

END TERM 2 2021 FORM ONE EXAM

GEOGRAPHY

Marking scheme

1. What is environment? (2marks)
 - External conditions surrounding an organism
 - Surrounding influences which composes all the external factors influencing life and activities of people, plants and animals
2. Name three human features (3marks)
 - Transport line e.g roads
 - Settlement structures e.g houses
 - Drainage e.g boreholes, water dams
 - Industries e.g coffee mills
 - Farms e.g tea estates
3. Name two greek words from which term geography originate (2marks)
 - Geo-Earth
 - Graphia-To write, draw or describe
4. If the local time in Nairobi on longitude 37°E is 10pm .what will be the time at Buchanan Liberia on longitude 10°W (4marks)

$1^{\circ} = 4\text{mins}$ $47^{\circ} \times 4 = 188\text{mins}$ $188 = 3\text{hrs } 8\text{mins}$	Buchanan is 3:08 behind Nairobi $10:00 - 3:08 = 6:52 \text{ AM}$
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5. a) What is an eclipse (2marks)

Phenomenon occurring when the rays of the sun are blocked from reaching the earth or the moon.
- b) Differentiate between solar and lunar eclipse (2marks)

During solar eclipse the moon comes between the earth and the sun while during the lunar eclipse the earth comes between the moon and the sun.
6. Give three reasons as to why the interior of the earth is hot (3marks)
 - Radio active decay causing most of the heating
 - Great pressure as a result of overlying crustal materials
 - Original heat resulting from slow cooling of the materials which were pulled off by the sun.
7. a) Give two dates in a year during which the number of hours of darkness is equal in both the north and south poles (2marks)

21st March and 23rd September

b) State four factors that support life on planet earth (4marks)

- Presence of water that support life.
- Presence of atmosphere with adequate Oxygen and carbon iv oxide levels that support life of animals and plants respectively.
- Enough heat and light due to earths favourable distance from the sun.
- Proportional garavitational force that allow objects to be upright on the earth's surface.

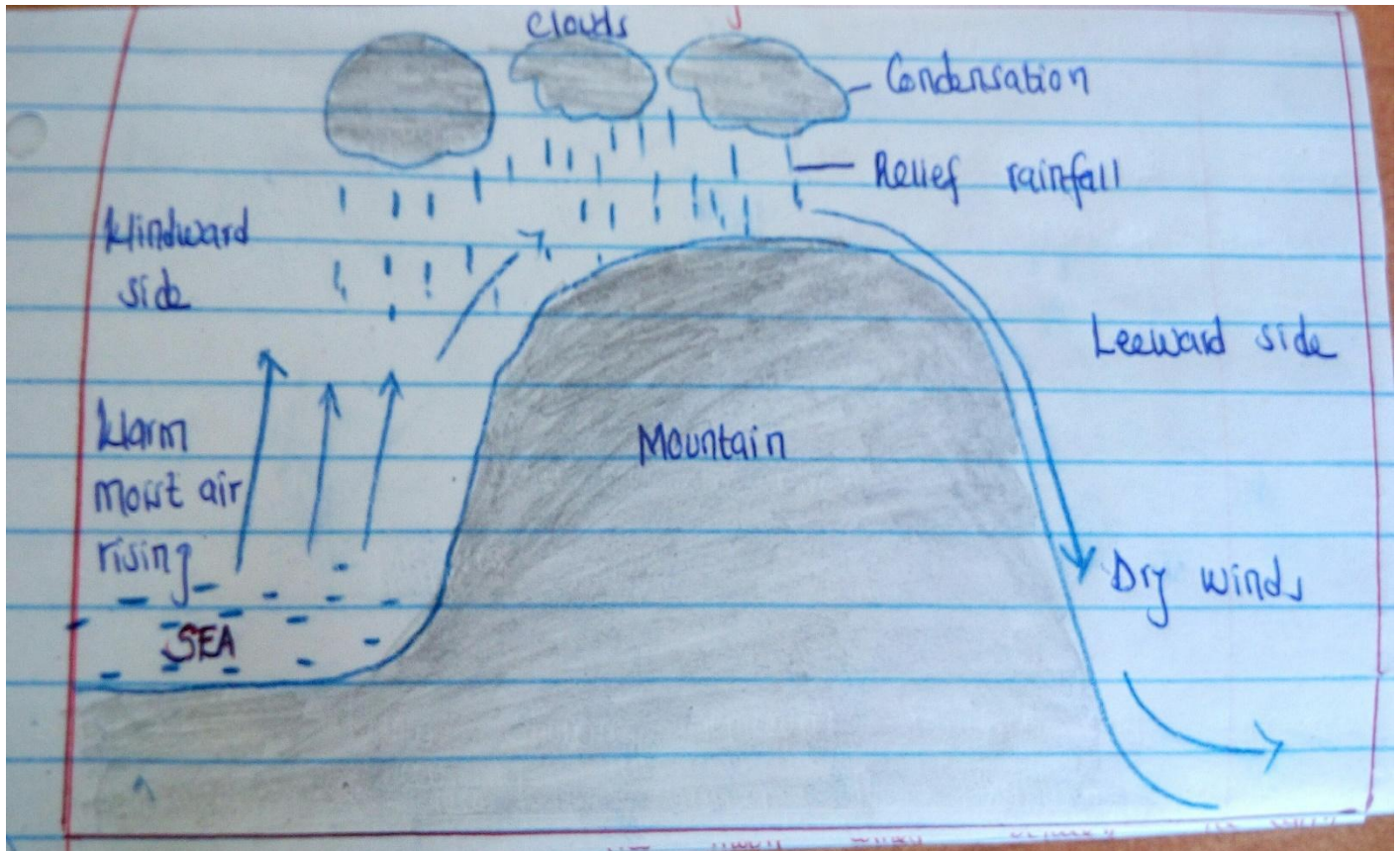
8. a)State three factors that influence weather (3marks)

- Temperature
- Humidity
- Precipitation
- Condensation
- Atmospheric pressure
- Clouds
- Air masses

b)The table below shown below represent rainfall and temperature of station X.Use it answer the following questions

Months	J	F	M	A	M	J	J	A	S	O	N	D
Temp in c	30	31	31	31	30	29	28	28	29	29	29	30
Rainfall in mm	250	250	325	300	213	25	25	25	100	275	380	200

- i. Calculate the mean annual range of temperature (2marks)
 $31-28=3^{\circ}\text{c}$
- ii. Calculate the mean annual rainfall for station X (2marks)
 $2368\div 12=197/197.33\text{mm}$
- iii. With an aid of a well labeled diagram describe how relief rainfall is formed (6marks)
Rain experienced on the windward slopes of mountains or hills,formed when moist air is forced to rise over a mountain or hill.
Air cools due to decreased temperature and decreased pressure causing it to expand.
Moisture condenses forming tiny water droplets (clouds).
The tiny water droplets in clouds merge and become too heavy to be suspended in air and fall as rain.
Rainfall is received on the windward side while the lee-ward side remains dry.



9. a) Write down two types of questionnaires (2marks)

- **Closed-ended (Rigid).**
- **Open-ended.**

b) What factors must be considered in selecting methods of data collection (3marks)

- **The method should be inexpensive.**
- **Should be time saving.**
- **Should give accurate data.**
- **Most applicable method.**

c) State four advantages of using questionnaires in collecting of statistical data (4marks)

- **It's a source of first hand information.**
- **The researcher can ask for clarification from respondent.**
- **Similar questions are used for all respondents and comparison can easily be made.**
- **When posted rigid questionnaires reduce fieldwork expenses.**

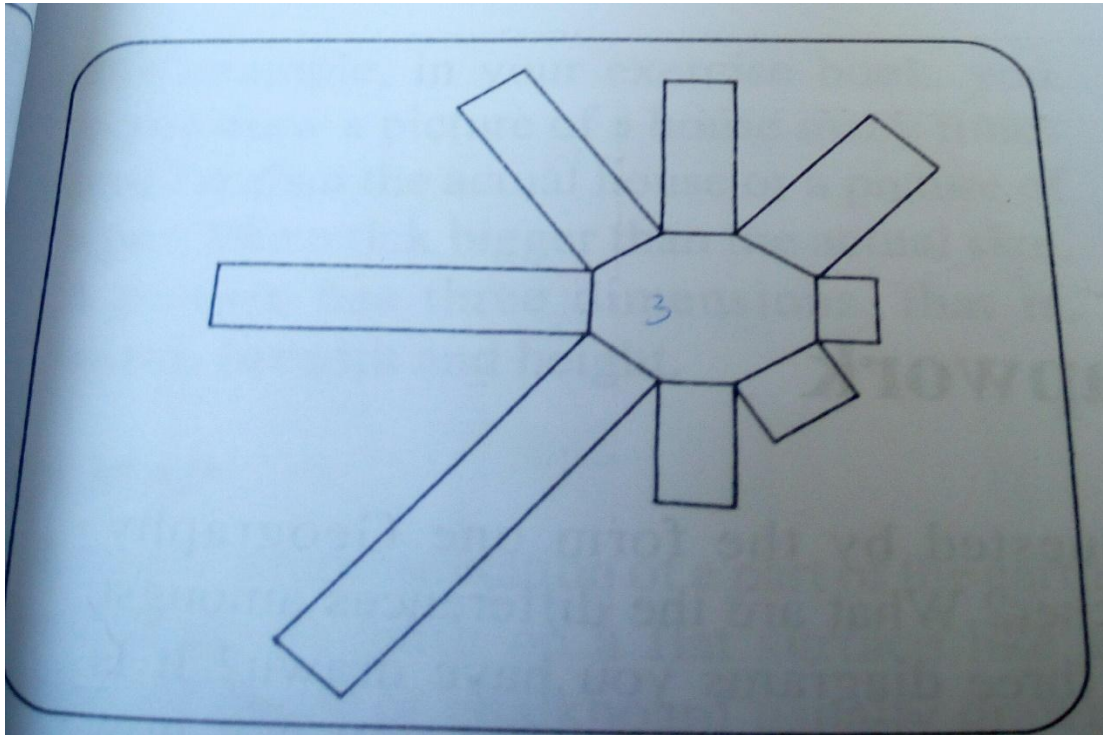
d) i) Study the table below of a station B in a month of July and answer the following questions

Direction of the wind	N	NE	E	SE	S	SW	W	NW	CALM	TOTALS
No of days	3	3	1	1	2	7	6	4	4	31

ii) Use the suitable technique to present the data

(6marks)

A simple wind rose for station B in July



Each bar ½ mark

Calm days 1mark

Title 1mark

d) State three disadvantages of using a wind rose to represent data

(3marks)

- **Does not show wind speed or pattern of flow.**
- **It's difficult to extract numerical values for it involves use of scale.**
- **Does not show exact time and day when the wind blew from a particular direction.**

e) Name four methods of recording statistical data

(4marks)

- **Note taking.**
- **Field sketching.**
- **Photographing.**

- Labelling samples.
- Tape recording.
- Filling in questionnaires.
- Tallying.

10 a) What is a map (2marks)

A representation of a part of the earth or the whole earth on a flat surface, a sheet of paper or chalkboard usually drawn to scale.

b) List down four types of maps (4marks)

- Topographical maps
- Atlas maps
- Wall maps
- Sketch maps

c) Outline five uses of maps (5marks)

Used to show:

- Direction and location of places and phenomena on the surface of the earth
- Human and economic activities such as settlement patterns, land use, communication network, mining areas forestry and fishing.
- Indicate physical features such as relief, drainage patterns etc.
- Weather trends eg. Rainfall distribution, temperature and climatic regions.
- Political and administrative boundaries and so is adjusted land for ownership
- Have become important in military strategies as enemy positions are clearly pin-pointed through the use of maps.

11.a) List down three methods used in analysing statistical data (3marks)

- Calculation of percentages.
- Measures of central tendencies
- Measures of dispersion.

b) If the study of a farm, 10 hectares are found to be devoted to coffee growing and the total acreage is 100 hectares, what is the percentage of the area under coffee (1mark)

$$10/100 \times 100 = 10\%$$

c) A pupil was requested to pick out fourteen numbers randomly from a set of numbers. She picked 20, 1, 66, 42, 12, 6, 15, 12, 42, 100, 3, 82, 42, 37

calculate

- i. The mean of data (2marks)
 $480 \div 14 = 34.29$
- ii. The mode of data (2marks)
42
- iii. The median of the data (2marks)
1,3,6,12,12,15,20,37,42,42,42,66,82,100
 $20+37=57$
 $57 \div 2 = 29$