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

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

**ANSWER ALL THE QUESTIONS**. **TIME: 1HOUR 45 MINUTES**

1. [a] What is Physical Geography? [2 marks]

***This is the branch of Geography that deals with the natural environment of human kind.***

 [b] State three importance of studying Geography. [3 marks]

* ***As a career subject, Geography provides a firm foundations for advanced careers such as aviation, engineering surveying.***
* ***Geography gives learners knowledge on available Natural resources and how to utilize them sustainably.***
* ***Learners understand landforms and land forming processes and how they influence human activities.***
* ***Knowledge on weather and climate enables a learner to understand why people live in certain regions and grow certain crops.***
* ***Geography creates international awareness by studying other regions of the world.***
* ***Learners are able to appreciate Nature through fieldwork and domestic tourism.***

2. [a] State three characteristics of the core. [3 marks]

* ***It is made of two parts: Inner core and outer core.***
* ***The outer core exists in a molten state/liquid.***
* ***The inner core exists in a solid state.***
* ***Both the inner core and the outer core are made of Iron and Nickel.***
* ***Temperature of the outer core is about 30000C.***

[b] Name two external spheres that surround the earth. [2 marks]

* ***Hydrosphere***
* ***Atmosphere***

 [c] State four differences between latitudes and longitudes. [4 marks]

* ***On a Globe, Latitudes run from East to West while Longitudes run from North to South.***
* ***Latitudes show how far north or South a place is from the equator while Longitudes show how far east or West a place is from the Prime Meridian.***
* ***Latitudes are parallel whereas Longitudes meet at the poles.***
* ***The distance between two Latitudes is uniform throughout whereas the distance between two longitudes is widest at the equator and decreases pole wards.***
* ***The equator is the only Latitude that is a Great circle while all longitudes and their opposites form a great circle.***

 [d] Describe how Orographic rainfall is formed. [5 marks]

* ***A large water body is heated by insolation causing evaporation to occur.***
* ***Warm moist air from the water body is driven by wind towards land.***
* ***The moist air is forced to rise on a mountain side.***
* ***As the air rises, it expands leading to cooling.***
* ***Further cooling of the moisture leads to condensation at certain altitudes.***
* ***Condensation forms water droplets which merge to form cloud.***
* ***When the clouds are heavy, they release the water as relief rainfall/Orographic on the windward side of the mountain.***

[3] [a] State five reasons why it is important to conduct a reconnaissance. (5 marks)

* ***One is able to contact and resource person and guides.***
* ***One is able to identify suitable methods of data collection and recording.***
* ***Assembling relevant tools, equipment materials and documents for use.***
* ***Preparation for a working schedule.***
* ***Conducting a reconnaissance of the area of study.***
* ***Statement of objectives and formulation of hypothesis.***

 [b] Give five methods of recording data in field work. (5 marks)

* ***Tape recording***
* ***Filling in the open-ended questionnaires***
* ***Tallying during counting of phenomena observed***
* ***Labelling of samples collected***
* ***Drawing sketches /Field sketching***
* ***Photographing using cameras to take photographs or videos***

4. [a] State four characteristics of volcanic rocks. [4 marks]

* ***Are formed on the Earth surface.***
* ***Are formed due to cooling and solidification of the lava.***
* ***The rate of cooling of the lava is fast/rapid.***
* ***The Rocks have very small crystals (obsidian has no crystals)***
* ***The Rocks have a fine texture.***

 [b] Explain four economic importance of rocks. [8 marks]

* ***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***

 5. [a] Explain how the following factors influence mining:

 [1] Size of the mineral deposit [2 marks]

***The size of the mineral deposit must be big/commercially viable to justify the high cost of mining it. Very small mineral deposits are uneconomical to mine thus may remain unexploited..***

 [2] Level of Technology [2 marks]

***Advanced technology is required for specialized mining activities. Third world countries with low levels of technological developments are forced to rely on developed countries for advanced machinery and equipment.***

 [b] Explain three contribution of diamond mining to the economy of South Africa. [6 marks]

* ***Provision of employment opportunities to thousands of workers who earn income thus raising their living standards.***
* ***Exported Gem Diamonds earn South Africa large amounts of foreign exchange which is useful in foreign trade.***
* ***Diamond mining has led to the growth of urban centers such as Kimberly and Pretoria.***
* ***Revenues earned from diamond mines has enabled South Africa to develop efficient highways, PowerStation’s and sporting activities***

6. [a] [i] List two types of Earth Movements. [2 marks]

* ***Horizontal Earth Movements***
* ***Vertical Earth Movements***

 [ii] Explain four negative effects of volcanic features. (8 marks)

* ***Powerful pyroclastic eruptions and lava flows destroy property such as buildings and farmlands leading to great losses.***
* ***Volcanic eruptions can result in loss of many lives due to hot ash, lava and poisonous gases released.***
* ***Volcanic mountains create a rain shadow effect thus resulting in aridity on the leeward slopes of the mountains.***
* ***Volcanic mountains and lava plateaus form barriers that hinder easy construction of roads, railways and pipelines.***
* ***Pyroclastic eruptions emit large quantities of ash and gases in the atmosphere that which interfere with weather patterns and also hinders air transport.***
* ***Rugged nature of volcanic landscapes may discourage some economic activities such as settlement and agriculture.***
* ***Regions with recent lava flows have poorly developed infertile soils that are unsuitable for crop farming.***

 [iii] List three features formed due to faulting. [3 marks]

* ***Fault scarps/Escarpments***
* ***Fault steps***
* ***Fault blocks (Block mountains and Horsts)***
* ***Tilt blocks***
* ***Rift valleys***

 [c] Classify volcanoes into three types based on level of volcanic activity. [3marks]

* ***Active Volcanoes***
* ***Dormant Volcanoes***
* ***Extinct Volcanoes***

 [d] [i] Define the term Earthquake. [2 marks]

***An Earthquake is a sudden and rapid movement of the Earth’s crust.***

 [ii] State four natural causes of Earthquakes. [4 marks]

* ***Movement of Tectonic plates towards each other or past each other.***
* ***Violent Volcanic eruptions and movement of magma in the crust.***
* ***Sinking of crustal rocks due to gravitative pressure.***
* ***Vertical Earth Movements during Isostatic Adjustments.***
* ***Energy Release in the Mantle.***

7. [a] The World map below shows some vegetation zones.



 [a] Name the Grasslands marked X, Y and Z. [3 marks]

* ***X –Downs***
* ***Y -Pampas***
* ***Z –Savannah.***

 [b] Describe the characteristics of the Vegetation zone marked W. [6 marks]

* ***The vegetation zone marked W is called coniferous forest.***
* ***Most tree species are ever green.***
* ***The trees are tall and have straight trunks which are flexible.***
* ***Tree crowns are cone shaped.***
* ***Trees have wide shallow roots to utilize moisture on the top soil.***
* ***Tree species are softwoods such as pines fir spruce and larch.***
* ***Trees have needle like leaves to reduce water loss.***
* ***Trees have thick bark with a lot of resin to prevent them from frost.***
* ***A large portion of the tree consists of the trunk/stem with very few and short branches.***
* ***The forest has very little or no undergrowth***

 [c] State four Human causes of Aridity and Desertification. [4 marks]

* ***Clearing large tracts of Vegetation causes soil erosion which interferes with the Hydrological cycle.***
* ***Industrialization increase the levels of carbon (IV) oxide and Chlorofluorocarbons leading to Global Warming and depletion of the Ozone layer.***
* ***Poor Agricultural practices such as Monoculture and over cultivation which leads to soil degradation.***
* ***Poor Irrigation practices lead to waterlogging of soil thus altering plant life.***

8. [a] Define the term forestry. [2 marks]

* ***Forestry is the practice of managing and using forests, trees and their associated resources for human benefits.***

***OR***

* ***Forestry is the science of developing and managing forests including cultivating them.***

 [b] Give three primary forest products. [3 marks]

* ***Timber.***
* ***Poles.***
* ***Firewood.***
* ***Nuts.***
* ***Honey.***
* ***Resin***

 [c] State five problems facing Forestry in Kenya. [5 marks]

* ***Encroachment into forest land for farmland and settlement.***
* ***Illegal cutting down of trees wood fuel has resulted in reduction of forest cover.***
* ***Occurrence of forest fires which destroy large sections of forests.***
* ***Prolonged drought at times leads to the drying of some trees.***
* ***Previous excisions by former governments which led to reduction in forest cover.***
* ***Overgrazing by large herds of wild and domestic animals destroys young trees.***
* ***Pests such as caterpillars and aphids which have destroyed vital tree species***

 [d] State three measures that may be taken to conserve trees in schools. [3 marks]

* ***Planting of trees in strategic zones within the compound.***
* ***Investing in alternative sources of energy such as biogas other than wood fuel.***
* ***Organizing for the recycling of waste papers in schools***
* ***Use of improved jikos in school kitchens to minimize on cutting down of trees to supply wood fuel.***