**FORM 3**

**END OF TERM II 2015 – MARKING SCHEME**

**GEOGRAPHY 312/2**

**SECTION: A**

1. (a) What is aphotograph? (2mks)

It is the image of an object,aperson or ascene inform of aprint taken by acamera. 2 x1 = 2

(b) Identify **Four** factors affecting the occurrence of minerals. (4mks)

* Veins and Lodes
* Beds and seams
* Weathering products
* Alluvial or placer deposit. 4 x 1 = 4

1. Use the following map to answer questions2a and 2b. (4mks)



Map of east Africa – distribution of minerals

1. Name the minerals marked x, y and z.

* x- Coal
* y – Salt
* z – Limestone 3 x 1 = 3

(b) State **Four** uses of the minerals mined at z.

* Used in building and construction industry.
* Used in the manufacture of paint.
* Used in the manufacture of cement.
* Used in water treatment i.e. lime. 4 x 1 = 4

1. (a) Distinguish between forest and Forestry. (2mks)
   1. A forest is a continuous and extensive cover of trees of one or more species on a vast land.Forestry is science of developing or cultivating forests. 1 x 2 = 2

(b) Give**Four** physical factors that influence the distribution and type

of natural forests. (4mks)

* Climate
* Altitude
* Soils
* Topography. 4 x 1 = 4

1. State **Four** characteristics of coniferous forests. (4mks)

* Trees are light in weight.
* Trees are evergreen.
* The trees occur in pure strands.
* The trees are tall in height with straight trunks.
* The trees have conical shape.
* The trees have thick barks with a lot of resin.
* Trees have hard needle – shaped leaves.
* The trees take a long time to mature 50-70 yrs. 4 x 1 = 4

1. In addition to coniferous forest name **Two**other types of natural forests. (2mks)

* Tropical hardwood forests.
* Temperate hardwood forests. 2 x 1 = 2

**SECTION B**:

*Answer questionsSix and any other two questions fromthis section.*

1. (a) Differentiate between Discrete Data and Continuous Data: (2mks)

* Discrete figures are given in whole numbers e.g. popular while continuous data isgiven in decimal and fractions. 1 x 2 = 2

1. the table below shows the number of tourists who visited Kenya from various parts of the world. Use it to answer the following questions.

|  |  |  |
| --- | --- | --- |
| **Continent** | **2010** | **2011** |
| Europe | 942000 | 965000 |
| Africa | 120000 | 154000 |
| Asia | 97000 | 128000 |
| North America | 94000 | 103000 |
| South America | 19000 | 24000 |
| others | 29000 | 41000 |
|  | 1301000 | 1415000 |

A divided rectangle ,easuring 15 cm long representing number of tourists who visited Kenya from various parts.

Title – 1mk

Segments – ½ x 6 = 3mks

Calculations ½x 6=3 marks

Total 6 marks.

(i) identify the continent with the highest increase in the number of tourists visiting Kenya between 2010 and 2011 (1mk)

* africa 1 x 1 = 1

(ii)calculate the percentage increase of tourists from south America between 2010 and 2011

24,000- 19,000 = 5,000

5,000/19,000 x 100 = 26.3%

(iii) state three advantages of using a divided rectangle to represent a geographical data (3mks)

* it gives a clear visual impression
* it allows for easy comparison
* they are easy to draw/ construct
* they are easy to read/ interprete
* they can be used to represent a wide variety of data

(iv)State**3** uses of petroleum. (5mks)

* Used in petrol and diesel run engines.
* Lubrication of machines.
* Manufacture of plastics such as cups and jerry cans.
* Manufacture of fertilizers.
* Kerosene used in cooking.
* Bitumen or tar used in tarmacking roads.
* Manufacture of chemicals e.g. Medicines

and cosmetics. 5 x 1 = 5

C(i) Identify**Five** contributions of oil to he economics of the Middle East. (5mks)

* The countries are able to develop their towns and cities.
* Revenue and royalties from oil enable them to involve in overseas Investment.
* has led to high per capita income.
* Creation of employment opportunities for the people in the region.
* Industrial linkages led to development of other

related industries. 5 x 1 = 5

(ii) outline four problems facing oil exploitation in Kuwait (4mks)

* Competition of market by other oil producing countries.
* Oil production and export is disrupted due to conflicts between Arabs and Israelites and rival government.
* International companies that are foreign.
* Fluctuation of oil prices. 4 x 1 = 4

1. (a) (i) Name **Three** indigenous soft wood tree species in Kenya. (3mks)

* Podo
* African pencil
* Cedar. 3 x 1 = 3

(ii) State the importance of forests and forest products in Kenya. (10mks)

* Preservation and conservation of the environment.
* Regulation of climate.
* Forests provide suitable habitats for wildlife.
* Major sources of income.
* As a raw material for industries use e.g. paper.
* A major source of employment.
* Promotes tourism.
* Forests provide firewood.
* Forests provide charcoal.
* Provides nuts, fruits and dyes.
* Forests provide wood for building.
* Forests and forest products are important sources of income.
* Tree leaves are used to feed caterpillar larvae.
* Forests are used to extract tannin.
* Forests are used as hiding grounds for dung wars.
* Forests act as research and education centers. 10 x 1 = 10

(b) Students of **TimboroaSecondary School**went for field work to study softwood forests around their school.

* 1. Name **Two** exotic species of tree they would identify in the forest.

(2mks)

* Pine
* Cypress 2 x 1 = 2

1. One of the methods they use to collect data would be observation.

State **Five** Disadvantages of observation. (5mks)

* Observation requires a lot of travelling.
* It is difficult to use it on bad weather.
* Visual impairment may limit effectiveness of the method.
* It may not be possible to collect data on past activities.
* The method is subject since it is based on

personal observation. 5 x 1 = 5

(c) Name other **Five** methods they would use to collect data in addition to observation. (5mks)

* Administering questionnaire.
* Interviewing.
* Taking measurements.
* Counting.
* Sampling.
* Experimentation. 5 x 1 = 5

1. (a) Identify **Five**factors that influence the exploitation of minerals.(5mks)

* The value of minerals.
* The size of mineral deposits.
* The quality of ore.
* Method of mining.
* Technology.
* Capital.
* Market.
* Transport cost. 5 x 1 = 5

(b)Describe the extraction and processing of Trona at Lake Magadi.(7mks)

* Mining is by done placer or alluvial mining.
* A dredger is used to excavate Trona from crystals.
* It is mixed with solutions from the lake called Liquor.
* The mixed is pumped back into the lake.
* Cleaned crystals are converted to Soda Ash.
* Soda ash is reduced into required size. 7 x 1 = 7

(c) Students from Athi River mixed secondary school travelled to Lake Magadi tostudy mining of Soda ash.

1. Give **Five** reasons why they should carry out a reconnaissance.(5mks)

* It familiarizes the student with the area of study.
* It introduces the student to the authorities and respondents in the area.
* Reconnaissance will help the students to identify and decide on the methods and tools to use in collecting relevant data.
* The students will determine of the area is suitable for study.
* Reconnaissance helps the students to identify any problems that they are likely to face during the study.
* Reconnaissance enables the students to estimate the cost of study and plan accordingly.
* Reconnaissance is useful in designing and planning a working schedule by the students. 5 x 1 = 5

1. What **Five**methods would the students use in recording the data collected. (5mks)

* Note taking.
* Taking paragraphs.
* Tape recording.
* Field sketching.
* Labeling of samples.
* Mapping. 5 x 1 = 5

1. State **Three**follow up activities the students would involve in after the field study. (3mks)

* The students would discuss in their groups and compare notes.
* The students would display samples of Soda ash collected from the mining.
* The students could analyze the data collected.
* They could present to the rest of the school community. 3 x 1 = 3

1. (a) Name **Two** places in Kenya where **Soft Wood Forests**are planted in Kenya. (2mks)

* Turbo
* Kipkabu
* Timboroa
* Kaptagat
* Elburgon
* Londiani
* Lugari 2 x 1 = 2

(b) Explain**Five** factors that favour forestry in Canada. (10mks)

* Low temperature discourages settlement. Other forms of land use their forests alternatively.
* The ruggedness of the landscape do not agriculture alternative forest.
* High precipitation throughout the year promotes forest growth.
* Valley bottom along the coats provide good sites for paper mills.
* The coastal location favour exploitation of the timber.
* There are many rivers which provide plenty of water for processing purposes.
* Rivers Otawa and Frazer provide cheap transport means.
* There is ready market in Canada and neighboring U.S.A for forest products. 5 x 2 = 10

(c) (i) State the difference between tree species in Kenya and Canada.(2mks)

* In Kenya both exotic and indigenous soft woods grow.In Canada, only soft woods trees are planted. 1 x 2 = 2

(ii) Identify**Six**problems facing forestry in Kenya. (6mks)

* Competition of forestry with farming and settlement.
* High demand for timber products in the country.
* Illegal logging- illegal cutting down of trees.
* Forest fires.
* Biological conflict.
* Pests and diseases.
* Prolonged droughts. 6 x 1 = 6

(iii) State **Five** ways in which Kenya has managed forests. (5mks)

* Carrying out public campaigns on value of forests.
* Carrying out research on suitability of soils and effects of pests and diseases.
* Establishment of training institutions dealing with forestry.
* Reduction of wastage in forestry industry by recycling the wastes.
* Laws established to govern management of forests.
* Non-government organizations have been actively involved in the management effects.
* Creation of forests reserves.
* Agro-forestry is practiced.
* Extensive a forestation programmed. 5 x 1 = 5

1. (a) Identify**Three** types of underground mining. (3mks)

* Drift /Adit method.
* Shaft method.
* Solutions method.
* Drilling method. 3 x 1 = 3

(b) Name the places where the following minerals are found in Kenya. (3mks)

* Diatomite Kariandusi
* Titanium Kwale
* Gold Kakamega/ Migori 3 x 1 = 3

(c)(i) State **Five** effects of mining on environment. (5mks)

* Land dereliction
* Pollution
* Loss of biodiversity
* Soil erosion.
* Landslides. 5 x 1 = 5

(ii) Give **Four** ways in which Diamond contributes to the economy of SouthAfrica. (4mks)

* Provides employment
* It earns substantial amount of foreign exchange.
* It has led to the growth of urban centers.
* It has led to the development of infrastructure. 4 x 1 = 4

(iii) Explain **Five** problems facing Diamond mining in South Africa. (10mks)

* Fluctuation of market prices.
* Low mineral content in ore making processing elaborate and expensive.
* High costs of mining and processing of Diamond leading to low profit.
* Labour competition with other sectors of the economy e.g. manufacturing industries leading ti high cost of labour.
* Reduction in Diamond reserves due to

continuous mining. 5 x 2 = 10