

NAME	INDEX NUMBER
SCHOOL	DATE _____

WEATHER

1. 1996 Q 4 (Section A)

a) If the local time in Nairobi at longitude 37° E is 10.00 a.m .What will the time be at Buchanan in Liberia at longitude 10°W

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b) What is the effect of the International Date Line on time? (2 marks)

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2. 1997 Q 5

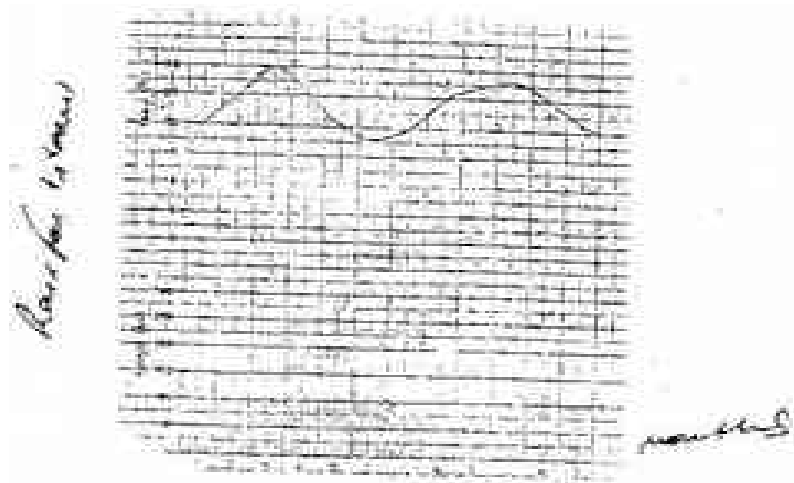
a) Differentiate between weather and climate (2 marks)

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b) The graph below shows climatic characteristics of a station in Kenya. Use it to answer the following questions.



i) Calculate the annual range temperature. (1 mark)

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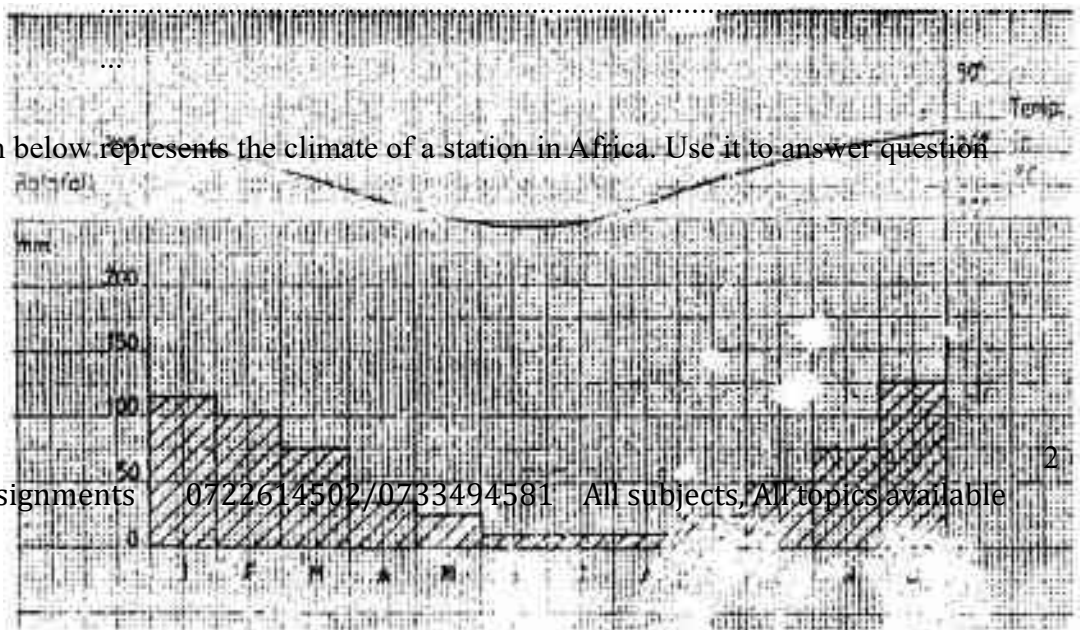
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ii) Calculate the total amount of rainfall received at the station (1 mark)

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3. 1998 Q 8a

The graph below represents the climate of a station in Africa. Use it to answer question



a) (i) Describe the characteristics of the climate represented by the graph

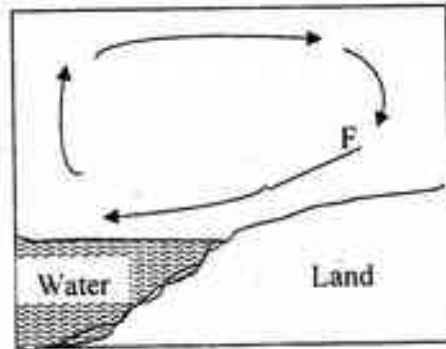
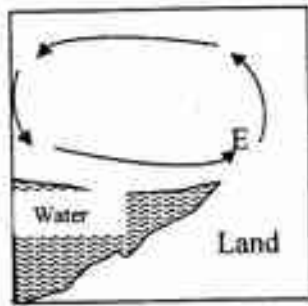
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(ii) Describe the type of natural vegetation likely to be found in an area with the type of climate represented by the graph.

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4. 1999 Q3

The diagram below represents the flow of air current. Use them to answer question



(a) (i) In your answer booklet, name the air current marked E

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(ii) Why does the air cool as it rises?

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5. 2000 Q 1

(a) Name two elements of weather that can be recorded at a school weather station

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(b) Give three reasons why the recording of data at a school weather station may be inaccurate

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6. 2000 Q 8a, b

(a) State three characteristics of the inter-tropical convergence zone

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(b) With the aid of a labelled diagram, describe how relief rainfall is formed

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7. 2001 Q 2

- (a) State two conditions that are necessary for the formation of fog.
 (b) The diagram below shows some types of clouds. Use it to answer the questions that follow.



- (i) Name the clouds marked R

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- (ii) Give two weather conditions associated with cumulonimbus clouds

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8. 2002 Q 4

- a) The table below shows climatic data of a station in Kenya. Use it to answer question(a)

Month	Jan	Feb	Mar	April	May	June	Jul	Aug	Sep	Oct	Nov	Dec
Temp in °C	28.9	29.7	30.3	29.9	29.7	29.2	28.4	28.7	29.6	30.1	29.2	28.7
Rainfall in mm	9.0	8.0	21.0	49.0	25.0	9.0	20.0	10.0	4.0	10.0	17.0	11.0

- i) What is the annual range of temperature at the station?

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 ii) Calculate the total rainfall for the station.

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 b) State three factors that influence climate.

9. 2003 Q 8

a) The tables below represent rainfall and temperature of stations X and Y.

Use them to answer questions (a) and (b)

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
TEMPERATURE IN ⁰ c	30	31	31	31	30	29	29	28	28	29	29	30
RAINFALL IN MM	250	250	325	300	213	25	25	25	100	275	380	200

MONTHS	J	F	M	A	M	J	J	A	S	O	N	O
TEMPERATURE IN ⁰ C	21	20	20	17	15	13	12	13	15	16	18	20
RAINFALL IN MM	12	12	15	50	90	110	87	87	50	35	20	15

a) (i) For each of the two stations calculate the mean annual temperature.

X -

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Y -

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(ii) Calculate the annual rainfall for station Y

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(iii) On the graph paper provided, draw a bar graph to represent rainfall for station x. Use vertical scale of 1cm to represent 50mm

b) Describe the climatic characteristics of station Y.

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c) (i) Describe how conventional rainfall is formed in the lake region of Kenya

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10. 2004 Q 2

a) What is latitude?

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b) What is the time at Hola on 40° E when the time at Tema on 0° longitude is 12.00 noon?

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11. 2004 Q 4

a) What do you understand by:

(i) Microclimate?

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(ii) Green house effect?

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b) Name three instruments to match three elements of weather that can be measured at a school weather station (3 marks)

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12. 2005 Q 9d.

(i) Describe a suitable site where you would locate a weather station in your school (2 marks)

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(ii) Give reasons why a Stevenson's screen is:
- Painted White (2 marks)

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- Has louvers (2 marks)

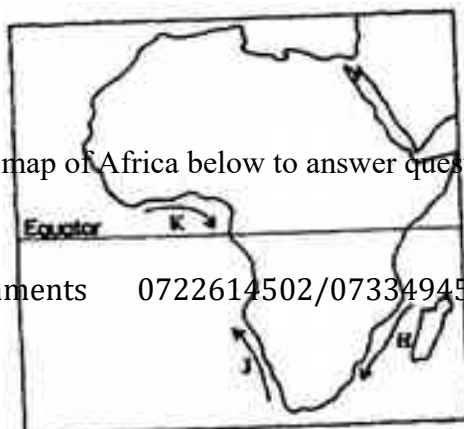
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13. 2006 Q 1

(a) How does a sea breeze occur? (2 marks)

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(b) Use the map of Africa below to answer questions (b) (i)



(i) Name the ocean currents marked H, J, and K (3 marks)

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(ii) State two effects of a warm ocean current on the adjacent coastlands (2 marks)

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14. 2006 Q 5

The table below represents rainfall and temperature figures for a town in Africa. Use it to answer the questions that follow

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temp (°C)	27	28	28	28	27	25	25	24	25	26	27	26
Rainfall (mm)	25	38	99	140	277	439	277	69	142	201	71	25

(a) (i) calculate the annual range of temperature for the town (1 mark)

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15. 2007 Q 8a, b

(a) (i) What is climate? (2 marks)

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(ii) Explain two effects of climate change on the physical environment (4 marks)

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(b) The table below shows rainfall and temperature figures of station in Africa

Month	J	F	M	A	M	J	J	A	S	O	N	D
Temp in °C	24	24	23	22	19	17	17	18	19	20	22	23
Rainfall in mm	109	122	130	76	52	34	28	38	70	108	121	120

(i) On the graph paper provided, draw a bar graph to represent the rainfall figure. Use a vertical scale of 1 cm to represent 10mm) (5 marks)

(ii) Describe the rainfall pattern of the station (4 marks)

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- (iii) Calculate the average monthly temperature for the station (Show your calculations)
(2 marks)

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16. 2008 Q 2b

The table below shows temperature readings at a weather station for one week.

Temp/Day	Mon	Tue	Wed	Thur	Fri	Sat	Sun
Max °c	28	27	28	26	29	29	26
Min °c	18	18	20	16	22	21	19

Calculate the following:

- i) The diurnal range of temperature for Tuesday; (1 mark)

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- ii) The mean temperature for Saturday. (1 mark)

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17. 2008 Q 4

a) Apart from water vapour, name two other substances that are suspended in the atmosphere. (2 marks)

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b) i) Give two factors that are considered when classifying clouds. (2 marks)

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ii) Name two types of clouds that give rise to rainfall in the tropical regions. (2 marks)

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18. 2009 Q 3

(a) What is a line of longitude (2 marks)

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(b) What is the local time at Alexandria 30° E when the local time at Malindi 40° E is 12.00 noon? (2 marks)

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19. 2009 Q 4

(a) Outline the steps followed when measuring humidity using a hygrometer. (3 marks)

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(b) Give two factors that influence relative humidity (2 marks)

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20. 2011 Q 7

a) i) State three conditions that are necessary for siting a weather station. (3 marks)

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ii) Give four reasons why weather forecasting is important. (4 marks)

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b) The table below shows the temperature and rainfall figures for a weather station in Kenya.

Use it to answer question (b) and (c).

Month	J	F	M	A	M	J	J	A	S	O	N	D
Mean monthly temperature in °c	16.2	16.5	17.1	17.1	16.1	15.2	15.2	15.0	16.0	16.1	16.1	16.3
Rainfall 2125 mm	100	104	175	232	323	218	196	231	196	152	127	71

Source: Kenya Meteorological Department

Calculate:

(i) The mean annual temperature for the station. (2 marks)

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(ii) The annual range of temperature for the station. (2 marks)

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(c) (i) On the graph paper provided, draw a bar graph to represent the rainfall figures for the station. Use a vertical scale of 1 cm to represent 20 mm (5 marks)

ii) Describe the characteristics of the climate experienced at the weather station. (3 marks)

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21. 2012 Q3 P2

a) Name two forms of precipitation that commonly occur in Kenya (2 marks)

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b) What is a Stevenson's screen?

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