**FORM ONE GEOGRAPHY MID TERM 3 2022 EXAM**.

**NAME ………………………………………………………………..CLASS……… ADM. NO………….**

**ANSWER ALL THE QUESTIONS**. **TIME: 50 MINUTES**

1. (a) Define the term environment. (2 mark)

***Environment refers to all external conditions that surround an organism and which influences its behavior or activities***.

 [b] Give four areas studied under Practical Geography. [4 marks]

* ***Maps and Map work***
* ***Fieldwork***
* ***Statistical Methods***
* ***Photograph Work***

2. [a] State three weaknesses of the passing star theory. [3 marks]

* ***The theory fails to explain the origin of the sun and the star.***
* ***Chances of another star approaching the sun are minimal.***
* ***The effect of another star would have reduced by now if it set the planets in motion.***
* ***The sun could have been broken up by the gravitational force of the star.***
* ***High temperatures materials drawn from the sun or the star would have dispersed rather than condense.***

 [b] Briefly describe the shape of the Earth. [3 marks]

* ***The earth is fairly spherical but not a perfect sphere.***
* ***The earth is slightly wider at the equator and is flattened at the poles.***
* ***This shape is called geoid or an oblate spheroid.***

 [c] Explain three proofs that the Earth is spherical. [6 marks]

* ***Satellite photographs of the Earth taken from space clearly show that the Earth is spherical.***
* ***It is possible to circumnavigate the earth. If one can move along a straight line, he or she is likely to come back at the starting point from the opposite direction.***
* ***The sun is first seen in regions to the east and later to the west. If the Earth was flat, then all places would receive sunshine at the same time.***
* ***The Earth’s Horizon appears curved when observed from a high point.***
* ***All planets have been observed using telescopes to be spherical. The Earth being one of them therefore is spherical.***
* ***When a ship from deep sea is approaching a shore, an observer first sees smoke, then the mast and then the whole ship.***

 [d] State four characteristics of the Mantle. [4 marks]

* ***The Mantle is about 2900km thick.***
* ***Average density of materials is between 3.0 and 3.3gm/cc.***
* ***It is divided into two parts. Upper mantle and Lower mantle.***
* ***The lower mantle exists in molten state .***
* ***The upper mantle exists in solid state with elastic rocks.***
* ***Olivine mineral is the dominant mineral in the rocks.***
* ***The temperature of the upper mantle is about 1000’c while that of the lower mantle is about 3000’c.***

3. [a] What is a Weather Station? [2 marks]

* ***Refers to a place set aside for the purposes of observing, measuring and recording elements of weather.***

 [b] State four factors to consider when choosing a suitable site for a Weather Station. [4 marks]

* ***The ground should be fairly level/gentle sloping.***
* ***The site should be in an open space where there is free flow of air.***
* ***The site should be free from flooding.***
* ***The site should provide a wide view of the surrounding landscape and sky.***
* ***The site should be away from tall structures, buildings and trees.***

 [c] Give three main ways through which the atmosphere is heated. [3 marks]

* ***Radiation***
* ***Convection***
* ***Conduction***

[d] Name five factors that influence the Temperature of a place. [5 marks]

* ***Latitude Ocean currents***
* ***Altitude Cloud cover***
* ***Aspect Length of day***
* ***Winds Continentality***

4. [a] What is statistical methods? [2 marks]

* ***Statistical methods refers to all techniques of collecting, recording, analyzing, presenting and interpreting Statistical Data.***

 [b] Give three sources of secondary statistical data. [3 marks]

* ***The internet***
* ***Newspapers***
* ***Reference books***
* ***Annual reports***
* ***Census reports***
* ***Compact discs/DVDs***
* ***Research papers***
* ***Maps***
* ***Magazines***
* ***Films***

 [c] The table below shows value of Kenya’s Principal imports between 2013 and 2016 in million shillings.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **IMPORT** | **2013** | **2014** | **2015** | **2016** |
| **PETROLEUM PRODUCTS** | **253,000** | **293,000** | **215,000** | **284,000** |
| **INDUSTRIAL MACHINERY** | **231,000** | **257,000** | **212,000** | **254,000** |
| **MOTOR VEHICLES** |  **83,000** | **102,000** | **118,000** |  **86,000** |
| **IRON AND STEEL** |  **81,000** |  **76,000** |  **88,000** |  **75,000** |

[i] What is the difference in value of imported Industrial Machinery and iron and steel in the year 2016? [2 marks]

***Ksh 254,000 million – Ksh 75,000 million***

***= Ksh 179,000 million***

***OR Ksh 179,000,000,000***

 ***OR Ksh 179 Billion.***

[ii] Calculate the percentage increase in import value petroleum products between 2013 and 2014. [3 marks]

***Difference: Ksh 293,000 – Ksh 253000 = Ksh 40,000***

 ***40000 X 100% = 15.81 %***

***253,000***

(iii) What is the total value of imports to Kenya in the year 2015? [2 marks]

***Total import Value year 2015 = 215,000+212,000+118,000+88,000***

 ***= Ksh 633,000 Million***

 ***OR Ksh 633,000,000,000***

 ***OR Ksh 633 Billion***

[5] [a] Define the term Field Work. [2 marks]

***Field work is a scientific study of Geography that applies practical techniques and uses the environment as a source of information.***

 [b] Highlight the three types of Field Work. [3 marks]

* ***Field Excursion***
* ***Field Study***
* ***Field Research***

 [c] Suppose you were to carry out a Field Study at a Weather Station near your school.

 [i] Give three appropriate methods that you would use to collect data.[3 marks]

* ***Observation***
* ***Content analysis***
* ***Interviewing***
* ***Taking measurement***
* ***Photographing***

 [i] State three follow up activities for the Field Study. [3 marks]

* + ***Writing a report in essay form.***
	+ ***Displaying processed photographs on a board.***
	+ ***Classifying the data collected.***
	+ ***Discussing the findings from the field in groups.***
	+ ***Drawing graphs based on numerical data collected.***
	+ ***Calculating averages and percentages on numerical data collected.***

[6] [a] List three types of scale in map work. [3 marks]

* ***Statement scale***
* ***Linear scale***
* ***Representative fraction scale/representative ratio scale***

 [b] Convert 1cm to represent 500metres to representative scale. [2 marks]

***Convert 500 metres to centimetres***

***1m=100cm***

***500m x100cm***

***1m***

***Representative fraction scale becomes 1/50,000***

 [c] Give five common marginal information on Topographical Maps. [5 marks]

* ***Map name Latitudes and Longitudes***
* ***Sheet title Grid Reference system***
* ***Map identification Scale***
* ***Administrative boundaries Compass direction***
* ***Index to adjoining sheet***

[7] [a] [i] What are Igneous Rocks? [2 marks]

***These are Rocks formed when molten magma in the interior of the Earth’s crust or lava on the surface cools and solidifies.***

[ii] Give two examples of Volcanic Rocks. [2 marks]

* ***Obsidian Trachyte***
* ***Rhyolite Basalt***
* ***Phonolite Scoria***
* ***Tuff Andesite***
* ***Pumice***

 [b] State three characteristics of Sedimentary Rocks. [3 marks]

* ***Sedimentary rocks are non-crystalline.***
* ***Some sedimentary rocks have fossils.***
* ***Most sedimentary rocks are clastic [made of fragments].***
* ***Some sedimentary rocks are chemical precipitates.***
* ***Sedimentary rocks have layers[are stratified]***

 [c] State five contributions of Rocks to the economy of Kenya. [5 mark]

* ***Some rocks form unique sceneries that attract tourists.***
* ***Some rocks such as limestone provides raw materials for the cement industry.***
* ***Some rocks provide materials for building and construction.***
* ***Some rocks contain valuable minerals that are extracted and sold.***
* ***Some rocks such as soapstone are carved and sold thus bringing income.***
* ***When most volcanic rocks weather, they form rich soils that support agriculture.***
* ***Some salts from rocks are used for domestic and industrial purposes.***
* ***When porous and pervious rocks are underlain by impermeable rocks, they form aquifers that hold and store water in the ground.***

 [d] List two types of Rock metamorphism. [2 marks]

* ***Thermal/Contact Metamorphism***
* ***Dynamic Metamorphism***
* ***Regional Metamorphism***

[8] [a] What is Mining? [2 marks]

***Refers to the process of extraction of valuable minerals and Fossil fuels on or from below the surface of the Earth’s crust.***

 [b] Give four ways in which minerals occur. [4 marks]

* ***Veins and lodes***
* ***Seams and Beds***
* ***Alluvial deposits***
* ***Weathered products***
* ***As evaporites***

[c] The diagram below shows a method of mining.

 

[i] Name the parts labelled E, F and G. [3 marks]

* + - ***E - Main shaft***
		- ***F - Horizontal tunnel***
		- ***G – Lift/cage***

 [ii] Explain three benefits of Gold mining to the economy of South Africa.(6 marks)

* ***Exported Gold earns South Africa foreign exchange which improves her balance of trade.***
* ***The Gold mining industry is a major source of employment to many South Africans who earn income.***
* ***Revenues obtained from the Gold mining industry has enabled South Africa to develop efficient roads, railways, power, residential and other social amenities.***
* ***Development and expansion of towns and cities especially in the Rand region such as Johannesburg.***
* ***Co-existence of Gold together with uranium has made South Africa to be a leading producer of Uranium and also Nuclear energy.***
* ***Gold mining has led to the related industries such as chemical and jewelry making.***
* ***Gold is used as unit of exchange for paying South Africa’s foreign debts.***

(d) Give two factors that influence the formation of minerals. (2 marks)

* ***Vulcanicity***
* ***Metamorphism***
* ***Weathering***
* ***Erosion***
* ***Sedimentation***
* ***Evaporation***