular ear while a national park is a large area set aside for propagation protection and preservation of wild life in their natural habitat and in which hunting is prohibited;***

(b) Give **three** factors that favour establishment of national parks in the Semi Arid areas of East Africa. (3 marks)

* ***Availability of large tracks of sparsely populated land;***
* ***The vegetation type found in such areas provide suitable habitat for wild animals;***
* ***The harsh climatic conditions that discourage farming and settlement makes wildlife conservation the best alternative land use;***
* ***Availability of a wide variety of vegetation which provides food for the wild animals;***
1. List **two** types of international trade. (2 marks)
* ***Bilateral trade;***
* ***Multilateral trade;***

(b) Give three reasons why Kenya would prefer to import components of motor vehicles to assemble instead of importing fully assembled vehicles.

 (3 marks)

* ***Components are generally cheaper than fully assembled vehicles;***
* ***It is easier to transport the components than fully assembled vehicles;***
* ***To create employment opportunity to the citizen through assembling industries;***
* ***To improve on industrialization in Kenya;***
* ***To enable Kenyan acquire skills in motor manufacturing;***
1. (a) Identify **two** types of settlements. (2 marks)
* ***Urban settle;***
* ***Rural settlements;***

(b) Give **three** causes for clustered pattern of settlements. (3 marks)

* ***Presence of water sources;***
* ***Presence of natural resources e.g minerals;***
* ***Need for difference / security purpose;***
* ***Government policy which may require people to live in to life together;***
* ***Availability of social amenities;***
1. State **five** environmental problems associated with open cast mining. (5 marks)
* ***The land left with gaping quarries, which are ugly with the natural beauty of the landscape;***
* ***The dust produced during the mining pollutes the atmosphere / is a health hazard;***
* ***The heap of rock waste hinder any land use / creates a landscape that is expensive to rehabilitate / barren land;***
* ***It causes shortage of land / it hinders settlement / leads to displacement / hinders agriculture;***
* ***It leads to loss of bio diversity – vegetation is cleared before extraction of minerals begins to take time to regenerate;***
* ***Large scale blasting of rocks leads to instability of the basement rocks;***
* ***Water accumulates in the hollows left by open case mines crating ponds which become habitat for diseases causing organisms;***

1. Use the photograph below and answer the questions which follow.



 (a) (i) Give **two** reasons why the photographs is a ground general view. (2 marks)

* ***Has many objects;***
* ***Sizes / clarity of the objects reduce towards the background;***

 (ii)What is the activity shown in the photograph? (1 mark)

* ***Animals / livestock grazing / keeping;***

 (iii)State **two** indicators in the photograph which favour the activity shown.

 (2 marks)

* ***Gentle slopes;***
* ***Vastland;***
* ***Pasture;***

 (iv) Draw a rectangular measuring 10cm b 8cm to represent the photograph.

 On the rectangle sketch and label the main features. (5 marks)

 (b) (i) Name **two** species of coffee grown in Kenya. (2 marks)

* ***Ruiru II,***
* ***Robusta;***
* ***Arabica;***

 (ii) Identify two counties in Kenya where coffee is grown in large scale?

 (2 marks)

* ***Kiambu;***
* ***Nyeri;***
* ***Kisii;***
* ***Nyamira;***

 (c ) Explain the problems facing coffee farming in Kenya. (10 marks)

* ***Coffee berry disease lowers yield;***
* ***Termites reduces quality / quantity;***
* ***Expensive inputs reduces profitability;***
* ***Impossible roads delay delivery;***
* ***Competition on land use reduces large scale production;***
* ***Competition in the world market over quality and price reduces market;***
* ***Fluctuations in the price leads to uncertainty;***
* ***Theft of coffee berries leads to losses;***
1. (a) (i) Distinguish between an industry and industrialization. (2 marks)
* ***An industry is an enterprise that makes it possible for people to produce goods and services / establishment while processes and transforms simple and ordinary raw materials to more complex materials of great value while industrialization is the process and pace / speed at which a country sets to establish industries;***

(ii)Give two examples of industries whose location was influenced by the market.

* ***Brick marking / tile marking / furniture manufacture because goods are bulky and of low value;***
* ***Milk processing / bread baking / confectionary industries goods are perishable;***
* ***Glass ware / bottled beverages – goods are fragile while on transit to customers;***
* ***Motor vehicle / machinery spare parts – because they are specialized items;***

(b) Compare ind industries in Thika and the Ruhr industrial region under the following sub heading. (6 marks)

1. Water Supply
* ***In both Thika and Ruhr, there is high supply of water for industrial use;***
* ***Thika has water from River Chania and in the Ruhr industries get water from many rivers like wupper, Emscher, Lipe and Rhine,***
1. Energy Supply
* ***In both Thika and Ruhr, energy for industrial use is adequately supplied;***
* ***Industries in Thika rely in HEP while in Ruhr, energy is multi sourced from HEP coal and nuclear power;***
1. Transport
* ***Industries in Thika rely on Road and Rail transport, while those in the Ruhr are served by Road, Rail and canal transport;***

(c ) Students from your class carried out a field study in an industry near your school.

1. Formulate three hypothesis for the study. (3 marks)
* ***Most goods produced by the industry are sold in the local market;***
* ***Most of the laborers are local people;***
* ***Most of the raw materials are sourced from the surrounding areas;***
1. State two methods they used to collect data. (2 marks)
* ***Administered questionnaires;***
* ***Conducted interviews;***
* ***Content analysis;***
* ***Observation;***

(d) Explain three causes of the decline in textile industries in Kenya. (6 marks)

* ***There has been decline in the production of cotton which has led to linked supply of raw materials for the textile industries;***
* ***Liberalization of economy has encouraged business people to import textile from other countries;***
* ***Large scale importation of second hand clothes; has reduced the demand for locally produced textile products;***
* ***Decline to economic growth as discouraged investors in the textile industry;***
* ***Emergence of some of the local textile factories has led to closure of such industries;***

(ii) Name four industries in Kenya that use agricultural non food products as raw materials. (4 marks)

* ***Tobaco processing;***
* ***Textile industry;***
* ***Paper marking;***
* ***Foot wear industries;***
* ***Pharmaceutical industries;***
* ***Pyrethrum processing;***
* ***Saw milling;***
* ***Leather tanning;***
* ***Glue making;***
1. (a) (i) Name **two** modern methods of fish preservation. (2 marks)
* ***Refrigeration / freezing;***
* ***Canning;***

(ii) State **three** challenges facing fish farming in Kenya. (3 marks)

* ***Attack by fish predators lead to heavy loses;***
* ***Inadequate capital to purchase fish farming equipment;***
* ***Inadequate fish rearing techniques;***
* ***Drought leads to inadequate supply of water in pods;***

(b ) Describe how the following methods of fishing are carried out.

1. Handline (5 marks)
* ***The single string is titted with a hook;***
* ***The hook is baited and cast in the water;***
* ***The line is fitted with floaters as an indicator;***
* ***Once the floater sinks, the handline is pulled and fish unhooked;***
* ***When the fish is shallow, the bait is thrown and they are caught by gills;***
1. Lining (7 marks)
* ***A longline is tied to the boat;***
* ***Many baited hooks are tied to one shorter one which are then tied to the longline;***
* ***The longline is tied with floats and dragged in the sea by moving boat;***
* ***As fish shallow the baited books and is entangled their throat as they are caught;***
* ***After enough fish is caught the line is hauled and fish are unhooked;***

(c ) Explain **four** ways through which natural fisheries can be managed. (8 marks)

* ***Establishment of research station to enable countries to come up with fish species that are favoured by various conditions hence increase production;***
* ***Banning indiscriminate fishing to protect fisheries from overfishing;***
* ***Control of population / release of untreated wastes into fisheries to prevent death of fish;***
* ***Licensing specific number of fishermen to prevent overfishing;***
* ***Creating awareness to enlighten people on the importance of fish resources and the fishing grounds;***

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1. (a) (i) Distinguish between renewable and nonrenewable sources of energy.

 (2 marks)

* ***Renewable sources of energy are sources of energy that can be regenerated and used over a long period of time / energy that can be re-used or recycled while;***
* ***Non renewable sources of energy are those sources of energy that cannot be re-used or recycled / once they are used they get exhausted and cannot be regenerate;***

(ii)State three advantages of using electricity as a source of energy.

 (3 marks)

* ***Clean / most environmentally friendly energy source / does not pollute the environment;***
* ***Can be transmitted over long distances using cable;***
* ***Can be put into many uses e.g. cooking, heating, cooling, transport, lighting and running machinery;***
* ***Relatively easy to use by just switching on / off when required;***
* ***construction of dams for HEP generation leads to creation of lakes that can be used for irrigation, controls of floods, recreation, fishing etc;***

 (b) (i) Apart from HEP projects in Kenya and Uganda, name two other HEP

 project in Africa. (2 marks)

* ***Akosombo dam;***
* ***Vanderkloof dam;***
* ***Kainji dam;***
* ***Inga dam***
* ***Aswan high dam***
* ***Kafue***
* ***Kariba***
* ***Caborra basa***
* ***Vanderkloof dam***

(ii)Explain three factors that favour establishment of Seven Folks dams along river Tana in Kenya. (6 marks)

* ***Presence of large and constant volume of water: river Tana has large and constant volume of water provided by its permanent tributaries (Murubara, Thiba and Nyimindi).***
* ***Presence of numerous waterfalls; River Tana has numerous water falls, rapids and Knick points which offered massive haudralic force suitable for generating power;***
* ***Presence of deep and narrow valley; the Deep valley provided enough space for construction of large water reservoir. The narrow valley enabled minimization of cost of constructing the dam;***
* ***Presence of hard impervious basement rock; the hard basement rocks offered***

(c ) (i) What is energy crisis? (2 marks)

* ***This is a situation where the demand for oil is higher than the amount being supplied thus leading to high oil price;***

 (ii)Give two causes of energy crisis. (2 marks)

* ***Over reliance on petroleum and its products: lack of alternative sources of energy that can fit in position of oil and petroleum causes over reliance on oil and its products in idnudstrial, gricultural and transport sector. So when producing countries fail to export or even increase prices of petroleum the importing countries strain ad suffer a lot;***
* ***Economic and political sanctions for instance in 1190, United state declared sanction against Iraq and Libya due to Gulf War and this led to decline in supply of oil to the importing countries;***
* ***Sky rocketing oil prices; this is sharp rise in oil prices due to increase in demand of oil; sometimes Oil producing and exporting countries (OPEC) do increase the prices of oil withoutnotifying the importing countries and this makes importation to become too expensive;***
* ***Exhaustion of wood fuel: over exploitation of fuel due to increased deforestation in developing countries make its supply to become less hence many people turn to use of oil***

(d ) Explain four economic benefits of H.E.P. (8 marks)

1. Use the map of Africa below to answer questions (a) (i).



1. (i) Name the power dams marked **J**, **K** and **L**. (3 marks)
* ***J – Aswan high dam;***
* ***K – Inga dam;***
* ***L – Seven forks dam;***

(ii) Explain **four** ways in which Kenya has benefited from the development of seven forks hydroelectric power scheme.

* ***It has led to controlling of flood in the lower parts of River Tana thus reducing the produce in the area;***
* ***The dams are for generating electricity which is used for industrial / domestic purposes;***
* ***The dams are tourist attractions which generates foreign exchange for the country;***
* ***The scheme has led to the development of industries thus creating employment opportunities / Kenyans have been employed in the scheme hence raising their standards of living;***
* ***Some dams in the scheme provide water for irrigation thus improving agricultural production;***
* ***The reservoirs provide fishing grounds which supply fish to the local people;***
* ***It has led to the improvement of roads hence the reduction of importation of power thus saving foreign exchange;***
* ***The dams have provided useful sites for education purposes;***
* ***The reservoirs provide regular supply of water for domestic / industrial use;***
1. (i) Apart from oil, name two other non-renewable sources of energy. (2 marks)
* ***Coal;***
* ***Uranium;***
* ***Natural gas;***

(ii) Explain **four** effects that the increase in oil prices has had on the economies of oil importation countries of Africa. (8 marks)

* ***The countries spend more of their foreign exchange on importation of oil thus leading to the decline of other sectors of the economy;***
* ***There has been increasing cost of transport causing a rise in the cost of movement of people, goods and services;***
* ***Production cost has increased leading to an increase in price of commodities thus reducing the demand of the commodities;***
* ***Some industries that rely on products of petroleum have reduced leading to redundancy / unemployment;***
* ***The countries have experienced low poverty among the citizen;***
* ***It has created awareness on the need to conserve energy;***
* ***The countries that have oil potential have started exploring the possibilities of drilling their own oil to reduce / stop importation;***
1. State **four** ways in which Kenya can reduce the use of petroleum as a source of energy. (4 marks)
* ***Encouraging people to use bicycles / boda boda over short distances;***
* ***Developing an alternative source of energy;***
* ***Pooling transport;***
* ***Encouraging people to use public transport;***
* ***Importing vehicles that consume less fuel;***
* ***Improving traffic flow to reduce usage of petrol diesel;***
* ***Improving roads to avoid delays that increase consumption of petrol / diesel;***