**MARKING SCHEME.**

**SECTION A: 25 MARKS**

1. a) State two differences between a national park and a game reserve.( 2 mks)

* ***National park is managed by the national government while the game reserve is managed by the county government***
* ***In the national parks no human activities or grazing is allowed while in the game reserve grazing is allowed.***
* ***National park mainly conserves wildlife, scenery and historic sites while game reserve mainly conserves wildlife and scenery. ( any 2×1) 2mks***

 b) State three importance of domestic tourism.( 3mks)

* ***To increase the consumption of local wildlife products***
* ***To increase the money circulation in the country***
* ***To facilitate the interaction between different communities thus promoting national unity***
* ***To increase employment opportunities***
* ***To create awareness about the environment***
* ***For people to appreciate their cultural heritage.***
* ***To make use of tourist facilities during the low season***
* ***To enhance the need for conservation and preservation of the environment.***

***( any 3×1) 3mks***

2. a) Name two tree species of coniferous forests.( 2mks)

* ***Pine kei apple***
* ***Spruce jacaranda***
* ***Fir ( any 2×1) 2mks***
* ***Cedar***
* ***cypress***
* ***African pencil***
* ***eucalyptus/blue gum***
* ***wattle***

b) Give three characteristics of tropical hardwood forests that hinder their exploitation. (3mks)

* ***most of the trees are heavy hence difficult to haul or transport***
* ***most of the forest have thick undergrowth make them impassable/ inaccessible***
* ***most of the trees have large buttress roots that make them difficult to cut***
* ***Most of the forests occur in mixed stand making them difficult to locate and extract the valuable tree species.***
* ***Most of the trees take a long time to mature***
* ***Experience very high amounts of rainfall making the roads impassable.***
* ***The forests are habitats to wild animal that attack people and kill them.***

***(Any 3×1= 3mks)***

3. a) Outline three problems facing wheat growing in Canada.( 3 mks)

* ***Frost that destroys the crop leading to lower yields***
* ***Attack by pest e.g. shiny weevil lowering production***
* ***Outbreak of diseases e.g stem rust lowering production***
* ***Fluctuation of the world market prices leading to lower profits***
* ***Soil exhaustion leading to lower yields***
* ***Competition from other producing countries reducing the market for the crop***
* ***Overproduction floods the market leading to lower prices***
* ***Frozen waters during winter limiting accessibility in the wheat farms***

***( any 3×1= 3mks)***

 b) List two exotic beef cattle reared in Kenya. (2 mks)

* ***Aberdeen angus***
* ***Hereford***
* ***Short horn***
* ***Galloway ( any 2×1) 2mks***

4. a) Differentiate renewable and non-renewable source of energy.( 2mks)

***Renewable sources of energy are those that can be regenerated and used for a very long time while non- renewable source of energy are those once used they became exhausted. √√ 2 mks)***

b) State three problems experienced due to over-dependence on petroleum oil (3mks)

* ***Importation of oil drains off foreign exchange leading to unfavorable balance of trade***
* ***High cost of transportation when there are crisis***
* ***Closure of some industries which depend on petroleum and petroleum product as a raw material***
* ***Leads to high cost of production which increases the prices of manufactured goods. ( any 3 ×1= 3mks)***

5. a) Name two types of manufacturing industries in Kenya.( 2 mks)

* ***Agricultural food processing industries***
* ***Agricultural non-food processing industries***
* ***Non-agricultural processing industries. ( any 2 ×1 =2mks)***

 b) State three problems facing jua-kali industries in Kenya (3mks)

* ***Competition from well-established factory manufactured goods hence reduced sales***
* ***Inadequate capital to invest***
* ***Discrimination of goods due to negative attitude on the products leading to low demand.***
* ***A rise in cost of materials resulting in increase in the prices of goods limiting the growth of industries***
* ***Exploitation by middle men who offer low prices. ( any 3×1=3mks)***

**SECTION B: 75 MARKS**

***ANSWER QUESTION 6 AND ANY OTHER TWO***

6. The table below shows crop production in Kenya for a period of five years in 1000 kilograms. Use it to answer question (a)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| CROP/YEAR | 2005 | 2006 | 2007 | 2008 | 2009 |
| Coffee | 1000 | 900 | 800 | 700 | 800 |
| Tea | 700 | 700 | 600 | 680 | 600 |
| Cotton | 500 | 400 | 300 | 600 | 350 |
| pyrethrum | 300 | 200 | 300 | 440 | 450 |

(a) (i) Using a scale of 1 cm represent 200 kilograms present the above data using a compound bar graph.(9 marks)



 (ii) List two advantages of using a compound bar graph to represent statistical data. (2 marks)

* ***Facilitates comparison of data***
* ***A number of variables can be represented in one bar***
* ***Changes /trend is easy to trace***
* ***Good visual impression*  *( any 2 ×1= 2marks)***

 (b) (i) Other than port harcout, name other towns associated with oil palm growing in Nigeria. (2 Marks)

* ***Sapele***
* ***calaboar***

 (ii) State three physical conditions that favor the growth of oil palm in Nigeria. (3 marks)

* ***high well distributed rainfall of 2000mm per year***
* ***high relative humidity***
* ***high temperatures of 24-30℃***
* ***deep, fertile well drained porous and rich in humus soils.***
* ***Plenty of sunshine during the ripening period***
* ***Gentle slopes /undulating landscape***
* ***Land less exposed to strong winds ( any 3×1= 3mks****)*

(c) Describe the cultivation of oil palm from land preparation to harvesting. (6 marks)

* ***The nursery is prepared***
* ***The land is cleared and ploughed***
* ***Hole are dug and spaced at 9m by 9m***
* ***The seedling are transplanted from the nursery to the holes***
* ***Weeding and spraying is done regularly***
* ***Manuring and addition of fertilizers is done***
* ***The maturing trees flower and bear fruits after 3-4 years***
* ***The mature fruits are harvested using a curved knife or hook***

***(any 6×1=6mks)***

 (d) Give three uses of palm oil. (3 marks)

* ***Used as cleansing agent in the tin industry***
* ***Used for making margarine/cooking oil***
* ***Used for making candles***
* ***Used for making cosmetics***
* ***Used for sweets and confectionaries***
* ***Used as lubricant***
* ***Used for making soap***
* ***Used as food***
* ***Used in the pharmaceutical industries. ( any 3×1= 3mks)***

7. The world map below shows the major fishing grounds



 (a) Name the

 (i) Ocean currents marked P and Q (2mks)

* ***P:warm gulf stream***
* ***Q: Mozambique/alguhas warm current***

 (ii) **Three** types of fish caught at the coast of Canada (3mks)

* ***Salmon, mackerel, herring, sardines,pilchards,tuna,flounder, and haddock***

***( any 3×1= 3mks)***

(b) Explain how the following factors favor fishing in Japan

 (i) Ocean current (4mks)

* ***The meeting/convergence of the warm kurosiwo and cold oyashiwo causes upwelling of water which bring fish food to the surface./increases supply of oxygen required for the growth of fish and growth of plankton***
* ***The ocean currents provide ideal temperature for survival of numerous species of fish/ growth of plankton.***
* ***The warm kurosiwo current raises the temperature of the ocean water making it ice free encouraging fishing throughout the year ( any 2×2=4 mks)***

 (ii) Nature of the coastline (4mks)

* ***The indented/irregular sheltered coastline provide secure breeding ground for fish.***
* ***The indented/irregular coastline provide suitable/ideal sites for the development of ports ( any 2×2= 4mks)***

 (iii) Level of technology (2mks)

* ***Modern/advanced technology encourages large scale commercial fishing/deep sea fishing/Limited technology discourages deep sea fishing.***
* ***Modern /advanced fishing encourages large catch of fish/Limited technology allows only a small catch of fish .( any 1×2= 2mks)***

(c) Describe how purse seining method is used in fishing (7mks)

* ***Uses two boats one large and one small***
* ***The net has floats on top and weight at the bottom to keep it in a vertical position***
* ***The net has a string along at the bottom edge***
* ***The fishermen locates area rich in fish***
* ***The string at the bottom is pulled to close the net at the bottom and trap the fish***
* ***The net is pulled out of the water and fish is hauled/emptied into the larger boat for preservation and transportation. ( 7×1= 7 marks)***

(d) Give three methods used to preserve fish (3mks)

* ***Sun drying***
* ***Salting***
* ***smoking***
* ***Refrigeration* ( *any 3×1= 3 mks)***

8. The table below shows the quantity of mineral produced in Kenya in tones between years 2001 and 2005.

Use it to answer questions a(i) and (ii).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Mineral / Years** | **2001** | **2002** | **2003** | **2004** | **2005** |
| Soda ash | 297780 | 304110 | 352560 | 353835 | 360161 |
| Fluorspar  | 11885 | 85015 | 80201 | 117986 | 109594 |
| Salt | 5664 | 18848 | 21199 | 31139 | 26595 |
| Others | 6093 | 7000 | 4971 | 6315 | 8972 |

**Source: Economic Survey, 2006.**

1. Calculate the average production of soda ash over five year period. (2 Marks)

 ***297780+304110+352560+353835+360161=1,400,436√***

 ***1,400,436/5=280,087.2 tonnes√***

1. Calculate the total mineral production for the year 2003. (1 Mark)

 ***352560+80201+21199+4971=458,931tonnes***

1. Give **three** uses of soda ash. (3 Marks)
* ***Used in manufacture of soap***
* ***Used in manufacture of glass***
* ***Used in manufacture of detergents***
* ***Used in paper and pulp industry***
* ***Used in oil refining***
* ***Used in textile industry ( any 3×1=3mks)***

b) i) Name the main places in Kenya where the following minerals are mined: -

a) Flour spar-***keriovalley***

b) Titanium- ***kwale county***

c) Gold- ***migori or kakamega.***  (3 Marks)

 ii) State **two** problems associated with shaft mining. (2 Marks)

* ***Sometimes mines are flooded with water causing waterborne diseases***
* ***The dust produced causes respiratory diseases***
* ***Emission of poisonous gases causes death/ respiratory diseases***
* ***Collapse of mines leading to death of miners ( any 2×1= 2mks)***

c) Explain **four** ways in which gold mining has contributed to the economy of South Africa. (8 Marks)

* ***When exported earns the country foreign exchange***
* ***Gold has been used as a unit of exchange for paying international debt***
* ***Has led to development of social amenties***
* ***Has led to urbanization of towns such as witwatersland***
* ***Has led to industrialization hence larger market for the goods***
* ***Has created employment opportunities raising the standard of livings***
* ***Has led to development of transport network. ( any 4 ×2 = 8 mks)***
1. Explain **three** negative effects of mining on the environment. (6 Marks)
* ***Dumping of rock waste has led to loss of biodiversity***
* ***Has led to land dereliction leading to wastage of of agricultural land***
* ***Open pits that are left behind are breeding grounds for mosquitoes***
* ***Causes environmental pollution e.g harmful gases released contaminates the air./mineral waste dumped into the rivers leading to death of aquatic life.***
* ***Mining disrupts the water table leading to shortage of water***
* ***Bare surfaces left due to clearing of the vegetation the land becomes prone to soil erosion. ( any 3×2=6 mks)***

9. (a) i) Apart from geothermal power, name three other renewable sources of energy in Kenya (3mks)

* ***Wind***
* ***Solar/sun***
* ***Wood***
* ***Biogas. ( any 3×1=3mks)***

 ii. State four factors that limit exploitation of geothermal power in Kenya (4mks)

* ***Inadequate/shortage of capital to invest in geothermal power production***
* ***Shortage of skilled labor to install the geothermal power***
* ***Low level of technology which hinders exploitation of energy***
* ***Political interference in the project. ( any 4×1=4 mks)***

 (b). i. Give three factors considered when setting up a hydroelectric power generating plant (3mks)

* ***Presence of deep valley/a river gorge to save on cost of construction.***
* ***Regular/reliable water supply to ensure continuous generation of power***
* ***A hard basement rock to provide firm foundation for the construction of a dam.***
* ***Presence of waterfall/steep gradient to provide hydraulic force for power generation.***
* ***Impervious/impermeable rock to prevent seepage ( any 3×1= 3mks)***

 ii. List three advantages of electricity over other sources of energy (3mks)

* ***It is renewable.***
* ***It is non pollutant***
* ***It is relatively cheap***
* ***It is easy to transport using wires***
* ***It is easy to use***
* ***It is adjustable to any fraction of energy using transformers***
* ***Convenient to use. ( any 3×1= 3mks)***

c) i) What is energy crisis (2mks)

 ***it is the situation where the demand for oil is higher than the supply leading to higher oil prices√√/ a situation where the demand for a given fuel exceed supply√√***

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

* ***Rapid depletion of oil resources leading to a reduction in the supply of oil when the demand for it increases***
* ***Political disagreements between two trading partners leading to withdrawals of oil leading to shortage***
* ***Shift from the use of wood fuel to oil as source of energy***
* ***Slow development of other renewable sources of energy***
* ***Imposition of sanctions on an oil producing country forcing to export only a limited quantities***
* ***High cost of prospection of oil leading to a reduction of oil supply when the demand is increasing***
* ***Sharp rise in demand of oil due to increasing population***
* ***Wastage and misuse of energy***
* ***Overdependence on oil and its products leading to high demand***
* ***Collusion by oil producing countries causing artificial shortage in order to maintain profits***
* ***Political disagreements making the oil producing countries to withhold oil causing crisis (any 2×1= 2mks)***

10. Below is a sketch map showing Lake Victoria. Use it to answer question (a)



1. i) Name the ports marked P, Q, R, S (4mks)

***P – Kisumu***

 ***Q- Musoma***

 ***R – Bukoba***

 ***S – Entebbe***

 ii) Give **four** advantages of air transport over water transport. (4mks)

* ***Air transport is faster***
* ***Air transport is less affected by congestion***
* ***Air transport is easier in transporting perishable goods***
* ***Air transport is most comfortable over long distances.***
* ***Air transport allows access to remote areas.( any 4×1 = 4 mks)***

 b) i) Name three types of communication. (3mks)

* ***Oral/verbal communication***
* ***Written communication***
* ***Visual/audio communication***
* ***Sign language. ( any 3×1 =3mks)***

 ii) Explain **four** problems facing transport and communication in Africa.(8mks)

* ***Difficult terrain – Africa is characterized by difficult terrain***
* ***Lack of an integrated traffic system – Different countries has different traffic rules.***
* ***Landlocked countries- A number of African countries are located far inland and away from oceans, thus denying them direct link to the sea.***
* ***Shortage of navigable rivers – fluctuations in river levels and presence of obstacles.***
* ***Uninhabited land- such areas are uneconomical***
* ***Thick vegetation- It makes it different and expensive to construct transport system.***
* ***Different railway and road systems.***
* ***Political barriers- Political animosity between countries***
* ***Inadequate capital – Heavy capital investment is required.***
* ***Poor technology and shortage of skilled labour***
* ***High fuel costs- Africans are unable to cope with the ever increasing prices of petroleum.***
* ***Security – vandalism of communication facilities, road sign, Terrorisms, wars in several countries. (Any four well explained4 x 2 = 8mks)***

 c) Explain the role of the Great Lakes and St. Lawrence Seaway to the economies of Canada and the USA. (6mks)

* ***Source of foreign exchange for the two countries because many tourists are attracted to beautiful scenery e.g. Niagara Falls.***
* ***Dams along the seaway are used to produce H.E.P. which stimulated growth of industries.***
* ***Fishing is undertaken in dams and lakes along the water way.***
* ***Development of agricultural activities along the seaway e.g. villages which practice horticultural farming.***
* ***It’s a source of employment e.g. tour guides, security, transport, etc.***
* ***Source of revenue to U.S.A. and Canada from toll charges paid by ships which go there.***
* ***Lakes and the seaway are sources of fresh water for domestic and industrial purposes.***
* ***Increased trade between the two countries and other countries of the world.***
* ***Reduction of transport costs to and from the interior of the continent. ( any 3×2= 6marks)***