

**KAKAMEGA CENTRAL SUB COUNTY JOINT EVALUATION EXAM
GEOGRAPHY PAPER 1
MARKING SCHEME.**

SECTION A

1. EFFECTS

- (a) Centripetal force pulls the north pole and the south pole towards each other thus flattening areas at the poles (1mk)
- (b) Centrifugal force results in the bulging of the earth at the equator due to variation in rotation towards the equator (1mk)
- (c) Force of gravity attracts objects on the earth's surface and materials within the earth towards its centre hence making the earth to have a spherical shape (1mk)

2. (a) components

- gases e.g. oxygen and carbon Dioxide
- solid particles e.g. dust
- water vapour

b) Temperature inversion

- a condition in the atmosphere where the upper layer of air is warmer than the lower layer (7mks)

3. Components

- Air
- Organic matter
- Mineral matter
- Living organisms 3 x 1 (3mks)

b) Importance

- water dissolves minerals in the soil to form solutions which can be easily absorbed by plants.
 - Water facilitates the transfer of mineral salts in their soil from one horizon to another (leaching)
 - Water helps to maintain the turgidity of the cells in plants thus keeping the sets strong
 - Soil water supplies water for the living organisms in the soil. (4mks)
4. a) Hydrological cycle
- is the continuous interchange of moisture between the atmosphere and the earth's surface. (2mks)

b) Benefits

- continuous flow of moisture helps to control aridity and desertification
- evaporation results in formation of rain
- surface run off into river ensures constant supply of fresh water in lakes / seas
- hydrological cycle helps to control some weather elements in the atmosphere which makes it conducive for human survival and crop growth.
- Hydrological cycle helps in regulating the amount of heat lost from the earth's surface. (3mks)

c) Sources

- rain water
- rivers
- melt water
- underground water (2mks)

5. types

- fringing reef
- barrier reef
- atolls (3mks)

6. Map Work

- (i) 9374 (2mks)
- (ii) $346^{\circ} \pm 1$ (2mks)
- (iii) 10km, 900m (1,900m) (2mks)

b) i) scattered trees

- scrub
- woodland

(2mks)

ii) – Education activities / Learning evidence; schools

- Treatment / health service evidence healthcare
- Religion-church
-

(4mks)

iii) outcrop rock

rivers / streams

Hills

Saddle

2x1 (2mks)

C.

- the highly areas around Kitui Hills, Usiani, Kyulu, Kamutotyia, Kiyamuthia, Nzia, Muazoa etc have few or no settlements because the area is steep/ rugged which make construction costly / difficult.
- There are many settlements in the North Western part and South Eastern part of the area because the land is gently slopping which makes constructions easy.
- There is more settlement around N. Western and S. Eastern area because it has dense road network for easy movement.
- There are clusters of settlement where there are market centres because there are social amenities and economic activities that attract settlements.
- There is no settlement in the area covered by Mutito forest.
- Generally there are few settlements due to low rainfall which discourages agriculture.

(6mks)

d)

- Area is mainly drained by rivers
- The rivers are well distributed (all over) in the area / many rivers
- most rivers are permanent
- River ikoo and its tributaries form dendritic pattern
- Most rivers like Ngoo, Kagone, Munyuni, Ikoo flows westwards
- Most rivers meander
- Some rivers / streams disappear underground / end abruptly
- Rivers/ streams originate from Hills and form radial drainage patterns
- The area has dams/water holes

7. FACTORS

Nature of the slope

Volume of water

Nature and amount of the load.

Nature of the underlying rock

b) Suspension

light fine and insoluble materials are lifted from the river bed and transported downstream while floating / suspended in water.

Solution

- Soluble materials are dissolved and carried in solution form by a rivers water.

Saltation / Hydraulic lift

-involves transportation of medium sized material downstream by water in form of series of short jumps / hops along the river.

Traction

- Involve rolling and dragging / pulling / shiding of large and heavy materials along the river bed by the source of water. (6mks)

Braided channels

- Forms when river is carrying heavy load

- The speed of the river / energy declines due to gentle gradient
- This leads to deposition of heavy material on the river bed to form ridges / shoals
- Shoals grow into alluvial highlands
- The river sub –divides into channels distributances (called braided channel
- This is referred to as braided channels (6mks)

d) **Preparations**

- Identify the area / place to conduct the study
- Seek permission from the administration
- Conduct reconnaissance visit
- Collect relevant tools / equipments
- Divide in groups (4mks)

ii) **Methods**

- Administering questionnaire
- Interviewing
- Observation
- Taking measurement
- Extracting from secondary sources.

8. a) **Differences**

- plutonic rocks are formed from magma that cools and solidifies beneath the surface of the earth while volcanic rocks are formed from the cooling and solidification of lava on the earths surface (7mks)

ii) **Sedimentary Rocks**

- Are formed from pre-existing igneous. Metamorphic rocks, through the process of weathering/ erosion
- The sediments are deposited in layers / strata
- Over a period of time they are consolidated into hard rock.

iii) **Characteristics**

- Made up of layers known as strata / bedding planes
- Are either mechanically / organically chemically formed
- Have joints that meet the bedding planes at right angles (3mks)

b)i) **Processes**

- Dynamic / Kinetic metamorphism
- Occurs when pre-existing rocks are subjected to intense pressure

Contact / Thermal

- Occurs when pre-existing rocks are subjected to intense heat
- Thermal – dynamic metamorphism
- It occurs when pre- existing rocks are subjected to both heat and pressure

ii) Sand stone – quartzite (1mk)

Limestone – marble (1mk)

Granite – gneiss (1mk)

Basalt - granulite (1mk)

Uses

- Some rocks provide raw materials for industries eg. Trona
- Some rocks are used for carvings that are sold to generate income carvings
- Some rocks like coal are source of energy in industries
- Some rocks contain minerals used in manufacturing of chemicals eg sulphur (5mks)

9) i) **Forces**

- compressional
- Tensional
- Tear and Shear 3 x 1 (3mks)

ii) **Features**

- Escarpment / fault scarp
- Fault steps
- Tilt block
- Rift valley (3mks)

Horst mountain

- Layers of crystal rocks are subjected to tensional forces
- This results in development of parallel normal fault
- Continued tensional forces lead to subsidence of the side blocks along the faults
- As a result the side blocks leave the middle block standing as a horst mountain.

c) **Pre-visit**

- Enables them do draw up study objectives / hypothesis
- To familiarise with the study area familiarise
- Enable them prepare a work schedule / plan equipments
- To identify suitable methods of data collection
- To enable them prepare financially / estimate the cost of study
- Enable them to prepare for the problem likely to be encountered (2x1 = 2mks)

iii) Reasons

- To identify type of data to be collected
- Decide on the suitability of objectives hypothesis
- Decide on methods of data recording
- Decide on the tools / equipments required for the study
- To prepare for the questionnaire

Effects

- Mountains formed receive rainfall on their windward sides hence sources of rivers which provide water for domestic use / irrigation generation of HEP.
- Rainfall on the windward sides of mountain encourage growth of forests which provide timber for building and construction
- Faulting results in formation of beautiful scenes which attracts tourists
- Cracks / faults formed on the earths surface during faulting are passages for hot water from the ground eg hot springs and geysers, such unique features form sites for tourists attraction
- Hot steam from hot springs is tapped and used for geothermal power generation
- Depressions formed by faulting form lakes when water accumulate in them.
- These lakes form suitable fishing grounds. (8mks)

10 i) Denudation

- refers to the forces that shape / modify existing land forms by internal land forming processes/ destination and removal of rocks on the earths crust which are exposed to the earths surface (2mks)

ii) Factors

- nature of the rock
- climate
- plants
- human activities / animals
- time
- shape

b) Granular Disintegration

- Refers to the forces that shape / modify existing land forms by internal land forming processes / destruction and removal of rocks on the earths crust which are exposed to the earths surface (2mks)

ii) Factors

- nature of the rock
- Climate

- Plants
- Human Activists / Animals
- Time
- Shape

b) Granular Disintegration

- Occurs in areas with large diurnal range of temperature
- It affects heterogeneous rocks
- At day time when temperatures are high different minerals in the rock are heated and expand at different rates.
- At night the minerals lose heat and contract at different rates.
- This expansion and contraction of the minerals in the rock at different rates causes stress within it.
- If this continues over a long time it eventually causes the individual grains to break off from the rock into small disintegration (5mks)

ii) Factors

- Collapse of a dam
- An earths tremor
- Felling of trees from hill side
- Burrowing of animals
- Of animals
- Quarrying
- Ploughing up / down a slope 3 mks

d) Effects

- Effects to formation of derelict land and this spoils the beauty of the land.
- Facilitate the loosening of the top soil thus increasing of the top soil thus increasing soil erosion.
- Materials from landslide may create a barrier across a river valley leading to formation of a lake
- Landslides may cause rivers to change their course / direction hence reducing the volume of water down stream
- Cause damage to property when materials cover structures / farms /homes.
- Lead to loss of life when people/ animals are buried
- Create sceneries that attract tourist.

**KAKAMEG CENTRAL SUB – COUNTY
JOINT EVALUATION EXAM – 2015
GEOGRAPHY PAPER 2 – MARKING SCHEME
SECTION A**

1. It provides about the immediate / wider environment
 - It makes us to understand the earth on which we live.
 - It creates awareness about the country/ the rest of the world
 - It promotes international understanding
 - It promotes awareness on the subsainable useof resources
 - It promotes development of skills / critical thinking
 - It prepares one of career opportunities any 1x3=3mks
2. a) River marked R – Marubaru 2mks
 - irrigation scheme marked P – Thiba
- b) Two land surfaces reclaimed in Netherlands are
 - North Eastern polder
 - Eastern Fleroland
 - Markewaas
 - Weringermeet any 2x 1 =2mks
3. a) Two nets used in seining in Fishing method are
 - Haul seine
 - Purse seine
- b) Give three reasons why the Kenyan Coastal water is not rich in fish (3mks)
 - The area of shallow water off the East African coast is very small limiting fish
 - Inadequate se inlets to provide local sheltered areas for fish breeding
 - Narrow continental shelf limits the growth of plankton for fish
4. a) Two types of internal trade
 - retail trade
 - wholesale trade 2mks
- b) Poor transport / poor roads that slows / delays movement of goods / services
 - difference in currency makes transactions difficult production of similar / duplication of goods limits trade
 - different levels of industrial development/ economic development creates imbalance in trade
 - movement barriers limit free movement of people / goods/ services
 - different political ideologies
 - political instability / insecurity / civil wars (any 3 x 1 = 3mks)
5. Environmental hazards associated with climatic conditions
 - Lightening
 - Floods
 - Drought/ desertification
 - Landslides
 - Hat waves
 - Windstorms 3mks
- b) Problems caused by windstorms in Kenya
 - Windstorms destroy trees/crops
 - Blow off roofs of houses rendering people homeless
 - Disrupt transport / communication lines interrupting movement
 - Spread bush fires causing destruction
 - They cause strong sea storms causing costal floods
 - Accelerate erosion carrying away top fertile soil 5mks

SECTION B

Total of dairy animals in the East of Rift Valley

6. a) Central	855000		
- Easter	344000		
- Nairobi	17000	+	
- Coast	73000		
	<hr/>		
	12889000	Animals	2mks

ii) The distribution density of dairy animals in each province

- Rift Valley - $\frac{1652000}{182539} = 9.050 = 9 \text{ Animals / Km}^2 \text{ 1/2}$
- Central - $\frac{855000}{13220} = 64.67 = 65 \text{ Animals / Km}^2 \text{ 1/2}$
- Eastern - $\frac{344000}{153473} = 2.24 = 2 \text{ Animals / Km}^2 \text{ 1/2}$
- Nairobi - $\frac{17000}{696} = 24.42 = 24 \text{ Animals / Km}^2 \text{ 1/2}$
- Coast - $\frac{73000}{82816} = 0.88 = 1 \text{ Animals / Km}^2 \text{ 1/2}$
- Nyanza - $\frac{21600}{12574} = 17.21 = 17 \text{ Animals / Km}^2 \text{ 1/2}$
- Rift Valley - $\frac{152000}{8264} = 18.39 = 18 \text{ Animals / Km}^2 \text{ 1/2}$

ii) Three factors which favour beef farming in the Nyika Plateau

- Presence of watering points/ rivers/ swamps
- There are large tracks of gentle/ undulating land with natural grass
- The local people kept livestock as their occupation
- There are ranching schemes which control grazing / spreading of disease / pest

c) Explain the three reasons why horticultural farming is encouraged in Kenya.

- To earn foreign exchange which help to improve the economy
- To create employment which enables people earn income hence improve their living standards/ reduces unemployment
- To provide raw materials which support the development of related industries
- To enable farmers with small pieces of land earn high income to improve standards of living
- To improve food supply in the country thereby ensuring food security
- To diversify agricultural production and reduce overreliance on few cash crops/ increase earnings

(Any 3x2 = 6mks)

CHROPLETH MAP SHOWING THE DISTRIBUTION OF DAIRY ANIMALS IN KENYA

7. a) what is energy

it is the power required to carry out an activity/ run a machine in various industries (2mks)

ii) three non- renewable sources of energy other than petroleum

- coal
- natural gas
- uranium

b) 3 factors which favoured the location of Owen falls Dam in Uganda.

- A large and constant volume of water by R. Nile which flows out of Lake Victoria
- A natural waterfall / Owen falls that supply the force to rotate the turbines
- A constant supply of water from Lake Victoria
- Availability of a market for electricity in the surrounding area for domestic / industrial purpose.

c) State three problems associated with the development of energy in Kenya.

- Inadequate capital for HELP development that requires huge initial investments
- Fluctuating river regime that leads to low water levels thus power rationing
- Siltation due to soil erosion reduces the capacity of the reservoir/ desilting is expensive
- Displacement of people to create room for a dam reservoir leading to overcrowding in the new area/ increasing pressure on available resources. 3mks

ii) Give any four causes of energy crisis in the world

- There is a high demand for oil
- There are embargoes / controls oil production by the oil producing countries

- There is de-regulation of oil prices by the suppliers
- There is unequal natural pattern of crude oil occurrence
- There is political instability/ wars in some of the oil producing countries

d) power stations marked 4mks

K- Akosombo

L- Inga

M- Kariba

N- Aswan

8. a) what is eco-tourism

It is the development and management of tourism while conserving the environment/ it is enjoying what nature provides while protecting it (2mks)

b) i) give four tourist attractions found at the coast if Kenya.

- Marine parks
- Historical sites
- Sandy beaches (coral reefs) coastal scenery
- Sunny / warm climate
- Traditional culture
- Water sports / beach sports
- Wildlife

any 4 x 1 = 4mks

ii) State five problems associated with tourism in Kenya

- Tourism has led to increase indrug abuse
- A number of youths especially at the coast have dropped out of school to become tour guides/ beach boys/ sex workers / curio sellers
- Tourism has led to the spread of diseases such as S.T.Is
- Tourism has led to population of environment / national parks/ game reserves
- Tourism has led to increase in crime/ insecurity
- Tourism has encouraged poaching/ illegal collectionof marine resources
- Tourism has led to international terrorism / piracy erosion of some social values / culture

any 5x1 = 5mks

c) State four ways in which game reserves are of benefit to the communities living near them.

- The game reserves offer employment opportunities to the communities
- Management of the game reserves provide social amenities to the communities
- The communities are allowed to graze their animals in the game reserves
- Access roads to the game resrvs benefit the local authorities is used to provide services to the communities
- Members of the community are given meat when animals have been killed
- Educational instructions located neat the game reserves have easy access for the educational tours
- Increased market for local products

d) Explain the differences between tourism in Kenya and Switzerland

KENYA	SWITZERLAND
<ul style="list-style-type: none"> - Tropical climate- warm and sunny encouraging sun-bathing - Varied and beautiful coastal scenery/ Rift valley volcanic mountains - Reports of insecurity scare away potential tourists - Poorly maintained transport network making it difficult to access some tourist sites - Few international languages hence limited communication - Training of personal in tourism industry is advanced to provide higher quality services - Accessibility to financial facilities services (use of credit cards) by the tourist in Kenya is limited to large urban areas. - Low purchasing power limits their ability 	<ul style="list-style-type: none"> - Temperature climate – cold witness encourage winter sports - Varied scenery – snow lapped glaciated landscape - Centrally located in Europe more tourists - Reports of peaceful atmosphere in Switzerland more tourists - Transport network s efficient - Diversity of languages spoken in Switzerland possible for tourist communicates with ease. - Training of personnel in tourism industry is more advanced to provide higher quality services - Similar facilities and services are widespread promoting easy transactions by tourists

<ul style="list-style-type: none"> - to travel as tourists - Coastal beaches - Wild animals are found in their natural habitats 	<ul style="list-style-type: none"> - High purchasing power enables people to travel as tourists - Has lakes - Found in ones <p style="text-align: right;">any 5x2 = 10mks</p>
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9. a) Name three agricultural non- food processing industries in Kenya

- Tobacco processing
 - Footwear making
 - Leather tanning
 - Bee wax processing
 - Sisal processing
 - Pyrethrum processing
- ay 3 x 1 = 3mks

ii) State four ways in which Kenya has benefited from the motor-vehicle industry

- Kenya saves foreign exchange
- Kenya earns foreign exchange through motor vehicle export
- The industry has promoted trade links with the neighboring countries as Kenya sells motor vehicles to them
- The industry has attracted foreign investors
- It has led to the development of skills among Kenyans
- Kenya earns revenue from taxes / licenses
- The industry has promoted transport sector by awaiting buses/ lorries/ vans/ cars (4mks)

b) Explain three problems arising from industrialization in Kenya

- Industrialization has led to rural-urban migration which has increased the urban population leading to congestion / shortage of houses / increase in crime
- Some industries emit toxic gases which are harmful to people wildlife
- Industrial effluent pollutes water sources making the water unfit for human / animal use
- Fumes from chemical industries corrode metallic roofs and buildings hence destroying them.
- Concentration of infrastructure and social services in the industrial centre's has caused an imbalance in economic development
- Careless dispatch / dumping of industrial waste has led to the degradation of land
- Some industries have led to the displacement of people thus disrupting their social /economic life.

c) explain three factors which influenced the location of iron and steel industry in the right region of Germany in the 19th Century.

- Availability of coal/ iron ore / limestone from the Rhine Valley provided raw materials needed in the industry
- River Rhine / Ruhr/ Lippe/ Emischer/ its tributaries the industry / industrial use
- The region is served by navigable rivers / Rhine/ Ruhr/ canals/ lippe/ Dortmund –EMS which
- Coal / from the Ruhr region/ imported petroleum provide power required in the industry
- The local population had acquired skills on iron working / availability of local skilled labour and this formed the foundation of iron and steel industry.
- Presence of rich companies/ Krupp group/ Ruhr Kohle families / which provided capital for the development of the industry.
- The dense / affluent population in Europe/ Germany provided ready market for iron and steel

d) You intend to carry out a field study of a furniture making industry in the local market centers

- State two reasons why it would be necessary for you to visit the area of study in advance
- To be able to prepare appropriate data collection
- Preparation of work schedule
- To find out the possible problems likely to be experienced during the field study
- To seek permission for the visit
- To be able to prepare a route map
- To determine appropriate tools for the study
- To determine the likely losses to be encountered during the study

ii) State two items you would include in the schedule

- Time for departure
- Time to spend in the study
- Time for lunch
- Time to end the study
- Time for lunch

- Time to end the study

ii) Give two advantages of studying about furniture – making through field work

It enables one to get first hand information

It makes learning interesting / it breaks the classrooms monotony.

It makes learning real.

It enable one to share information.

It enable one to retain information learned.

It enabled one to apply skills learnt/acquire skills

10. (a) Differentiate between internal and regional trade.

Internal trade is the buying and selling of goods and services within all country's borders while regional trade is trade between countries that are found within the same geographical region

ii) list three major exports from Kenya to the European Union (E.U)

- Pyrethrum extract
 - Coffee
 - Tea
 - Fluorspar
 - Horticulture products / fruits / flowers/ vegetables
 - Soda ash
- 3 x 1 = 3mks

b) Give four reasons why the southern African Development cooperation (SADC) was formed

- To promote regional integration among member countries
- To establish a common market for member states / wider market
- To liberate trade within the region / lower tariffs among member states
- To strengthen the bargaining power in international trade

9. to foster peace, stability and democracy among member states

- To eradicate poverty in the region
- To encourage free movement of labour

c) Explain four problems facing trade in Kenya

- Cheap imported goods create unfair competition for some local products leading to reduction in some local products leading to reduction in the production of such goods closure of some industries
- Exports are mainly raw agricultural products which are lowly priced hence earning little revenue for the country
- The fluctuation of prices in the world market varies the earnings from exported goods making it difficult to plane
- Unexpected trade restrictions are sometimes imposed on Kenya's exports thus lowering production of such commodities causing loses to exporters.
- Poor / inadequate transport and communication facilities in some areas delay delivery to markets / delivery of raw materials to the industries/ spoilage of products limits trade
- Slow clearance of goods at the port of Mombasa delays delivery of some goods increases the cost of goods
- Some traders smuggle goods out of neighbouring countries/ import goods thorough improper channels thereby denying the government revenue from taxes
- Inadequate capital for some traders make the unable to expand their trading activities
- The high fuel prices increase production / transport costs leading to increased prices of goods low demand for goods
- Insecurity in the country discourages investors / traders incur great loses.

d) Explain how the future of international trade in Kenya can be improved

- Kenya is exploring new markets in the far East countries to avoid over reliance on the European Market
- Kenya has signed trade agreements with various countries in Africa and in America which help improve trade
- Kenya's trade with African countries is likely to improve through the membership in trade blocs such as COMESA AND EAC
- Some Kenyan entrepreneurs are setting up branches of their industries in the neighbouring countries in order to expand trading activities
- Implementation of vision 2030 will lead to increase
- Kenya is undertaking partial processing of some of the agricultural products before export in order to attract a wider market for her products
- Kenya's should aggressively advertise her products to attract more buyers
- Improve her international and communication links for efficient trans actions