

**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)
- |                          |  |
|--------------------------|--|
| <b>1°-4mins</b>          | <b>Buchanan is 3:08 behind Nairobi</b> |
| <b>47° × 4 = 188mins</b> | <b>10:00 - 3:08 = 6:52 AM</b>          |
| <b>188 - 3hrs 8mins</b>  |  |
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)
- 21<sup>st</sup> March and 23<sup>rd</sup> 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.

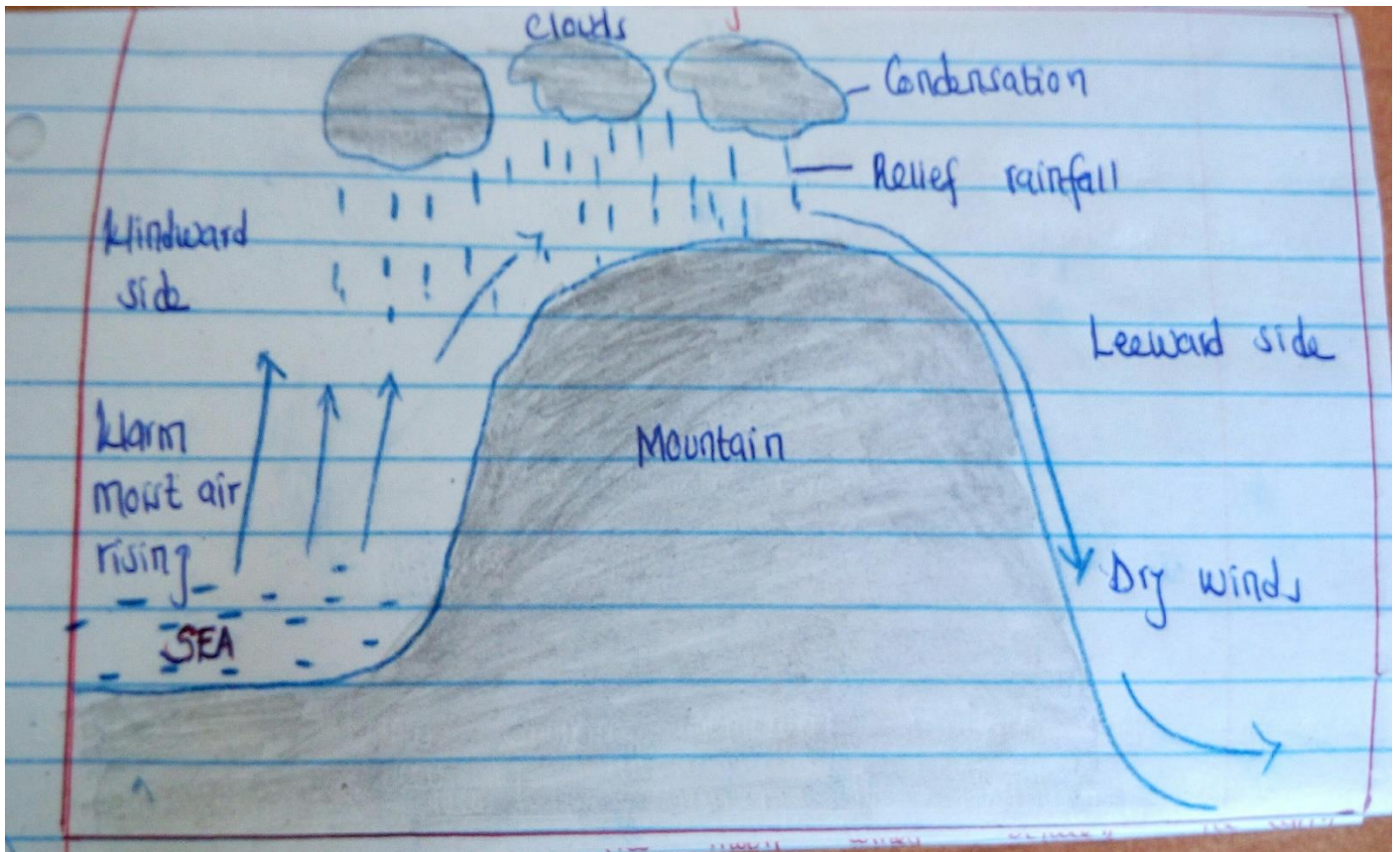
8. a)State three factors that influence weather (3marks)

- 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 |

- Calculate the mean annual range of temperature (2marks)  
 **$31-28=3^{\circ}\text{c}$**
- Calculate the mean annual rainfall for station X (2marks)  
 **$2368\div 12=197/197.33\text{mm}$**
- 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.**

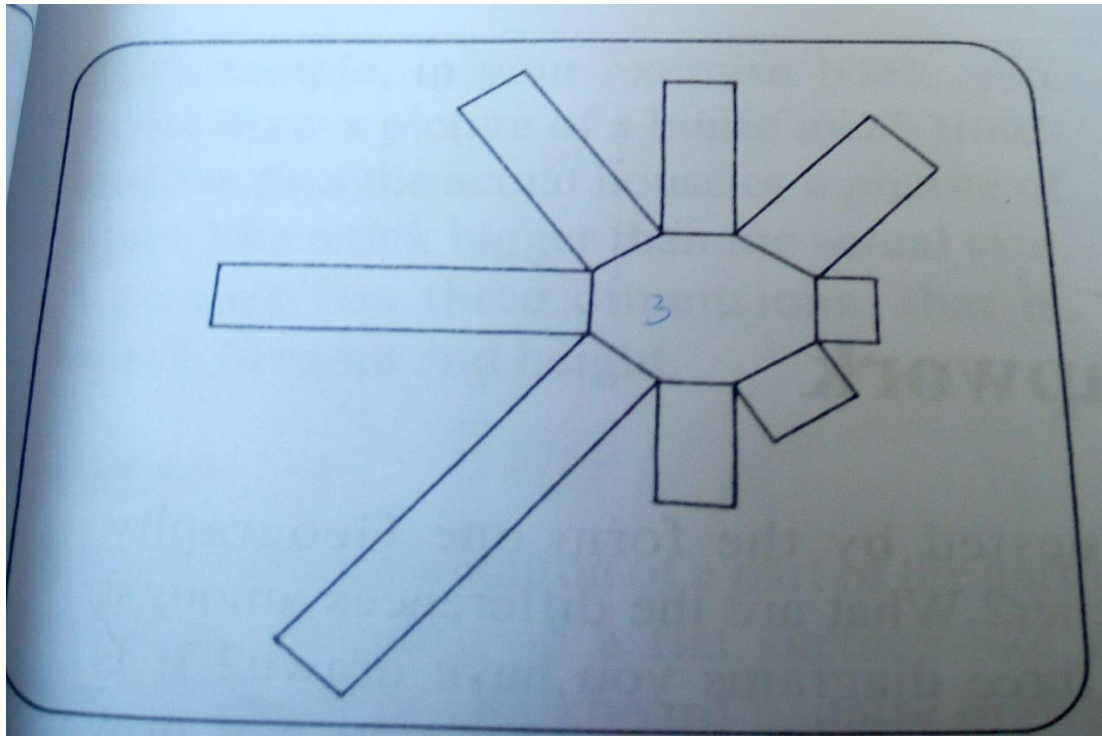
d) i) Study the table below of a station B in a month of July and answer the following questions

| 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 1/2 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 100hectare 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**

**$20+37=57$**

**$57 \div 2 = 29$**