FORM TWO SECONDARY EDUCATION EXAMINATIONS

OCTOBER 1999

0013 GEOGRAPHY

TIME: 2 HOURS

INSTRUCTION:

Answer ALL questions in Section A and only TWO questions from Section B.

SECTION A: (60 Marks)

Answer ALL questions

1. Match the items in Column A with corresponding items in Column B.

   Column A:

   (i) Latitudes
   (ii) Isotherms
   (iii) Atmospheric pressure
   (iv) Forest conservation
   (v) Dormant volcano

   Column B:

   A. Has not erupted recently
   B. Afforestation
   C. Lines joining places with the same temperature
   D. Deforestation
   E. Measured from the centre of the earth East and West of meridian Greenwich
   F. Line joining places with the same rainfall
   G. Measured by barometer
   H. Angular distance measured from the centre of the earth north and south of the equator.
   I. Erupts very quickly

2. For questions 2(a) – (h) write "TRUE" OR "FALSE" against the statements given.
   (a) Mining activities can destroy the environment…….
   (b) Good railway and road network stimulate trade and commerce……..
   (c) South African's mining industry is not a major contribution to her economy……
   (d) It is impossible to tape underground water in desert and semi desert areas…….
   (e) Subsistence agriculture is a system where by people keep animals and grow crops in a small scale…….
   (f) Heavily forested areas can lead to the availability of less rainfall than unforested areas……
   (g) Lake Nyasa is the deepest Lake in East Africa……
   (h) Steppe is the name given to the grass vegetation ground in tropical Africa……

   For questions 3 – 12 read the statements carefully and then write the letter of the correct answer in the space provided against each question

3. Which statement is true in Tanzania?
   (a) Solar energy is mostly used for drying clothes and grains
   (b) Solar energy is used for heating homes
   (c) Solar energy is used for providing electricity
   (d) Solar energy is for driving trains
4. Which of the following planets has the longest orbit around the sun?
   (a) Saturn (b) Neptune
   (c) Jupiter (d) Mars
5. Which of the following is not connected with the proofs of the earth`s shape?
   (a) Circum navigation
   (b) The earth`s shadow on the moon during an eclipse
   (c) The different types of mountains
   (d) The rotation and revolution of the earth
6. An Eclipse of the moon can take place:
   (a) When the earth is between the sun and the moon
   (b) When the moon passes between the earth and the sun
   (c) When meteor fall on the moon

(d) All answer are correct

7. Pick out the statement that is not true
   (a) An altitude is a great circle
   (b) All longitudes are great circle
   (c) All longitudes and the equator are great circles
   (d) The 0˚ parallel is a great circles
8. Which of the following mathematical statements gives the right answer in minutes of the time taken by the earth to turn one degree of longitudes?
   (a) $\frac{360 \times 24 \text{ hours}}{60 \text{ Minutes}}$
   (b) $\frac{24 \text{ hours} \times 60 \text{ minutes}}{360}$
   (c) $\frac{360}{60 \text{ Minutes}}$
   (d) $\frac{360}{24\text{hours} \times 60\text{minute}}$
9. One of the following groups are features of the ocean floor
   (a) Ridge, basin, plateau and water fall
   (b) Continental shell, continental slope, trench
   (c) Trench, ridge, basin dune
   (d) Horst, plain basin, Volcano
10. The core of the earth is composed of
    (a) Silicon oxide and oxygen
    (b) Aluminium and gold
    (c) Carbon and sodium
    (d) Iron nickel and magnesium
11. Identify the incorrect association in the following parts
    (a) Isobar and pressure
    (b) Isotherm and temperature
    (c) Isotherm and contours
    (d) Isohels and sunshine
12. The second nearest planet from the sun is
    (a) Mercury (b) Earth
    (c) Venus (d) Jupiter
13. Four factors which can affect the temperature of a place are:
14. One of the essentials of a map which defines the symbols and signs or details of a map is……
15. If 32˚F is equivalent to 0˚C what will be the equivalent for
    (a) 40˚C……˚F
    (b) 100˚C…….˚F
16. Four countries through which the Nile flows are:
17. List down four economic uses of a forest.
18. Draw and label the diagram of the solar eclipse.
19. (a) With the aid of a diagram briefly outline the process of rain formation.
    (c) Write the correction number of the item in ground B against the correct later of the item in group A (There are 7 items in ground B and 16 items in group A)

Group A.

1. Lake Chad
2. River Niger
3. Corn belt of north America
4. Lake Tanganyika
5. River Nile
6. Plain important for wheat farming
7. Tropical climate
8. Mediterranean climate
9. Isotherm
10. Isohyets
11. Tanzania
12. Underground water
13. Egypt
14. Pressure
15. Land breeze
16. Weather

Group B

(a) Canadian prairies
(b) Owen falls
(c) Inland drainage
(d) Two seasons dry and wet in the year
(e) Lines on a map joining places of equal temperature
(f) The name given to water which sinks into the ground
(g) The study of atmospheric conditions in a short period of time

SECTION B:

This section contains three questions, answer only two questions

20. Explain the importance of tourism.
21. Outline the factors influencing the location of industries in Tanzania.
22. (a) Explain the aim of land reclamation.
    (b) What were stages of reclaiming land in the Netherlands?

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2000
GEOGRAPHY

Time: 2 Hours

Instruction:

Answer ALL questions in Section A and only TWO questions from section B

SECTION A: (60 MARKS)

1. Read the following statements carefully and then write the letter of the correct answer in the space provided against each question
   (i) This is an example of a block mountain
   (a) Atlas Mountain (b) Mount Meru
   (c) Drakensburg Mountains (d) Ruwenzori Ranges
   (ii) Which of the following is the smallest scale?
   (a) 1:1,000,000 (b) 1:100,000 (c) 1:50,000 (d) 1:10,000
   (iii) Tides are highest
   (a) During the eclipse (b) During the Aphelion
   (c) During the Equinox (d) During the day
   (iv) This instrument is used for measuring the speed of wind
   (a) Wind vane (b) Barometer (c) Anemometer (d) Hydrometer
   (v) Dar es salaam at sea level has a temperature of 32˚C. What will be the temperature of a place in Arusha 1,500 metres above sea level?
   (a) 0.6˚C (b) 23˚C (c) 17˚C (d) 9˚C
   (vi) What is the difference in time between Conakry 15˚W and Lilongwe 30˚E?
   (a) 3 hours (b) 2 hours (c) 4 hours (d) 1½
   (vii) Give the compass bearing for south West
   (a) 135˚ (b) 225˚ (c) 315˚ (d) 45˚
2. Match items in Column A with the corresponding items in column B

COLUMN A:

i)	Climate…….	iv)	Isotherms…….
ii)	Key……..	v)	Mozambican ocean currents…….
iii)	Planets……..		

COLUMN B:

A. The temperature and rainfall conditions of a place
B. Defines signs and symbols used in a map
C. Average weather conditions recorded over a long period of time
D. Symbols and signs in a map
E. Lines on a map joining places with the same atmospheric pressure
F. Bodies that revolve around the sun
G. Cool Ocean currents
H. Cause drought in Mozambique
I. The difference between altitude and latitude

J. Warm Ocean currents
K. Lines on a map joining places with the same temperature
L. Large plane bodies revolving round the sun
M. Lines on a map joining places with the same amount of rainfall
N. Bodies floating in the atmosphere
O. An instrument used for measuring atmospheric pressure

3. Write TRUE of FALSE against the statements given
   (a) Cyclonic rainfall is most common in highland regions…….
   (b) The hot desert regions have a very small diurnal range of temperature……..
   (c) Lake Nyasa is the deepest lake in the World…….
   (d) The atmosphere is said to be saturated when it does not contain water vapour……
   (e) The oceans are saltier than the seas……..
   (f) Asteroids revolve around the sun……..
   (g) Mt. Elgon, the Himalayas and Ruwenzori ranges are good examples of volcanic mountains…….
   (h) The bearing of a place is given by readings starting from North, moving clockwise toward North again……..
4. Convert the following temperature
   (a) 176˚F into ˚C……
   (b) 40˚C into ˚F……..
5. Carefully study the climatic data given for station A and then answer the questions

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
Temperature in ˚C	25.5	25.8	26	26	27.3	26.5	26.5	26.1	26.8	26.8	226.3	25.5
Rainfall in mm	246	186	185	198	184	176	174	197	188	206	161	266

   (i) Calculate the mean annual temperature…….
   (ii) Give the annual range of temperature for the station……
   (iii) Calculate the annual rainfall for the station……..
   (iv) Suggest the type of climate for the station……
6. Give two reasons for suggesting the type of climate for station A above
7. State four ways of giving the location of a place in a map
8. What are the major characteristics of small scale agriculture in east Africa (any four)
9. What are the advantages of sedentary anima I keeping (any four

SECTION B: (40 MARS)
Answer only two questions from this section

10. Out line me problems affecting live stock keeping in Tanzania
11. Coffee and tea are major cash crops grown in Tanzania. Select one of these crops and give the climatic and soil conditions necessary for its growth. Where it is grown in Tanzania?
12. Give reasons for the rapid expansions of industries in South Africa.
13. What could be the effect of rapid population increase around forest reserve areas?
14. Outline the main factors for the growth of industries in West Germany.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2001
GEOGRAPHY

TIME: 2 HOURS
INSTRUCTIONS:

- *This paper consists of two section A and B*
- *Answer ALL questions in section A and only TWO questions from section B.*

SECTION A:

Answer ALL questions in this section

1. Read the following statements carefully and then write the letter of the correct answer in the space provided against each question

i) The rotation of the earth on its axis causes:
(a) Seasons (b) Day and night (c) Eclipse (d) Tides

ii) A representative scale of 1: 50,000 can be represented by a statement scale of:
(a) 0.5cm to 0.5km (b) 2cm to 5km
(c) One cm to 0.5km (d) One cm to 50.000cm

iii) Isohyets are lines on a map which join all places with the same
(a) Height above sea level (b) Amount of rainfall
(c) Atmospheric pressure (d) Natural vegetation

iv) The following is the dominant feature of the continent of Africa:
(a) Valley (b) Plateau (c) Basin (d) Mountain

v) The solar eclipse occurs when:-
(a) The moon comes between the sun and the earth
(b) The sun comes between the moon and the earth
(c) The earth comes between the sun and the moon

vi) If it is 3:00 pm at Mwanza 33˚E in Tanzania, What will be the time at Tehran 50˚E in Iran?
(a) 10:00 am (b) 4:08 pm (c) 4:32 pm (d) 10:00 pm

vii) A weather instrument which is not kept in the Stevenson screen is
(a) Barometer (b) Wet bulb thermometer
(c) Dry bulb thermometer (d) Maximum thermometer

2. Match the items in column A with the corresponding items in column B

COLUMN A:

i) The sudd vegetation……
ii) Position of a place on a map……..
iii) Cardinal points of the compass……..
iv) Standard time……
v) 23½ ˚N

COLUMN B:

A. Time adopted from agreed meridian
B. Tropic of Cancer
C. West, North, East and South
D. Floating weeds in the river Nile in Southern Sudan
E. The high pressure zone centered in the hot region
F. Is determined by starting with longitudes followed by latitudes
G. North west, East and South East
H. The low pressure zone along the equator which is permanent
I. The ration between vertical scale and the mean sea level

3. Write TRUE or FALSE against the statements given
(a) The amount of salt is not the same at all places in oceans……..
(b) A longitude is an angular distance measured in degrees north and south of the Equator……..
(c) It is impossible to tap underground water in desert and semi-desert areas……
(d) Lake Tanganyika is the deepest lake in Africa……..
(e) Elements of weather are the same as the elements of climate…….
(f) Major natural regions are the regions with the same geographical background to human activities as well as temperature, rainfall and natural vegetation……
(g) Nomadic pastoralism is a large scale livestock keeping……
(h) Industrial activities may cause air pollution……..
(i) Bearing and distance are one of the methods used to locate positions in maps……..
(j) Stripping method is used to estimate an area of irregular shape……..

4. (a) The location of point x is given by grid reference 501394. Point out the number which represents
(i) Eastings…… ii) Northings……
(b) Draw a well labeled diagram to show the formation of sea breeze

5. Carefully study the climatic data given for station K and then answer the questions that follow:

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
Temperature in ˚C	21.7	21	20.6	18.9	16	13.9	13.9	16	20	22.2	22.2	22.2
Rainfall in mm	149.7	101.6	78.7	17.8	7.6	0	0	0	2.5	22.9	83.8	132

   i) Calculate the mean annual temperature
   ii) Give the annual range of temperature
   iii) Calculate the total annual rainfall
   iv) Suggest the type of natural region for the station
   v) Mention five vegetation types found in the station
6. Which are the major economic activities conducted in the station? (any 2)
7. The economic uses of water are (any four)
8. Mention four important conditions for the development of tourism in Tanzania
9. Write down four problems associated with exploitation of forest resources

SECTION B: (40 MARKS)

Answer only TWO questions from this section

10. Outline the benefits brought by the Gezira River Basin scheme.
11. What are the problems associated with exploitation of energy resources?
12. Describe the characteristics of large scale Agriculture.
13. Explain the advantages of developing transport and communication.
14. Discuss measures which may raise the productivity of pastoralism in Africa.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2002

GEOGRAPHY

TIME: 2 HOURS

Answer ALL questions in section A and only TWO questions from section B

SECTION A: (60 MARKS)

Answer ALL Questions in this section

1. Read the following statements carefully and then write the letter of the correct answer in the space provided against each question

   i) The sun is the main source of
   (a) The earth and the planet (c) Energy and solar system
   (b) Light and heat (d) Water and light

   ii) The four seasons which occur on the earth's surface are a result of
   (a) Ferrell's law
   (b) Rotation of the earth
   (c) Revolution of the earth
   (d) The tilting of the earth on its axis

   iii) Fold mountains are formed by
   (a) Faulting
   (b) Out flow and spread of lava over land
   (c) Wrinkling of the earth
   (d) Sinking of the earth`s crust

   iv) The following is not a component of a weather station
   (a) Rain gauge (b) Wind vane (c) Microscope (d) Stevenson screen

v) When the difference in the reading of the dry bulb and wet bulb thermometer is great
   (a) Evaporation is low
   (b) Humidity is high
   (c) Moisture content in the atmosphere is low
   (d) Air in the atmosphere is saturated

vi) If the temperature at 0 meter above sea level is 32˚C the temperature at a place where the altitude is 1500 metres will be
   (a) 0.6˚C (b) 23˚C (c) 08˚C (d) 17˚C

vii) The compass bearing for South West is
   (a) 135˚ (b) 225˚ (c) 315˚ (d) 045˚

viii) The characteristics of the equatorial type of climate are
   (a) Heavy rainfall throughout the year and savannah vegetation
   (b) Heavy rainfall throughout the year and scattered trees
   (c) Heavy rainfall throughout the year and small annual temperature range about 2˚C
   (d) Seasonal rainfall and savannah vegetation

ix) Some of the advantages of land Reclamation are
   (a) Increase of land and production
   (b) Soil erosion and fertility
   (c) Land degradation
   (d) Land and soil erosion

x) One of the following groups indicate the features of ocean floor
   (a) Ridge, bash, plateau and waterfall
   (b) Continental shelf, continental slope and trench
   (c) Trench, ridge, basin and dune
   (d) Horst, plain, basin and volcano

2. Match the items in column A with the corresponding items in column B

COLUMN A:

i) Average weather conditions recorded over a long period of time……
ii) Venus……
iii) Hygrometer…….
iv) Zero grazing…….
v) Water pollution…….

COLUMN B:

A. Climate
B. Warm ocean current
C. Chemical added to water to purify it
D. Unwanted substances mixed with water
E. It completes its orbit in 225 days
F. A list of fold mountains
G. Measures humidity
H. Living with animals in one shed
I. Stall feeding
J. The moon eclipse

3. Write TRUE or FALSE against the statements given
   a) Domestic trade takes place between one country and another……..
   b) Planets are bodies that revolve around the earth……
   c) Contour terracing in agriculture aims at preventing the loss of soil ferity…….
   d) The side of the mountain facing the direction of the wind is known as the windward side…….
   e) Savannah climate is characterized by dry and wet seasons……
   f) The hot deserts have a very small diurnal range of temperature……..

g) Grid references on maps are used in locating and describing positions……
h) Magnetic compass is used to determine the position of the sun in a day……
i) A map is a representation of an area of the earth's surface on a sheet of paper or any other flat surface……
j) In shifting cultivation permanent crops like coffee, sisal, and banana ca be planted……

4. Convert the following scales
   (a) A representative fraction of 1: 700,000 into a statement scale in km
   (b) A statement of 50m to 1km into a representative fraction
5. Carefully study the climatic data given for station O and answer the questions that follow:

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
Temperature in C	13.3	16.1	20.0	25.0	28.9	35.0	36.7	35.8	32.8	26.7	19.1	14.3
Rainfall in mm	149.7	101.6	78.7	17.8	7.6	0	0	0	2.5	22.9	83.8	132

   i) Calculate the mean annual temperature
   ii) Calculate the total rainfall for the station
   iii) Give the annual range of temperature for the station
   iv) Suggest the type of climate for the station
   v) The station receives more rainfall when the sun is overhead on the tropic of…
6. Write down three main types of rainfall
7. Give five characteristics of a map
8. List down five factors which make navigation difficult in most African rivers
9. Mention any four factors that affect the temperature of a place
10. Proper ways of dealing with waste are

SECTION B: (40 MARKS)

Answer any TWO questions from this section

11. Explain the problems which affect fishing industry in East Africa.
12. What are the problems that limit the development of mining industry in Tanzania?
13. Explain the economic importance of minerals to the Republic of South Africa.
14. Write down the functions of Tennessee River Valley Authority.
15. Describe the characteristics of small scale agriculture.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2003
GEOGRAPHY

TIME: 2 HOURS

INSTRUCTIONS
Answer all questions in section A and only two questions from section B.

SECTION A: (60 MARKS)

Answer all questions in this section

1. Read the following statements carefully and then write the letter of the most correct answer in the box provide against each question
   i) The time when the sun is overhead on attitude 23½˚S or 23½˚N is called
      A. Solstice B. Aphelion C. Equinox D. Tropic of cancer
   ii) The second nearest planet from the sun is
      A. Mercury B. Earth C. Venus D. Jupiter
   iii) Which of the following is the largest scale?
      A. 1:100,000 B. 1:10,000 C. 1:50,000 D. 1:1,000,000
   iv) Wind blows from

A. Highlands to lowlands
B. Lowlands to highlands
C. Low pressure areas to high pressure areas
D. High pressure areas to low pressure areas

v) …… causes the difference between the length of day and night.
A. Rotation of the earth
B. Distribution of longitudes
C. Inclination of the earth's axis
D. Revolution of the earth

vi) Which of the following type of mountains result from the eruption of the molten rocks from the earth's interior?
A. Block mountains B. Volcanic mountains
C. Residual mountains D. Fold mountains

vii) If it is 3:00 pm at Mwanza 33˚E in Tanzania, what will be the time in Bangladesh 50˚E?
A. 10:00 am B. 4:32 pm C. 10:00 pm D. 4:08 pm

viii) Which of the following is not a renewable resource?
A. Water B. Air C. Mineral D. Forest

ix) The relative humidity of a region is low when:
A. The wet and dry bulb thermometer read the same
B. The difference between the readings of wet and dry bulb thermometers is large
C. The temperatures are high
D. The temperatures are low

x) The practice of sectional movements to the mountains and to the valleys is called:
A. Agriculture B. Pastoralism C. Transhumance D. Hunting

2. The following are matching items. Match the items in **Column A** with the corresponding items in **Column B** by writing its letter in the box provided alongside column A as shown in the worked example (V)

Column A

(v) Wrinkling of the earth's crust_____A

Column B

A. Fold mountains
B. Fault mountains

Column A:

i) Lines drawn on maps joining places with the same height above sea level……
ii) Rainfall caused by intensive solar radiation…….
iii) Plateau……
iv) Air pollution…….
v) Manufacturing……..

Column B:

A. Convectional rain
B. Cyclonic rain
C. Shown by U shaped contours
D. Dominant feature of the continent of Africa
E. Contours
F. Isobars
G. Planting trees and burning grass
H. Addition of unwanted materials into the air
I. Provides materials in raw form
J. Conversion of materials into forms which are more useful to man

3. The following statements are either TRUE or FALSE. In the space provided write TRUE if the statement is true and FALSE if the statement is false.

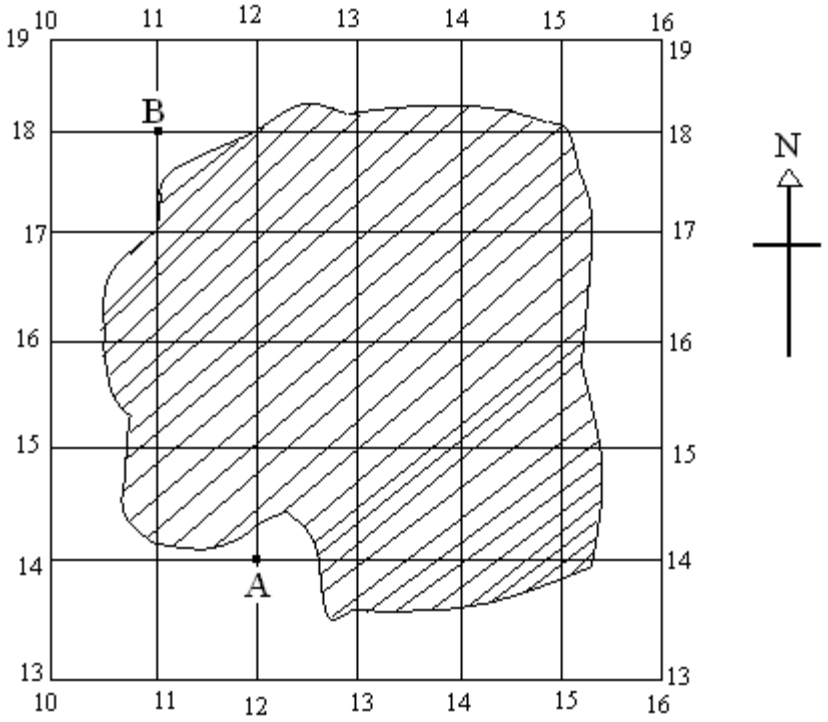
(a) Transportation involves the movement of ideas or information while communication involves the movement of goods and people …….

(b) There is no direct relationship between the availability of raw materials and industrialization ……..
(c) Seasons are more pronounced between 23½° and 66½° of latitude……..
(d) Environmental pollution results into global warming ……..
(e) Lake Victoria is an example of a Rift Valley Lake ……..
(f) The spread of HIV/AIDS somehow is accelerated by tourist activities ……..
(g) Rising and falling in the level of water in the oceans is called a current ……
(h) Good railway and road networks stimulate trade and commerce ……
(i) Bearing and distance is the only way of locating position on maps ……..
(j) Over exploitation of forest resources may lead to desertification ……..

SECTION B:

This section consists of short answer questions. You are required to read the questions carefully before you write the answer in the space provided.

4. (a) Study the diagram below and answer the questions that follow:



i) Calculate the area of the shaded part
ii) Find the bearing of A from B
iii) Give the direction of B from A
iv) Write the grid reference of point A and B

(b) Carefully study the climatic data given for station T and answer the questions that follow:

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
Temperature (˚C)	25.5	25.8	26	26	27.3	26.5	26.5	26.1	26.8	26.8	26.3	25.7
Rainfall (mm)	246	186	185	198	184	176	174	197	183	206	261	266

(i) Calculate the mean annual temperature
(ii) Determine the annual range of temperature
(iii) Find the annual rainfall for the station
(iv) What type of climate does station T experience?
(v) Mention four crops that can be grown in the area

(c) Give evidences to prove that the earth is round.

(d) Mention five factors to be considered in the location of manufacturing industries.
(e) List down five uses of solar energy.
(f) List five advantages of plantation agriculture.
(g) List down five characteristics of large scale agriculture.

SECTION B: (40 MARKS)

Answer any TWO questions from this section. Use the answer sheets provided

5. Explain five characteristics of sedentary livestock keeping.
6. Explain the features associated with rapid population growth.
7. Give suggestions on how to solve the problem of desertification.
8. Mention the problems associated with exploitation of forest resources.
9. Explain the main problems facing transport and communication in East Africa.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2004
GEOGRAPHY

TIME: 2 HRS

INSRUCTIONS:

- This paper consists of TWO sections, A and B
- Answer ALL questions in section A and ONLY two questions from section B

SECTION A: (70 Marks)

Answer all questions in this section

1. Read the following statements carefully and then write the letter of the most correct answer in the box provided against each question
   i) In geography the term rotation means
      (a) The movement of the sun
      (b) The movement of one body around another
      (c) The spinning of a body on its axis
      (d) The rise of the moon in the east
   ii) The planet that is known to support life is the
      (a) Sun (b) Moon (c) Earth (d) Mercury
   iii) The grid reference of station x is 261582. What are the number of the Eastings and the Northings?
      (a) 583 are Eastings and 261 are Northings (c) 582 are Northings and 261 are Eastings
      (b) 158 are Eastings and 262 are Northings (d) 651 are Northing and 582 are Eastings
   iv) Dare-salaam at sea level has temperature reaching 30˚C. Determine the temperature of Arusha situated at 1,500 metres above sea level
      (a) 21˚C (b) 39˚C (c) 9˚C (d) 23˚C
   v) The structure of the earth is composed of
      (a) Carbon and sodium (c) Silicon and alumina
      (b) Crust, mantle and core (d) Sima and Sial
   vi) Fold mountains are formed by
      (a) Outflow and spread of lava over land (c) Wrinkling of the earth's crust
      (b) Sinking of the earth's crust (d) Faulting
   vii) Which of the following tropical climates has the largest diurnal temperature range?
      (a) Tropical monsoon (b) Hot deserts (c) Mediterranean (d) Cold deserts
   viii) At which longitude will it be 2:00 pm when it is 11:00 am at 10˚W?
      (a) 35˚E (b) 45˚E (c) 135˚E (d) 10˚E
   ix) Wind vane is an instrument used for
      (a) Recording wind velocity (c) Measuring air pressure
      (b) Recording temperature (d) Showing direction of wind
   x) A representative scale of 1:250,000 can be represented by a statement scale of
      (a) 0.5 to 2.5 km (c) One cm to 2.5 km
      (b) 2 cm to 25 km (d) One cm to 250,000 cm

2. Match the items in column A corresponding items in column B by writing the letter of the correct item in column B against its corresponding number in column A

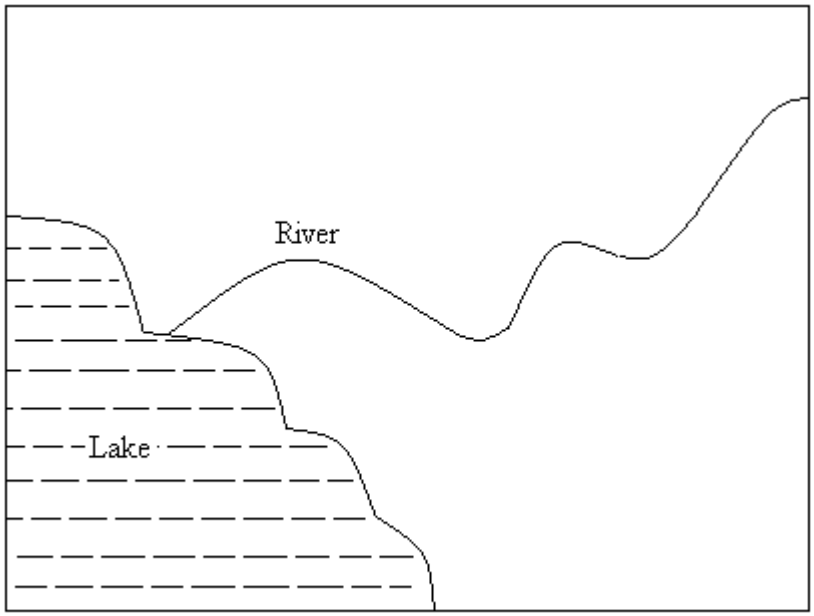
COLUMN A	COLUMN B
(i) The causes of day and night	A. Air pollution
(ii) Cardinal points of a compass	B. Lines joining places with the same temperature
(iii) International date line	C. Standard time
(iv) Meteors	D. North, East, South and West
(v) Beach	E. Area between high tide and low tide
(vi) Mozambique ocean current	F. Rotation of the earth
(vii) Isotherms	G. Lapse rate
(viii) Characterized by two rainfall maxima	H. The equatorial region
(ix) Temperature decreases with increase of altitude	I. Lake Tanganyika
(x) Contours and spot height	J. 180˚ West and East
	K. Warm current
	L. Determine direction
	M. Pieces of hard mater falling from outer space
	N. Methods used to show relief features on a map
	O. The crust

3. Write TRUE or FALSE against the statements given
   i) Back bearing is the bearing of an observer from the object……..
   ii) The only continent that is crossed by both tropic of cancer and Capricorn is America……
   iii) All longitudes are great circles…….
   iv) Orbit is the path of the moon and the earth in the universe…….
   v) Lake Tanganyika is a good example of rift valley lake……
   vi) Industrialization is not an agent of air pollution…….
   vii) Elements of weather are the same as the elements of climate……..
   viii) The side of the mountain that faces the direction of the wind is known as the windward side……..
   ix) An area of low pressure where wind blow inward in circular motion is known as a depression……..
   x) A map is not a scaled representation of a place……..

4. (a) Carefully study the climate data given for station x, and then answer the questions that follow:

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
Temperature in ˚C	23	22	21	20	18	15	12	10	17	18	18	19
Rainfall (mm)	10	15	20	50	130	180	175	150	100	70	18	15

   i) What is the annual range of temperature for station x?
   ii) Calculate the total annual rainfall
   iii) What type of climate does the station experience?
   ……
   Give reasons: (a) ……
   (b) ……..
   iv) In which climatic region is the station located?
   v) Suggest two type of crops grown in the area



Scale 1:50,000

(b) (i) Mention any three methods which may be used to measure the area of the lake.
(ii) List three methods which can be used to measure the distance of the river.
(iii) How is the scale of the map represented?
(iv) List down three important things to be considered when using maps

5. (a) Give three necessary conditions for the construction of Hydro-Electric power (HEP) station.
(b) State three ways of dealing with water pollution in Tanzania.
(c) What limits cotton production in the Cotton Belt of the USA?
(d) What are the problems associated with oil drilling?
(e) Define the following terms
(i) Zero grazing
(ii) Land reclamation
(f) Suggest three ways of minimizing the use of fuel wood at family level.
(g) Write down three methods of soil conservation.
(h) State the three economic importance of manufacturing industry in Africa.
(i) Outline three economic significance of mineral exploitation to any country.
(j) Mention three gender discrimination for women in Tanzania.

SECTION B: (30 MARKS)

Answer any two questions from this section. Use the answer sheets provided

6. Outline the problems of marine transport.
7. Briefly explain the significance of developing agricultural sector in terms of social and economic development in Tanzania.
8. Write down the important conditions for developing tourism in Tanzania.
9. Elaborate the problems which are encountered by most women in establishing business.
10. Describe the advantages of developing solar energy.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2005
GEOGRAPHY

TIME: 2½ HRS

INSTRUCTIONS:

1. This paper consists of sections, A and B
2. Answer ALL questions in section A and ONLY two questions from section B
3. Write your examination number on every page

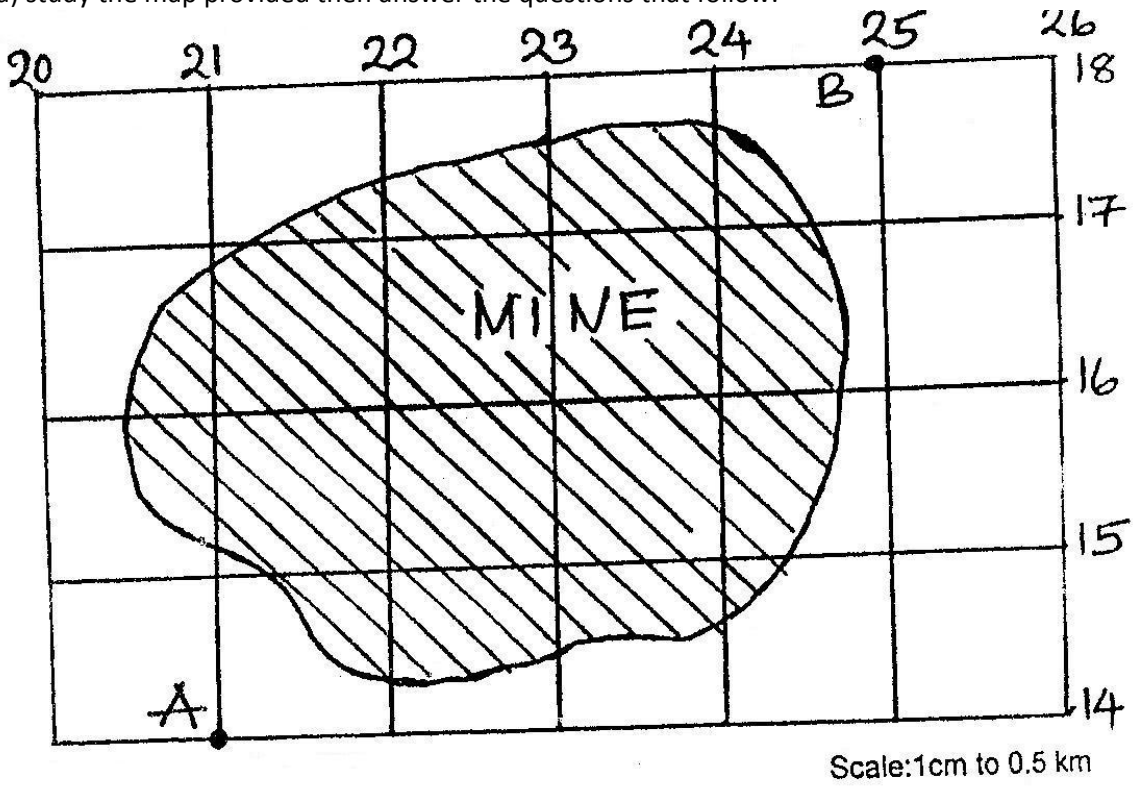
4. All answers in the section A must be written in this paper. Answer for section B should be written in the sheets of paper provided
5. Cellular phones are not allowed in the examination room
6. Electronic calculators are not allowed in the examination room

SECTION A: (70 MARKS)
Answer ALL questions in this section

1. Read the following statements carefully and then write the letter of the most correct answer in the box provided against each question
   i) The time recorded along the same meridian is called:
      A. Local mean time C. Great mean time
      B. Green which mean time D. Standard time
   ii) The following planet has 8 satellites:
      A. Mars B. Jupiter C. Neptune D. Saturn
   iii) Fold mountains are mainly produced by:
      A. Tension force B. Earthquakes C. Compression force D. Faulting
   iv) Part of the earth which forms continental blocks is:
      A. Sima B. core C. Sial D. Hydrosphere
   v) What is the local mean time of Dar es Salaam at 45˚ when it is noon at Greenwich?
      A. 10:00 am B. 7:00pm C. 3:00pm D. 8:00pm
   vi) The only type of climate that is different from others is:
      A. Mediterranean B. Savanna C. Hot desert D. Equatorial
   vii) Wind blow from
      A. Low altitude to high altitude
      B. Low pressure to high pressure zone
      C. High pressure to low pressure zone
      D. Sea to land during nights
   viii) Which is the largest among the following scales?
      A. 1:25,000 B. 1:500,000 C. 1:50,000 D. 1:10,000
   ix) Identify the incorrect association in the following pains
      A. Isobar and sunshine C. Isotherm and temperature
      B. Isobar and pressure D. Isohyets and rainfall
   x) WSW compass direction is equivalent to the following compass bearing:
      A. 225˚ B. 135˚ C. 245.5˚ D. 247.5˚
2. Match the items in column A with the corresponding items in column B

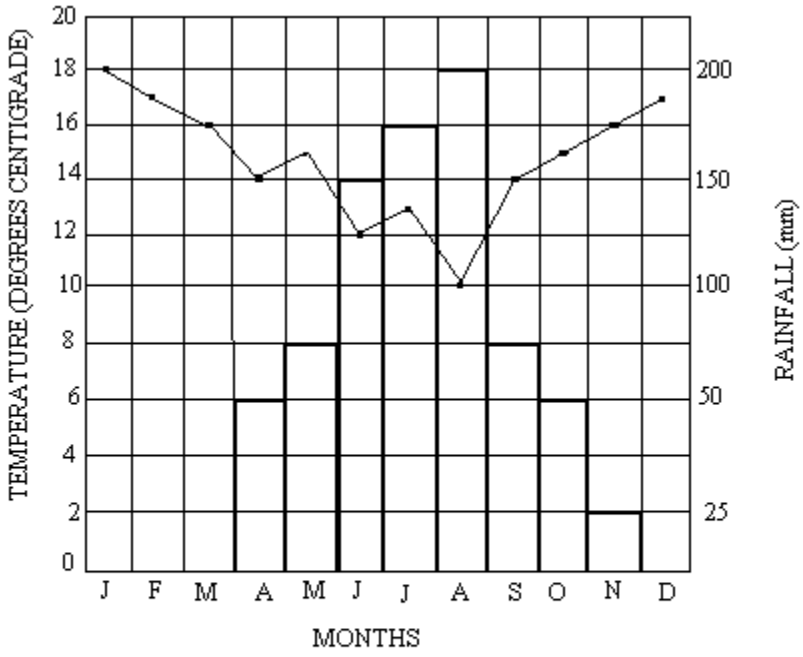
COLUMN A	COLUMN B
(i) Branches of Geography	A. Pair of divider
(ii) The furthest planet	B. Troposphere, stratosphere, mesosphere and thermosphere
(iii) World solstice	C. Causes seasons
(iv) Experience longer or nights at some periods of the year	D. Pluto
(v) Core	E. Ocean floor features
(vi) Layers of the atmosphere	F. Physical, Human and Practical Geography
(vii) Continental shelf, continental slope and trench.	G. Precipitation caused by intensive solar radiation
(viii) Weather	H. When the sun appears to be overhead latitude 23½˚N and 23½˚S
(ix) Convectional rainfall	I. Temperate regions
(x) An instrument used to measure curved distances on maps	J. The condition of the atmosphere which occur at a specific time.
	K. An area of high pressure belt
	L. It is made up of iron and manganese silicate

3. Write TRUE or FALSE against the statements given
   i) When contour lines are close to one another this means that there is gentle sloped over the landform……
   ii) Lines of latitudes are sometimes called parallels…….
   iii) Asteroids are heavenly bodies revolving around the sun mostly between the orbit of Mars and Jupiter…….
   iv) See breeze occurs when wind blow from the land to the sea……..
   v) Lakes Victoria, Kioga and Chad are among the rift valley lakes……..
   vi) If one crosses the International Date Line westwards one gains a Day……..
   vii) In order to read grid references start with Northings and finish with Eastings……
   viii) Penumbra is a small dark shadow……..
   ix) Watershed is the collecting ground for a single river system…….
   x) Europe is the only continent which is crossed by both tropic of cancer and Capricorn……
4. (a) study the map provided then answer the questions that follow:



   i) Calculate the area of the mine
   ii) Find the bearing of point B from A
   iii) Give the direction of A from B
   iv) State the grid reference of A and B

   (b) Carefully study the climatic graph given and then answer the questions that follow



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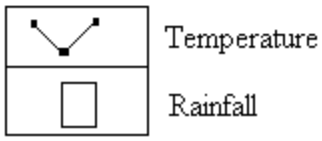


i) Calculate the annual range of temperature
ii) Calculate the annual rainfall for the station
iii) Calculate the mean annual rainfall for the station
iv) Suggest the type of climate for the station
v) Give reasons for the suggestion you have given in (iv) above

5. (a) (i) Define deforestation
(ii) List down three causes of deforestation
(b) Mention four forms of transport
(c) Outline four difficulties which face the improvement of agricultural sector in Tanzania.
(d) Mention problems that hinder development of tourism sector in Tanzania (any 4)
(e) Outline four measures which should be taken to improve trade in developing countries
(f) Name any four types of irrigation systems
(g) Write down the necessary conditions for the location an industry (any 4)
(h) Give out the benefits of establishing Tennessee Valley Authority in U.S.A (any 4)
(i) What is the importance of developing river basin schemes in Africa? (Any 4)
(j) State four ways of empowering women in small scale agriculture

SECTION B: (30 MARKS)

Answer any two questions from this section. Use the answer sheets provided

6. Explain the factors which prevent the development of fishing industry in East Africa.
7. What are the ways of minimizing pollution caused by mining to the environment?
8. Outline the aspects that have contributed to the development of dairy farming in Netherlands.
9. Describe the consequences of water shortage to communities.
10. Give an illustration of the advantages of sedentary farming.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2006
GEOGRAPHY

TIME: 2 ½ HRS

INSTRUCTIONS:

1. This paper consists of sections A and B
2. Answer ALL questions in section A and ONLY two questions from section B
3. Write your examination number on every page
4. ALL answers in both sections must be written in this paper
5. Cell phones and electronic calculators are not allowed in the examination room
6. All writing must be in black or blue pen

SECTION A: (70 marks)

Answer ALL questions in this section

1. Read the following statements carefully and then write the letter of the most correct answer in the box provided against each question

   i) The farthest position from the sun in the orbit of earth is called: ☐
   A. Lunar eclipse B. Aphelion C. Umbra D. Perihelion

   ii) The angular distance measured in degrees North and South of the Equator is known as ☐
   A. Great circles B. Longitude C. Altitude D. Latitude

   iii) The atmosphere is said to be humid only when ☐
   A. It contains water vapour
   B. It is unsaturated with water vapour
   C. It is saturated with water vapour
   D. It does not contain water vapour

   iv) A statement scale of one centimeter representing half a kilometer can be represented in representative fraction as ☐
   A. 1:250,000 B. 1:50,000 C. 1:100,000 D. 1:25,000

   v) Water and air currents do not move in straight lines due to spinning effect of the earth. The term used to describe this situation is ☐
   A. Deflation B. Reflection C. Direction D. Deflection

   vi) If it is 3: 00 pm at Mwanza 33˚E in Tanzania, what will be the time at Tehran 50˚E in Iran? ☐
   A. 4:08 pm B. 1:52 pm C. 10:00 am D. 10:08 pm

   vii) Siberia is to the East of the International Date Line (IDL) and Alaska is to the West. If or[illegible]m Siberia crosses the line to Alaska he/she ☐
   A. Gains a day
   B. Loses a day
   C. Gains and loses a day at the same time
   D. None of the above

   viii) Dar es Salaam at sea level has a temperature of 32˚C. What will be the temperature of a place in Arusha 1,500 metres above sea level? ☐
   A. 41˚C B. 23˚C C. 9˚C D. 0.6˚C

   ix) One of the following groups are features of the ocean floor: ☐
   A. Ridge, basin, plateau and waterfalls
   B. Continental shelf, basin and waterfalls
   C. Trench, continental shelf and continental slope
   D. Horst, plain, basin and volcano

   x) The Grid reference of station x is 612825. What are the numbers of the Eastings and the Northings? ☐
   A. 825 are Northings and 612 are Eastings
   B. 282 are Eastings and 625 are Northings
   C. 825 are Eastings and 612 are Northings
   D. 228 are Northings and 825 are Eastings

2. Match the items in column A with the corresponding items in column B by writing the letter of the correction item in column B against the corresponding number in A.

Column A	Column B
(i) Solar eclipse	A. Solar system including all stars
(ii) Geography	B. Is said to be the results of tension and compression forces.
(iii) Climate	C. The lines drawn on the map showing the areas with the same amount of rainfall.
(iv) Doldrum	
(v) Magma	D. Is said to be the results of tension forces only.

(vi) Galaxy (vii) Rift valley (viii) Isohytes (ix) Leeward (x) Topographical maps	E. The side of a mountain facing away from the wind direction. F. When the moon passes between the sun and earth. G. A science that studies man in relation to his environment. H. The lines drawn on the map showing the areas with the same temperature. I. Molten materials below the crust. J. Maps showing areas with the same temperature. K. When the sun passes between the moon and the earth. L. Represent relief and man made features. M. Areas of equator which experience low pressure while temperature is high. N. The average weather condition recorded over a long period, about 35 years.

3. Write TRUE or FLSE against the statements given
   i) A scale is one of the essentials of a good map……
   ii) The earth's orbit is more spherical than elliptical in shape…….
   iii) Lake Nyasa is an example of depression Lakes……..
   iv) The hot desert regions have a very small diurnal range of temperature…….
   v) The following are the forms of precipitations: rain, snow and hail……
   vi) The Equator is the line which divides the earth into two hemispheres…….
   vii) Mercury is the largest planet in the Solar System……
   viii) The bearing of a place is given by reading starting from the North moving in clockwise direction…….
   ix) Westerly winds do not move from North Pole to the Horse Latitudes…….
   x) Geography deals with earth's features only……
4. (a) carefully study the climatic data given for station x and then answer the questions that follow:

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
TEMP(C)	30	30	30	31	32	38	37	37	35	34	31	30
RAINFALL (mm)	10	20	26	15	8	0	0	0	12	18	15	10

   i) Calculate the annual range of temperature
   ii) Determine the annual rainfall
   iii) Calculate the mean annual temperature
   iv) What type of climate does station x experience? Give reasons
   v) Suggest the hemisphere in which station x is located

   (b) i) Define
   A map_____
   A scale_____
   ii) List down four essentials of a map
   iii) In station p on a area covered by thick forest was found to be 12 full squares and Half squares. Calculate the area of the thick forest in square Kilometers
   iv) If the map distance of RUVURiver is 29 centimeters, calculate actual distance of Ruvu River in kilometers given that the map scale is 1:25,000
   v) Change the scale 1:25,000 into a statement scale

5. (a) Explain two advantages of wind energy,
   (b)Mention four problems facing timber industry in the Congo basin
   (c) (i) Define the term agriculture.
   (ii) List down two types of subsistence farming in practice.
   (d) What are the aims of land reclamation? (Any 2)
   (e) Identify four types of human activities.
   (f) State four factors which favour the development of tourism.

(g) Outline four problems associated with harnessing Hydro-Electric Power (H.E.P).
(h) What are the factors that led to the development of sheep farming in Australia?
(i) Give four advantages of extracting gas from Songosongo.
(j) Outline four effects of water shortage in the society.

SECTION B: (30 MARKS)

Answer any two questions from this section. Use the space provided at the end of this section

6. Explain the effects of high population pressure on forest resources and suggest ways to overcome the problem of forest resource depletion.
7. Elaborate problems which face the development of transport sector in Tanzania.
8. Explain the importance of mining industry to the economy of a country.
9. What are the problems which hinder the development of manufacturing industry in Tanzania?
10. Describe ways of conserving water resources.

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2007
GEOGRAPHY

INSTRUCTIONS:

1. *This paper consists of section A and B*
2. *Answer ALL questions in section A and ONLY two from section B.*
3. *Write your Examination number on every page.*
4. *All answers in this section must be written in this paper.*
5. *All writings must be in blue or back ink*
6. *Cell phones and electronic calculators are not allowed in the examination room.*

SECTION A: (70 MARKS)
Answer all questions in this section

1. Reading the following statements carefully and then write the letter of the most correct answer in the box provided against each question.
   (i) The central body of the solar system is
   A. The planets B. The sun C. The moon D. The earth
   (ii) The spinning of the earth on its own axis is known as:
   A. Rotation B. Revolution C. Day and night D. Distance
   (iii) If it is 3.00 pm at Bukoba 33˚E in Tanzania what will be the time at Tehran 50˚E in Iran?
   A. 10.00 am B. 4.08 pm C. 4.32 pm D. 10.00 pm
   (iv) Morogoro at 800m above sea level has a temperature reading of 28˚C. Determine the temperature of Karatu which is located at 1400 metres above see level.
   A. 31.6˚C B. 3.6˚C C. 24˚C D. 24.4˚C
   (v) The side of a mountain facing the direction of wind is known as
   A. Leeward side B. Fore side C. Backward side D. Windward side
   (vi) A ship moves to the west and crosses the International Date Line.
   What happens with regard to time gain or lost.
   A. No time is gained or lost C. One whole day is gained
   B. One whole day is lost D. One whole day is repeated
   (vii) The four seasons which occur on the earth's surface are the result of
   A. Revolution of the earth C. The tilting of the earth on its own axis
   B. Ferrell's law D. Revolution of the earth
   (viii) The big different between the readings of a wet Bulb thermometer and Dry bulb Thermometer indicates that
   A. Humidity is low C. Humidity is high
   B. The Air is saturated with water vapour D. There is low evaporation
   (ix) What is the compass bearing of North North West (NNW)?
   A. 337½˚ B. 048˚ C. 220˚ D. 315˚

2. Match the items in column in A with the corresponding items in column B by writing the letter of correct item in column B against its corresponding number in column A.

COLUMN A	COLUMN B
1. Empowering women	A. One of the factors affecting temperature.
2. Green house effect	B. Living with animals in one shed.
3. Global warming	C. The difference in vertical height between two successive contour lines.
4. Sedentary livestock keeping	D. The process in which female gender is exposed to more human rights and responsibilities.
5. Land reclamation	E. The effect of human activities on environment
6. Vertical interval	F. Involving green plants on the house roof.
7. Oasis	G. Increase in the average temperature of the atmosphere, oceans and landmasses of the earth.
8. Desertification	H. Avoiding female genital Mutilation.
9. Water pollution	I. Unwanted substances mixed with water.
10. Altitude	J. Rearing animals is one permanent area.
	K. Adding chemicals to water in order to purify it.
	L. Turning waste and poor land into useful state.
	M. The capacity of certain gases in the atmosphere to trap heat emitted from the earth's surface.
	N. Desert well.
	O. Pot like holes found along the river bed.

3. Write TRUE against a correct statement or FALSE against an incorrect statement
   i. Lines drawn on a map joining points with the same pressures are called Isotherms ……..
   ii. Merino is one of the types of sheep reared in Australia. ……..
   iii. The growing of the fruits, vegetables and flowers is known as horticulture ……
   iv. A scale is a relationship between map distance and the actual ground distance. ……
   v. The moon generates light during the night. …….
   vi. Over exploitation of forest resources may lead to desertification ……
   vii. PUNJAB is the name given to the rivers namely JALUM, CHANUB, RAVI, SUTLET and BIAS ……
   viii. Winds blow from areas of low pressure to areas of high …….
   ix. Industrialization is an agent of environmental pollution …….
   x. TAZAMA is the railway line running from Dar-es-salaam, Tanzania to Kapiri Mposhi, Zambia. ……..

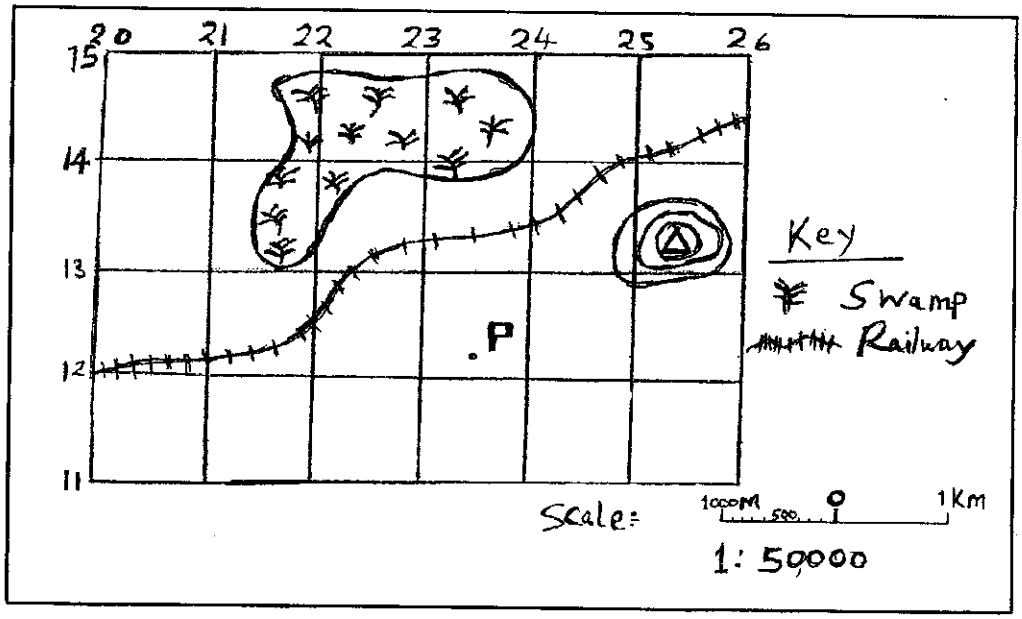
4. (a) Carefully study the climatic data given for station Y and then answer the questions that follow:

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
TEMP˚C	12	13	15	16	19	22	25	26	24	20	17	15
RAINFALL (mm)	150	87	87	60	30	12	00	00	25	75	110	140

   i. What is the annual range of temperature?
   ii. Compute the mean annual temperature.
   iii. Calculate the total amount of rainfall for station Y.
   iv. What type of climate is found in station Y? Give three reasons.

(b)Study carefully the provided map below then answer the questions that follow.

follow:



i. List two ways used by this map to express the scale.
ii. Give the indicators from the map which shows lowland and a highland (any 2)
iii. Why is the railway line not straight from grid reference 260144 to 200144?
iv. Measure the length of a railway line from the grid reference 260144 to 200120
v. Calculate the area covered by the swamp. Give your answer in square kilometres.

5. (a) Name five sources of water.
(b)List down three causes of deforestation
(c) List down any four main Hydro-electric power generating stations in Tanzania.
(d) Mention four factors which influence industrial location.

SECTION B: (30 MARKS)

Answer any two questions from this section. Use the space provided at the end of this section.

6. Explain the negative effects of tourism industry in Tanzania
7. Describe the advantages of developing solar energy technology in Tanzania
8. What are the problems facing fishing industry in East Africa?
9. Suggest ways through which Tanzania can improve the situation of water supply and sanitation
10. Explain the problems facing cotton plantation agriculture in Tanzania

FORM TWO SECONDARY EDUCATION EXAMINATIONS, 2008
GEOGRAPHY

TIME: 2½ HRS
INSTRUCTIONS:

1. *This paper consists of sections A and B*
2. *Answer ALL questions in section A and ONLY two from section B*
3. *Write your examination number on every page of your answer booklet (s)*
4. *ALL answer must be written in the answer booklets (s) provided*
5. *ALL writing must be in black or blue ink*
6. *Cell phones and electronic calculators are not allowed in the examination room.*

SECTION A: (70 MARKS)

1. Read the following statements carefully and then write the letter of the correct answer
i) The earth's revolution around the sun takes
A. 366 days B. 365¼ days C. 365½ days D. 365 days
ii) What is the time for Rio de Janeiro (43˚W) when it is 3:30 pm at Dar es Salaam (39˚E)?
A. 3:14 pm B. 3:58 pm C. 8:58 am D. 10:02 am

iii) The feature resulting from eruption of molten rocs of the mantle is a:
A. Block mountain B. Fold mountain C. Volcanic mountain D. Residual mountain

iv) A large part of the Southern Hemisphere is
A. Open water B. Land mass C. Volcanic island D. Dark soil water

v) Which of the following pairs is not a correct association?
A. Isobar and pressure C. Isotherms and temperature
B. Isobar and sunshine D. Isohyets and rainfall

vi) What is the temperature of Arusha 1400m above sea level when it is 28˚C at Tanga 800m above sea leave?
A. 31.6˚C B. 3.6˚C C. 24˚C D. 24.4˚C

vii) Water vapour changes into water droplets in the process known as:
A. Evaporation B. Saturation C. Condensation D. Sublimation

viii) The condition of atmosphere recorded over a long period of time is:
A. Weather B. Climate C. Temperature D. Atmospheric temperature

ix) Grid reference B is 361585. What are the numbers of the Eastings and Northings?
A. 585 are Eastings and 361 are Northings
B. 36.1 are Eastings and 58.5 are Northings
C. 36 are Eastings and 58 are Northings
D. 361 are Eastings and 585 are Northings

x) The following is the outcome of the economic importance of land reclamation:
A. Soil erosion and fertility C. Land erosion and soil erosion
B. Land degradation D. Increased land production capacity

2. Match the items in column A with those in column B, by writing the letter of the correct against its corresponding item number in column A

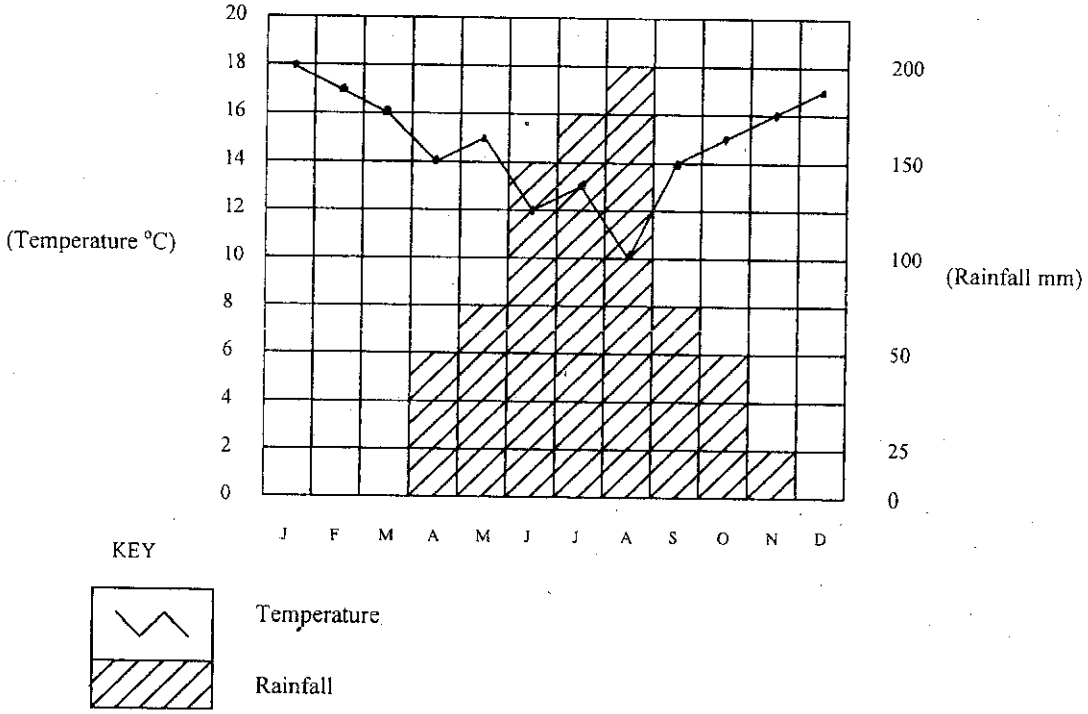
COLUMN A	COLUMN B
i) A long narrow depression found in the ocean	A. Bush fallowing
ii) It is used for cooking, heating and production of electricity	B. Mining
iii) It is formed through vertical rising of moist air current	C. Convectional rainfall
iv) It involves processing and changing the materials in order to make new products	D. Drainage
v) A system of farming in which a farmer abandons an area to regain its fertility	E. East, West, North and South
vi) It is determined by starting with longitude followed by latitudes	F. Cooking oil
vii) Mixture of snow and rain	G. Indicate latitude number
viii) Removal of water from the land surface	H. Irrigation scheme
ix) The process of extracting minerals from the ground	I. Ocean trenches
x) This is the result of tension in the earth's crust.	J. Position of a place on a map
	K. Rift valley
	L. Secondary industries
	M. Natural gas
	N. sleet

3. Write TRUE or FALSE against the respective number of RIGHT or WRONG statement

i) Longitudes are either measured north or south of the equator.
ii) Pollution means the addition of excessive waste materials into the air water or land.
iii) Bush fire is not an agent of soil erosion
iv) Agriculture in east Africa is highly associated with unskilled labour force.
v) A bearing of a point on a map can be found only when the north is given.
vi) Acid rainfall leads to the addition of soil fertility.
vii) Tributaries are found in the river mouth.
viii) The sun is the source of all energy on the earth.
ix) A heavily forested area can lead to the availability of less rainfall.

x) Ranches are purposely used for livestock rearing and crop production

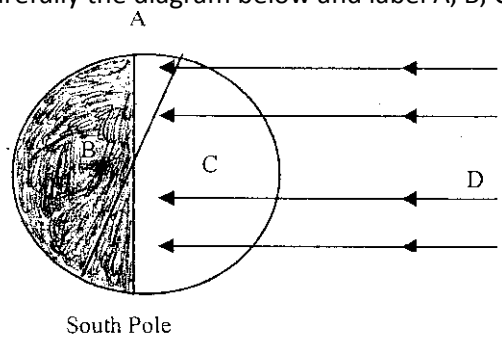
4. (a) Carefully study the climatic graph given and then answer the questions that follow:



i) Calculate the mean annual temperature
ii) What is the annual range of temperature
iii) Calculate the total rainfall for the station
iv) Which month has the highest temperature?

(b) Mention two ways in which relief features on a map may be represented
(c) List down four essential of a map

5. (a) Study carefully the diagram below and label A, B, C and D



(b) List down any two aims of land reclamation in the Netherlands
(c) Mention two main sources of energy in Tanzania
(d) Mention two factors affecting temperature of a place

SECTION B: (30 MARKS)

Answer any two questions from this section

6. What are the problems that limit the development of mining industry in Tanzania?
7. Describe the ways of improving the subsistence small scale agriculture.
8. Explain how Tanzania is going to benefit from natural gas exploitation.
9. Why is navigation difficult in most African rivers?
10. Give suggestions on how to solve the problem of desertification.

FORM TWO SECONDARY EDUCATION EXAMINATINS, 2009
GEOGRAPHY

TIME: 2½ HRS

INSTRUCTIONS:

1. *This paper consists of sections A and B.*
2. *Answer ALL questions in section A and ONLY TWO from section B*
3. *Write your examination number at the top right hand corner of every page.*
4. *ALL answers must be written in the spaces provided*
5. *ALL writing must be in black or blue ink*
6. *Cell phones and calculators are not allowed in the examination room.*

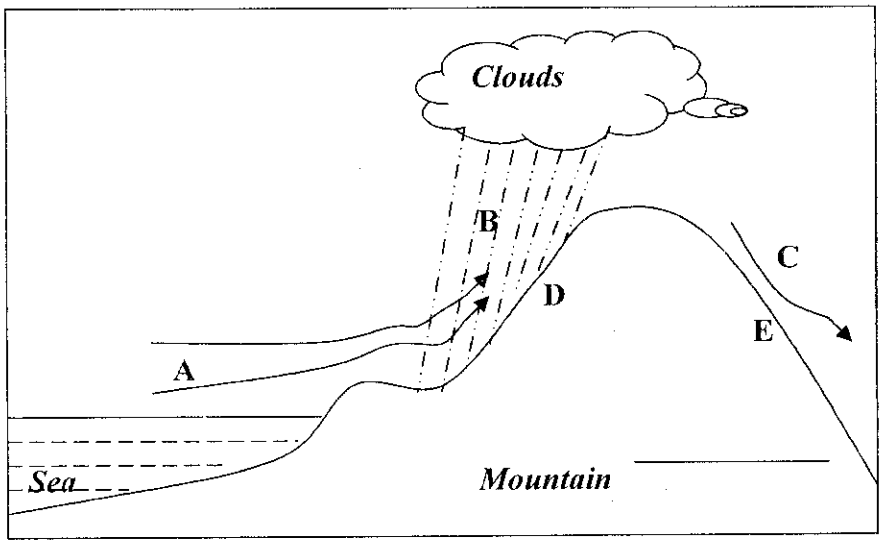
SECTION A: (70 MARKS)

1. For each of the following questions, write the letter of the correct answer in the box provided
   i) Geography is the study of
      A. Soil and the atmosphere
      B. Human activities and his environment
      C. The physical environment
      D. The human environment
   ii) If is 3:00 pm at Mwanza 33˚ E in Tanzania, what will be the time at Bangladesh 50˚E?
      A. 10:00 am B. 4:32 pm C. 4:08 pm D. 5:00 am
   iii) The distance between two crests is called
      A. Anticline B. Syncline C. Trough D. Wave length
   iv) Pastoralism where by animals are given feeds in shed with out making them go out in the field is called
      A. Zero grazing
      B. Nomadic pastoralism
      C. Mixed pastoralism
      D. Sedentary pastoralism
   v) If the temperature at Morogoro 800m is 28˚C, what will be the temperature at Karatu 1400m above sea level?
      A. 40.0˚C B. 31.6˚C C. 24.4˚C D. 24.3˚C
   vi) Water and air currents do not move in straight lines due to spinning effect of the earth. The term used to describe this is:
      A. Deflection B. Reflection C. Direction D. Refraction
   vii) WSW compass direction is equivalent to the following compass bearing:
      A. 247˚ B. 135˚ B. 225˚ D. 250˚
   viii) Which of the following mountains is a block mountain?
      A. Atlas B. Ruwenzori C. Rocky D. Drakensberg
   ix) If the ground distance between two points is 13 km, what will be the map distance if the scale is 1cm to 0.5 km?
      A. 13.0 cm B. 6.5 km C. 13.0 km D. 6.5 cm
   x) Which of the following resources are non-renewable?
      A. Biogas, oil and wind
      B. Coal, gas and oil
      C. Geo-thermal, biogas and solar energy
      D. Wind, coal and electricity
2. Match the items in column A with those in column B by writing the letter of the correct answer against its corresponding item number in column A in the box provide below:

Column A	**Column B**
i) Adding excess waste substance in the environment	A. Altitude
ii) Common rainfall in the tropics	B. Afforestation
iii) Objects with leading heads and bright tails	C. Block Mountains
iv) Refers to the process of preserving water for proper or sustainable use.	D. Block Mountains
v) The wind which blows from the sea to the land	E. Comets
vi) The feature resulting from the eruption of molten rocks	F. Convectional rainfall
vii) The removal of the top fertile layer of the soil	G. Cyclonic rainfall
viii) The stream at the river mouth	H. Deforestation
	I. Distributaries
	J. Latitudes
	K. Land breeze

ix) The process of cutting down trees without replacing x) Temperature decreases at the rate of 0.6˚C for every 100m	L. Pollution M. Sea breeze N. Soil erosion O. Tributaries P. Volcanic Mountains Q. Water conservation R. Water management

3. Write TRUE if the statement is correct or FALSE if the statement is not correct against each of the following statements:
   i) Agulhas is a good example of a warm current……
   ii) Pests and diseases are not common problem facing the farmers in Tanzania……..
   iii) The Earth rotates from East to West……
   iv) Transportation involves the movement of goods, people and services from one place to another…….
   v) The energy produced due to the movement of water is biogas……..
   vi) A key acts as a dictionary of a MAP……
   vii) Salinity of the ocean water varies from to place due to the different rates of evaporation……..
   viii) Seasons are the result of earth rotation……..
   ix) All latitudes are great circles……
   x) The main crop produced in Gezira irrigation scheme in Sudan is cotton……..
4. (a) Study carefully the diagram below then answer the questions that follow:



   i) Name the type of rainfall labeled B and the area where it usually occurs……..
   ii) A stands for……
   iii) C stands for……
   iv) D stands for……
   v) E stands for……..

   (b) Mention two ways of locating positions on a map.

   (c) Find the bearing or direction of the following
   i) NNW……
   ii) 045˚……
   iii) 000˚ and 360˚……
5. (a) Study carefully the climatic data given for station K and answer the questions that follow:

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
TEMP	25.0	25.0	24.6	24.5	24.2	24.0	24.0	24.0	24.0	24.0	24.4	24.5

(˚C)												
RAINFALL (mm)	40.6	68.8	150.0	230.0	206.0	114.0	64.0	84.0	194.0	226.0	150.0	50.8

i) Calculate the mean annual temperature
ii) Calculate the total annual rainfall for the station
iii) Give the annual range of temperature for the station
iv) Suggest the type of climate for the station
v) Indicate the month which receive:
Highest rainfall……
Lowest rainfall……

(b) Define the following terms as used in Geography
i) Agriculture
ii) Topographical map

c) List two conditions necessary for establishing Hydro- Electrical power.

SECTION B: (30 MARKS)

Answer ANY TWO questions from this section

6. Write a short essay about problems which face the development of the Transport Sector in Tanzania
7. Explain the achievements that were brought by the Tennessee Valley Authority in North America.
8. Explain how forests are endangered in Tanzania and suggest measures that can save them
9. What are the negative results of tourism in Tanzania?
10. What are the problems caused by the mining industry in Tanzania?

FORM TWO SECONDARY EDUCATION EXAMINATINS, 2010
GEOGRAPHY

TIME: 2½ HRS

INSTRUCTIONS:

1. *This paper consists of sections A and B.*
2. *Answer **ALL** questions in section A and only **TWO** from section B.*
3. *Write your examination number at the top right hand corner of every page.*
4. ***ALL** writing must be in black or blue ink **EXCEPT** diagrams which must be drawn in pencil*
5. *ALL answers must be written in the spaces provided*
6. *Cell phones and Calculators are not allowed in the examination room.*

SECTION A: (70 Marks)

1. For each of the following items choose the best answer from the given alternatives and write its letter in the box provided.
   (i) Which one of the following planets has shortest orbit around the Sun? ☐
   A. Earth B. Mercury C. Pluto D. Venus
   (ii) People living in Dar es Salaam see the sun earlier than in Kigoma. What does this fact indicate?
   A. People in Kigoma sleep longer.
   B. The earth rotates from East to West. ☐
   C. The earth rotates from West to East.
   D. There are many hills and mountains in Kigoma. ☐
   (iii) Which one of the following is not an element of weather?
   A. Altitude B. Cloud cover C. Precipitation D. Wind
   (iv) The boundary between one drainage basin and the next is known as:
   A. basin zone B. distributaries C. tributaries D. water divide. ☐
   (v) The Solar eclipse occurs when:
   A. one body passes between the two bodies
   B. the earth passes between the moon and the sun
   C. the earth passes between the sun and the moon ☐
   D. the moon passes between the earth and the sun

(vi) One of the following explains on how plants maintain continuous growth in the equatorial climate:
A. evenly distribution of rainfall and constant temperature
B. temperature are always high
C. there is an abundance of water
D. there is no strong wind

(vii) The mantle is the second layer of the earth which consists of:
A. iron and manganese silicates B. iron and nickel
C. sial and sima D. uranium and iron

(viii) One of the following is the agricultural method used to restore back the fertility of the soil:
A. crop rotation by planting leguminous plants
B. monoculture system of agriculture
C. terracing system
D. the use of tractor during cultivation and harvesting

(ix) As someone ascends in altitude the temperature tends to:
A. decrease and increase at the same time
B. decrease at the rate of 0.6°C for every 100 metres
C. increase at the rate of 0.6°C
D. remain constant

(x) Identify the correct process of rain formation.
A. cooling, evaporation, condensation and precipitation
B. evaporation, cooling, condensation and rainfall
C. evaporation, cooling, precipitation and rainfall
D. evaporation, precipitation, condensation and cooling

2. Match the items in Column A with those in Column B by writing the letter of the correct answer below its corresponding item number in Column A in the box provided.

COLUMN A	COLUMN B
(i) Depression containing water found in the desert	A. Bearing and distance
(ii) Imaginary line that divides the Earth into two halves from north to south	B. Communication
(iii) Is one of the methods used to locate places on the map	C. Equinoxes
(iv) It is a leading producer of oil in Africa	D. Geysers
(v) It is applied in deep mining	E. Greenwich
(vi) The period when the sun is overhead at the equator	F. Libya
(vii) The transmission of messages	G. Local mean time
(viii) The type of climate found in areas between 30° and 45° in the Northern hemisphere	H. Mediterranean
(ix) Variation of time from place to place adopted the time from a certain meridian	I. Nigeria
(x) Wood, nuclear energy, natural gas and coal	J. Non-renewable resources
	K. Oasis
	L. Shaft
	M. Standard time
	N. Transportation
	O. Tropical grassland

Answers:

COLUMN A	(i)	(ii)	(iii)	(iv)	(v)	(vi)	(vii)	(viii)	(ix)	(x)
COLUMN B										

3. The following statements are either correct or not correct. Write **TRUE** if the statement is correct or **FALSE** if the statement is not correct, against each of the following statements:
(i) Afforestation process decreases global warming .....
(ii) Aphelion is the time when the earth is nearest to the sun .....
(iii) Maximum thermometer filled with alcohol is used to determine the highest temperature reached in a day .....

(iv) Population pressure especially in big cities in Tanzania has not accelerated the improvement of social services .....

(v) Representative Fraction scale (R.F) is a way of expressing the scale of a map by the use of word statements .....

(vi) Snow refers to tiny droplets suspended immediately above the ground .....

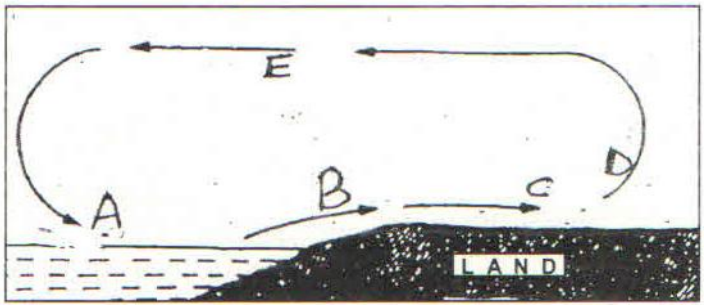
(vii) Tennessee Valley Authority (T.V.A) was established in order to control floods and soil erosion .....

(viii) Tourism is an activity which involves enjoyment of attractive sceneries .....

(ix) The only continent crossed by both the Tropic of Cancer and Tropic of Capricorn is Europe .....

(x) There is more water surface in the southern hemisphere than in the northern hemisphere.

4. (a) Study carefully the diagram below then answer the questions that follow:



(i) The type of breeze shown on the diagram above is .....

(ii) A. stands for .....

B. stands for .....

C. stands for .....

D. stands for .....

E. stands for .....

(b) Explain three ways used to measure areas on maps.

(c) Describe the importance of a map.

(d) Define the following terms as used in a map:

(i) Eastings (ii) Northings

(e) Convert the following statements into R.F. scale:

(i) One centimetre on the map represents half a kilometre on the ground

(ii) One centimetre on the map represents one kilometre on the ground

5. (a) Study carefully the climatic data given for station X and answer the questions that follow:

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
TEMP. ℃	21.7	21	20.6	18.9	16.0	13.9	13.9	16	20	22.2	22.2	22.2
RAINFALL (mm)	149.7	101.6	78.7	17.8	7.6	0	0	0	2.5	22.9	83.9	132

(i) Name the type of climate for station X

(ii) Explain three climatic characteristics for station X.

(iii) What are the economic activities conducted in station X?

(iv) Which crops can be grown in station X?

(v) What natural trees can be found in this climate?

(b) Define the following geographical concepts:

(i) Mixed farming (ii) Volcanic mountains

(c) Name six factors necessary for establishment of manufacturing industries.

(d) Mention two main sources of energy in Tanzania.

SECTION B: (30 Marks)

Answer any TWO questions from this section

6. Describe the problems facing agriculture in Tanzania.
7. Geographers prefer watching weather forecasting news everyday. Do they often benefit by watching such news? Give reasons for your answer.
8. Briefly discuss the importance of pastoralism in East Africa.
9. Water plays a great role in sustaining life in our planet earth. Do you agree? Why?

10. What factors influenced ship building in Japan?

FORM TWO SECONDARY EDUCATION EXAMINATINS, 2012
GEOGRAPHY

TIME: 2½ HRS
INSTRUCTIONS:

1. *This paper consists of sections A and B.*
2. *Answer **ALL** questions in section A and any **TWO** from section B.*
3. *Write your examination number at the top right corner of every page.*
4. ***ALL** answers must be in black or blue ink **EXCEPT** diagrams which must be in pencil*
5. ***ALL** answers must be written in the spaces provided*
6. *Cellphones and Calculators are not allowed in the examination room.*

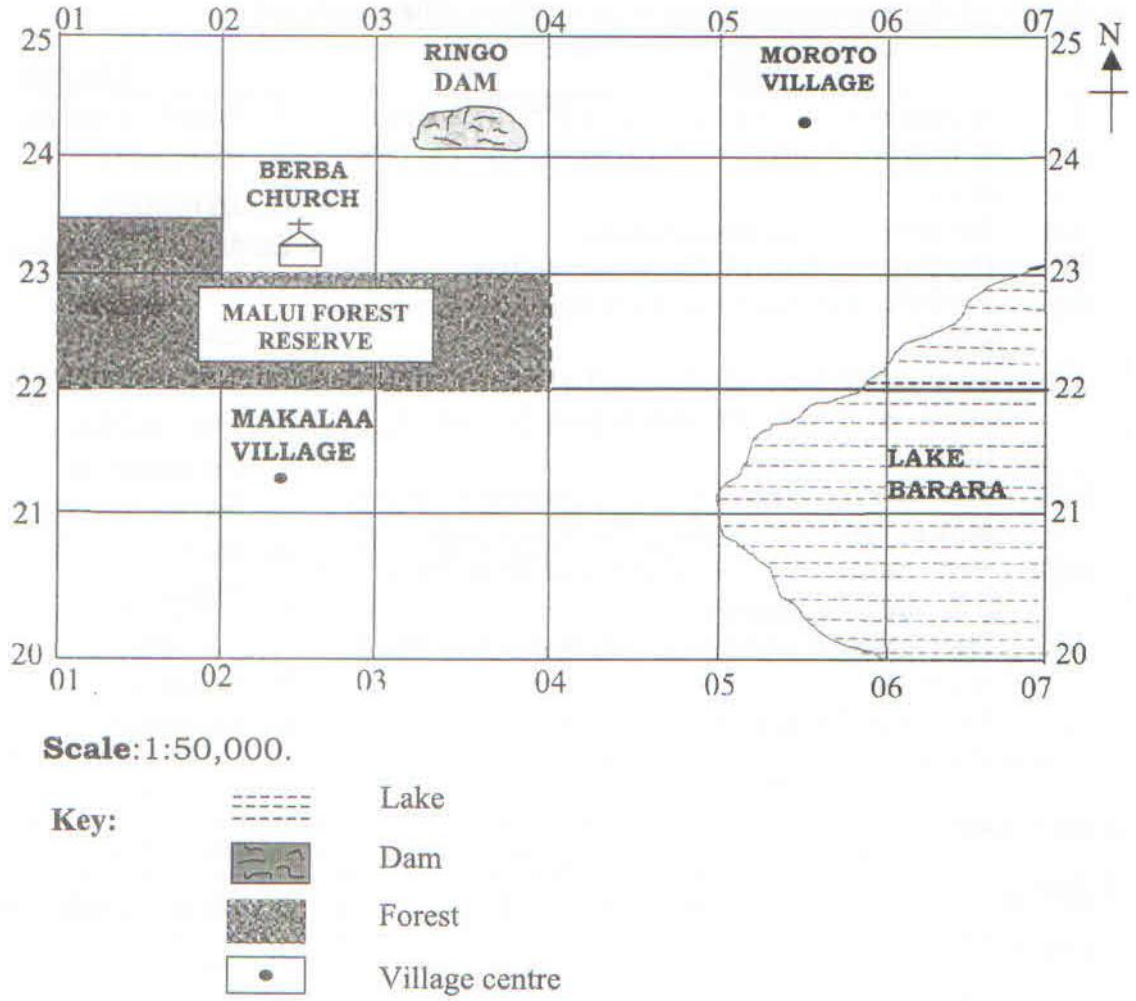
SECTION A: (70 MARKS)

1. For each of the following items choose the correct answer from the given alternatives and write its letter in the box provided.
   (i) Movement of farmers seasonally with their animals from one grazing ground to another in search for pasture and water:
   A. nomadism B. pastoralism C. sedentary farming D. transhumance
   (ii) An angular distance measured in degrees East and West of the Prime Meridian:
   A. Equator B. Latitude C. Longitude D. Tropic of Cancer
   (iii) The occurrence of summer, winter, autumn and spring is a result of:
   A. Ferrel's law B. revolution of the earth
   C. rotation of the earth D. tilting of the earth on its axis
   (iv) Summer months in the Northern Hemisphere are:
   A. December, January and February B. June, July and August.
   C. March, April and May D. September, October and November
   (v) One of the common characteristics between nomadic pastoralism and shifting cultivation is that people have:
   A. advanced in technology B. good standard of living
   C. high crop production D. no permanent settlement
   (vi) Which among the following statements explains the importance of Geography?
   A. Acquire skills of mechanism
   B. Develop awareness of living organisms
   C. Expand our knowledge of technology
   D. Gain skills of observation, measuring and recording
   (vii) The wise use and control of water resources is known as water:
   A. controlling B. development C. management D. resources
   (viii) The following features are found in the ocean:
   A. basin, ridge, plain and dune B. continental shelf, continental slope and trench
   C. ridge, basin, plateau and waterfalls D. trench, ridge, plain and dune
   (ix) The extraction of minerals close to the earth is referred to as:
   A. alluvial mining B. open cast mining C. placer mining D. underground mining
   (x) Although the earth is in motion all the time, we do not feel its motion. This is due to the reason that we are:
   A. in the earth B. moving against the motion C. moving with it D. On the earth
2. Match each item in List A with a response in List B by writing its letter below the number of the corresponding item in the table provided.

LIST A	LIST B
(i) A depression containing water in a desert	A. Block mountains
(ii) A result of tensional forces in the earth's crust	B. Contours
(iii) Active volcanic mountains	C. Irrigation
(iv) Partial shadow of the solar eclipse	D. Mediterranean climate
(v) Periodic fall and rise in level of water in sea	E. Moon

(vi) The conditions of atmosphere which occur at a specific place and period of time	F. Oasis
(vii) The lines drawn on the maps connecting points with equal heights above sea level	G. Oldonyo Lengai
(viii) The main source of light and heat that the planets receive	H. Penumbra
(ix) The method used in deserts for watering vegetation	I. Residual mountains
(x) Very hot days and cold nights	J. Savannah climate
	K. Sun
	L. Tides
	M. Umbra
	N. Usambara
	O. Weather

3. The following statements are either correct or not correct. Write **TRUE** if the statement is correct or **FALSE** if the statement is not correct.
   (i) Circumnavigation of the earth is not the evidence to prove that the earth is spherical .....
   (ii) Crossing the International Date Line causes the gaining or losing a day ……
   (iii) Forests are sources of medicine ……
   (iv) Geography deals with the earth's features only …….
   (v) Light industries involve manufacturing of heavy and bulky products …….
   (vi) Magnetic compass is used to determine the position of the sun in a day …….
   (vii) One of the conditions which favour the development of tourism is that of good weather and climate ……..
   (viii) People in Coast Region see the sun earlier than those of Kagera due to the earth's revolution from East to West ……..
   (ix) The main crop produced in the Gezira Irrigation Scheme is cotton ……
   (x) The time within a particular area is termed as Local Mean Time (LMT) …..
4. Study the map extract of Town Y and answer the questions that follow:



(i) Calculate the area of Lake Barara in square Kilometres.
(ii) Write the grid reference of Moroto and Makalaa villages.
(iii) What are the features found in the following grid references?
(a) 025232 (b) 035242
(iv) Mention four points on the economic importance of Lake Barara to the people living around the lake.

5. (a) Study carefully the climatic data given for Mtoni Village and then answer the questions that follow:

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
Temperature (°C)	25	25	26	26	24	24	25	26	26	24	24	26
Rainfall (mm)	170	175	160	180	184	179	177	138	100	97	100	125

(i) Calculate the annual range of temperature.
(ii) Give the mean annual temperature.
(iii) Calculate the total annual rainfall.
(iv) Name the type of climate.
(v) Explain two climatic characteristics of the village.
(vi) Suggest the type of crop that can be grown.

(b) (i) What is the International Date Line?
(ii) Why is the International Date Line Zigzag?

(c) Explain the following geographical terms:
(i) Doldrums
(ii) Lunar eclipse
(iii) Planets
(iv) Weather station

(d) Differentiate the following geographical terms:
(i) Revolution and rotation

(ii) Aphelion and perihelion
(iii) Plateau and mountains
(iv) Small scale map and large scale map.

SECTION B: (30 MARKS)

6. An investor from Japan wants to establish a manufacturing industry in Tanzania. Explain five points on the expected economic importance of the industry to the people of Tanzania.
7. What are five effects of rapid population growth on small scale agriculture?
8. Briefly explain how each of the following factors affects water supply to the society.
   (i) Climate (ii) Distance from the water source (iii) Government support (iv) Education level among the people (v) Water pollution.
9. Suggest five measures to be taken to conserve forest in Tanzania.
10. (i) What is tourism?
    (ii) Explain four negative impacts of tourism.

FORM TWO SECONDARY EDUCATION EXAMINATINS, 2013

GEOGRAPHY

TIME: 2½ HRS

INSTRUCTIONS:

1. *This paper consists of sections A and B.*
2. *Answer **ALL** questions in section A and any **TWO** from section B.*
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5. ***ALL** answers must be written in the spaces provided*
6. *Cellphones and Calculators are not allowed in the examination room.*

SECTION A: (70 MARKS)

1. For each of the following items choose the correct answer from the given alternatives and write its letter in the box provided.
   (i) Branches of Geography include:
   A. human, economic and regional B. physical, regional and practical
   C. practical, human and regional D. practical, environmental and regional
   (ii) The arrangements of the planets and solid objects in space in relation to the position from the sun is referred to as solar:
   A. energy B. panels C. power D. system
   (iii) The furthest position of the earth from the sun is known as:
   A. aphelion B. equinox C. perihelion D. solstice
   (iv) If the time at place X (45°E) is 10.00a.m, what will be the time of place Y 45°W)?
   A. 10.00pm B. 10.00am C. 04.00pm D. 04.00am
   (v) Which of the following gives the proof that the earth is spherical in shape?
   A. Circumnavigation of the earth, solar eclipse and lunar eclipse
   B. Great circles, longitudes and small circles
   C. Lunar eclipse, the planets and the earth's orbit
   D. Ship's visibility, lunar eclipse and aerial photograph.
   (vi) The features resulting from eruption of molten rocks are:
   A. block mountains B. fold mountains C. residual mountains D. volcanic mountains
   (vii) The major feature rising above the surface of ocean water and important for tourism is called:
   A. continental shelf B. continental slope C. ocean island D. ocean plain
   (viii) The condition of the atmosphere recorded over a long period of time is:
   A. climate B. pressure C. temperature D. weather
   (ix) A representative scale of 1:250,000 can be represented by a statement scale of:
   A. 2cm to 2.5km B. 2cm to 25km C. 1cm to 2.5km D. 1cm to 250,000km
   (x) The Grid reference of point B is 361585. What are the numbers of the Eastings and Northings?

A. 585 are Eastings and 361 are Northings
B. 361 are Eastings and 585 are Northings
C. 36.1 are Eastings and 58.5 are Northings
D. 36 are Eastings and 58 are Northings

2. Match each item in List A with a correct response in List B by writing its letter below the number of the corresponding item in the table.

LIST A	LIST B
(i) A line where a date is changed or where a calendar day begins	A. Benguela
(ii) A place where weather elements are measured and recorded	B. Bush fallowing
(iii) A system of farming in which a farmer leaves a land so as to regain its fertility	C. Core
(iv) Equator and all longitudes	D. Crop rotation
(v) Lines joining places with the same amount of sunshine.	E. Distributaries
(vi) Small streams that branch off from the main stream before they enter the sea or lake.	F. Equatorial
(vii) Solar system including all stars.	G. Galaxy
(viii) The innermost part of the earth.	H. Great circles
(ix) The type of climate found in area between 5° North and 5° South.	I. International date line
(x) Warm ocean current.	J. Isohels
	K. Mozambique
	L. Planet
	M.Tributaries
	N. Tropical
	O. Weather station.

3. Each of the following statements is either correct or not correct. Write **TRUE** if the statement is correct or **FALSE** if the statement is not correct.
   (i) Global warming is the result of environmental pollution.....
   (ii) Good railway and road networks stimulate trade.....
   (iii) Grid references are used to show relief features on the map.....
   (iv) Increase of population can cause intensive exploitation of forest resources.....
   (v) Industrialization is an agent of air pollution.....
   (vi) International tourism involves people travelling to places within the country.....
   (vii) Over exploitation of forest resources may lead to desertification.....
   (viii) The distance between homes and water sources affects women.....
   (ix) The energy produced due to movement of water is biogas.....
   (x) The hot deserts have a very small diurnal range of temperature.....
4. (a) Draw a cross section of relief features of the ocean floor and show the following features: A. Seal level B. Ocean trench C. Ocean ridge D. Ocean plain E. Oceanic island F. Continental shelf.
   (b) Mention four ways of locating position on a map.
   (c) Describe four major aims of land reclamation.
   (d) Briefly define the following geographical terms:
      (i) An anemometer
      (ii) Deforestation
      (iii) Geography
      (iv) Latitude
      (v) Rotation
      (vi) The true North
5. (a) Study carefully the climatic data given for station Y and then answer the questions that follow:

MONTHS	J	F	M	A	M	J	J	A	S	O	N	D
Temperature (°C)	28	27	27	27	28	28	26	25	24	26	27	28
Rainfall (mm)	2400	2100	2050	1750	1700	1750	1660	1500	1700	1805	2100	2300

   (i) Calculate the annual mean temperature.
   (ii) Calculate the amount of annual rainfall.

(iii) Determine the annual range of temperature.
(iv) Name three cash crops that can be grown in the area at station Y.
(v) With two reasons suggest the type of climate at station Y.

(b) Identify one place in Tanzania where the following minerals are found:
(i) coal (ii) Gold (iii) Minerals salts (iv) Natural gas

(c) Briefly explain four problems facing transport industry in East Africa.

(d) Suggest four factors favouring the development of tourism in Tanzania.

6. What are the problems facing natural gas exploitation in Tanzania?
7. Describe the factors to be considered when establishing a manufacturing industry.
8. Explain the ways that our country can use to reduce the use of wood fuel.
9. What are the different uses of water?
10. Briefly explain the problems facing Rufiji Basin Development Authority (RUBADA).

SUGGESTED ANSWERS
NECTA – FTSEE 1999

SECTION A:

1. Matching items

LIST A	i	ii	iii	iv	v
LIST B	H	C	G	B	A

2. TRUE or FALSE

LIST A	a	b	c	d	e	f	g	h
LIST B	TRUE	TRUE	TRUE	FALSE	TRUE	FALSE	FALSE	FALSE

3. A, 4. B, 5. C, 6. A, 7. A, 8. B, 9. B, 10. D, 11. C, 12. C

13. Four factors which can affect the temperature of a place are:
- ✓ Altitude
- ✓ Latitude
- ✓ Distance from the sea
- ✓ Ocean currents
- ✓ Prevailing winds
- ✓ Cloud cover

14. One of the essentials of a map which defines the symbols and signs or details of a map is **KEY**.

15. If 32ºF is equivalent to 0º

(a) 40ºC is equivalent to ?ºF

Procedures:

$F = {}^{9}/_{5}C + 32$
$= ({}^{9}/_{5} \times 40) + 32$
$= 72 + 32$
$= 104ºF$

Therefore, 40ºC is equivalent to 104ºF

(b) 100ºC is equivalent to ? ºF

Procedures:

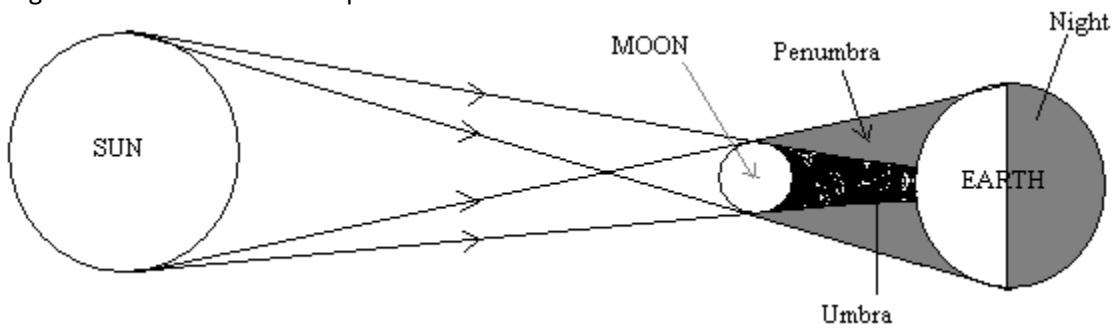
$F = {}^{9}/_{5}C + 32$
$= ({}^{9}/_{5} \times 100) + 32$
$= 180 + 32$
$= 212ºF$

Therefore, 100ºC is equivalent to 212ºF

16. Four countries through which the Nile River flows are:
- ✓ Uganda
- ✓ Sudan

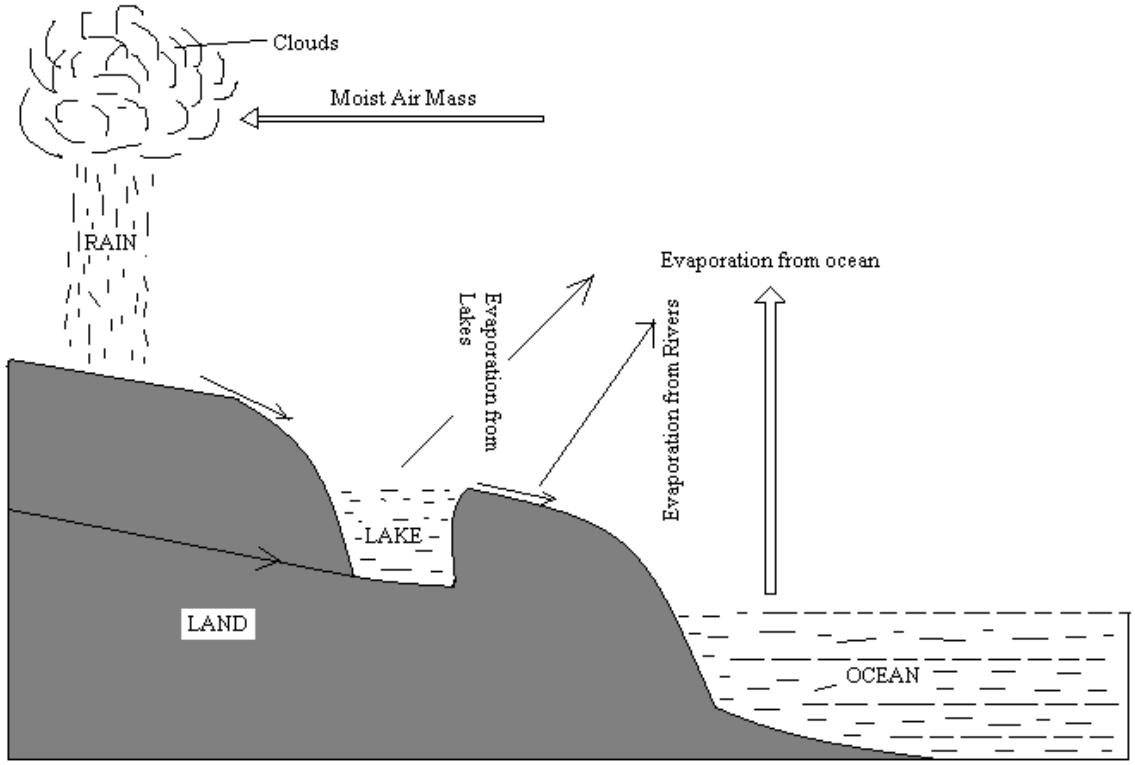
- ✓ Ethiopia
- ✓ Egypt

17. Four economic uses of forest:
    - ✓ Source of rainfall
    - ✓ Source of power e.g. charcoal and fire wood
    - ✓ Source of timber (building materials)
    - ✓ Source of medicines.
    - ✓ Forest protects water sources – which can be used for irrigation in plantations.
    - ✓ They attract and make beautiful scenery on landscapes - leading to tourism industry.
    - ✓ Home of bees – which produce honey.
18. Diagram to illustrate solar eclipse:



19. (a) The process of rain formation from rivers, lakes and oceans:
    - o Solar energy changes water from rivers, lakes and oceans to water vapour
    - o Water vapour rises up and cools to form clouds.
    - o Condensation takes place to form water droplets which falls as rain

Diagram for rain formation



(b) Matching items

GROUP A	a	b	c	d	e	f	g
GROUP B	6	5	1	7	9	12	16

SECTION B:

20. The importance of Tourism in Tanzania:

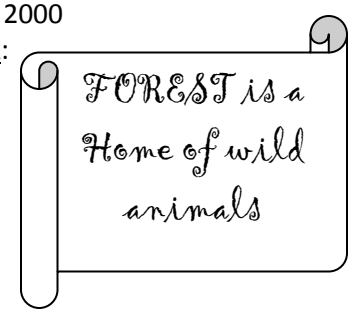
- ☑ It provides employment to the people in hotels, guiding section, game parks and travelling agents.
- ☑ Source of foreign currency
- ☑ It provides opportunity for recreational or enjoyment.
- ☑ It leads to the introduction of new culture.
- ☑ Development of infrastructure
- ☑ Promotes international co-operation
- ☑ Encourages national economic growth
- ☑ Encourages the growth of towns e.g. Bagamoyo, Amboni, Kyela, Mbozi
- ☑ Provides market for other products e.g. agricultural and industrial products, crafts, etc.
- ☑ It promotes international respectability of our country. For instance, today Tanzania is well known for flourishing tourism industry in game reserves and national parks.

21. Factors influencing the location of industries in Tanzania:
    - ➢ Raw material sources
    - ➢ Easy transport and communication
    - ➢ Easy marketing
    - ➢ Near the source of labour
    - ➢ Availability of power
    - ➢ Accessibility to the markets
    - ➢ Land availability which should be far from residential areas
    - ➢ Government policies
22. (a) Land reclamation is done to make the unproductive or waste land into useful. E.g. The land which is under water or contains a lot of stones you can remove the stones and water for:
    - ✓ Cultivating the land and producing crops
    - ✓ Making the area for settlement
    - ✓ Constructing industries
    - ✓ Make roads for human use

    (b) The stages of reclaiming land in Netherlands:
    - » Great dykes were built across the North Sea
    - » The land was divided into Polders
    - » The water inside the polders was pumped out to expose the land.
    - » The exposed land was surveyed to find out the type of soil in the area
    - » Reeds were planted to help dry the land
    - » The reeds are cut down to make the land ready for use

NECTA – FTSEE 2000

SECTION A:



1. Multiple choice

QUESTIONS	i	ii	iii	iv	v	vi	vii
ANSWERS	d	a	a	c	b	a	b

2. Matching items

COLUMN A	i	ii	iii	iv	v
COLUMN B	C	B	F	K	J

3. True or False

QNS.	a	b	c	d	e	f	g	h
ANS.	FALSE	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	TRUE

4. To convert
   (a) $176^{o}F$ into ^{o}C
   Procedures:

C = 5/9 (F – 32)
C = 5/9 (176 – 32)
C = 5/9 x 144
C = 80°C
Therefore, 176°F is 80°C

(b) 40°C into °F
Procedures:
F = 9/5C + 32
F = (9/5 x 40) +32
F = 72 + 32
F = 104°F
Therefore, 40°C equals 104°F

5. (i) The mean annual temperature

$$= \frac{25.5 + 25.8 + 26 + 26 + 27.3 + 26.5 + 26.5 + 26.1 + 26.8 + 26.3 + 25.7 + 26.8}{12}$$

$$= \frac{315.3}{12}$$

= 26.275°C
Therefore, the mean annual temperature is 26.3°C

(ii) The annual range of temperature
= Highest temperature – Lowest temperature
= 27.3°C – 25.5°C
= 1.8°C
Therefore, the annual range of temperature is 1.8°C

(iii) The annual rainfall for the station
= Sum of rainfall throughout the year
= 246 + 186 + 185 + 198 + 184 + 176 + 174 + 197 + 188 + 206 + 161 + 266
= 2367mm
Therefore, the annual rainfall for the station is 2367mm

(iv) The type of climate for the station is **Equatorial climate**

6. Reasons for suggesting the type of climate for station A above
   - ✓ Small annual range of temperature
   - ✓ Rainfall is high throughout the year.
7. Four ways of giving the location of a place
   - ✓ Using name of a place
   - ✓ Using Longitudes and Latitudes
   - ✓ Using Grid reference
   - ✓ Direction (with reference to north)
   - ✓ Compass bearing
   - ✓ Political and administration boundaries.
8. The major characteristics of small scale agriculture
   - ✓ Low capital is used
   - ✓ Scattered small plots
   - ✓ Hand to mouth production, i.e. no or little surplus for sale
   - ✓ Low technology is used in production. Poor tools are used in production (less expensive) e.g. hand hoes, pangas
   - ✓ Uses family labour. Women are the main producers but have no rights of inheriting or owning the land.
   - ✓ The farmers are unskilled. Hence use poor farming methods.
   - ✓ Poor disease and pest control.
   - ✓ There is poor transport and communication network.
9. *Sedentary livestock keeping is a system of farming in which the farmer keeps the animals while settled permanently in one place*. He does not move from place to place. The Advantages of sedentary animal keeping includes the following:

- ✓ Easy to control diseases and animal parasites because herds of different people do not come into contact
- ✓ High production of milk or meat because animals are healthy
- ✓ Easy to manage because animals kept are few
- ✓ The farmer gets a balanced diet since there is availability of proteins and carbohydrates.
- ✓ Manure is stored for other uses
- ✓ The farmers does not waste time moving from place to place
- ✓ The farmer can engage in other economic activities
- ✓ It helps in conserving the environment

SECTION B:

10. Problems affecting livestock keeping in Tanzania:
    - ✓ Shortage of grazing land
    - ✓ Poor technology
    - ✓ Low capital for buying drugs
    - ✓ Poor transport and communication systems
    - ✓ Presence of diseases and parasites e.g. foot and mouth disease (FMD)
    - ✓ Poor markets
    - ✓ Price fluctuation
    - ✓ Shortage of cattle dips for external parasites
    - ✓ Poor storage and processing facilities
    - ✓ There is poor yield due to poor varieties
    - ✓ Poor education among the farmers
    - ✓ Religious believes. Such that some people like Moslems cannot keep animals like pigs.
    - ✓ Poor government policy
11. (a) Tea
    - i. Climate
        - Needs 1500 – 7500mm of rain a year
        - Average temperature at least 18^oC
        - High humidity producing morning mist or dew which enables the leaves to grow quickly
    - ii. Soil
        - Well drained soil
    - iii. Where grown in Tanzania
        - Bukoba, Mufindi, Tukuyu

    (b) Coffee
    - (i) Climate
        - An average monthly temperature of 21^oC to 26^oC with minimum daily temperature of 15^oC accompanied with high humidity
        - An annual rainfall of about 1700mm with a maximum in growing season and a minimum when a plant is at flowering and when the berries are ripening.
    - (ii) Soil
        - Soil should be fertile of volcanic type with much potash, well drained to enable the roots to penetrate easily.
    - (iii) Where grown in Tanzania
        - Bukoba, Tukuyu, Mbozi, Mbinga
12. Reasons for rapid expansion of industries in South Africa:
    - ✓ Cheap labour
    - ✓ High technology
    - ✓ Cheap source of power from coal
    - ✓ Good transport and communication
    - ✓ Good market of the industrial products.
13. Effects of population increase around forest reserve areas:
    - ✓ Destruction of forests leading to drought

- ✓ Cutting the forests for settlements
- ✓ Cutting forests for fuel
- ✓ Cutting forests for timber leading to running away of wild animals
- ✓ Clearing forest for cultivation
- ✓ Grazing of cattle to the areas covered by forest (overgrazing)

14. Main factors for growth of industries in West Germany
    - ✓ High technology
    - ✓ Cheap source of power from coal
    - ✓ Cheap source of raw materials e.g. steel and iron.
    - ✓ Good transport and communication
    - ✓ Good market of the industrial products.

NECTA – FTSEE 2001

SECTION A:

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii
ANS.	B	C	B	B	A	B	A

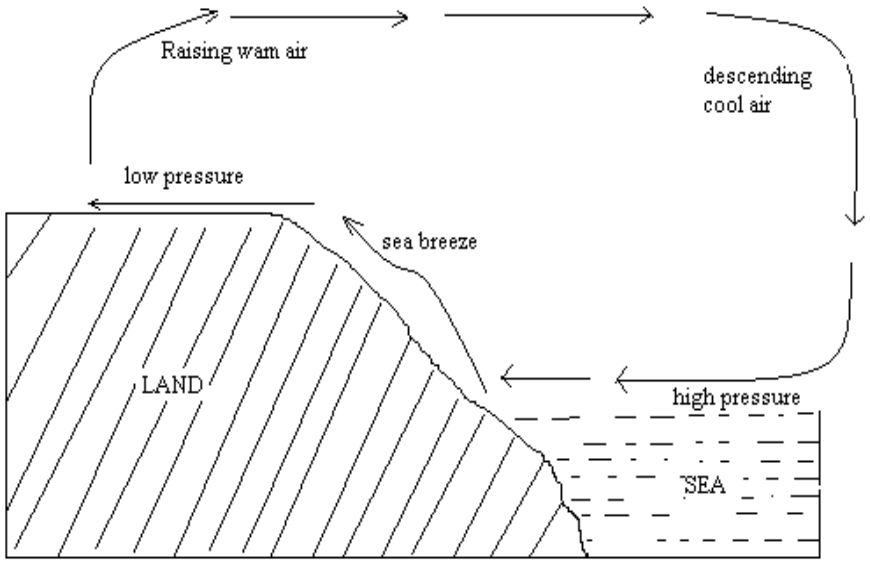
2. Matching items

COLUMN A	i	ii	iii	iv	v
COLUMN B	D	F	C	A	B

3. True or False

QNS.	a	b	c	d	e	f	g	h	i	j
ANS.	TRUE	FALSE	FALSE	TRUE	TRUE	TRUE	FALSE	TRUE	TRUE	TRUE

4. (a) (i) Eastings **501**
   (ii) Northings **394**
   (b) Diagram to show the formation of sea breeze (DAY TIME)



5. (i) Mean annual temperature
   = The sum of temperature in a year
   Number of months in a year
   = 21.7 + 21 + 20.6 + 18.9 +16 + 13.9 + 13.9 + 16 + 20 + 22.2 + 22.2 + 22.2
   12
   =228.6

12
=19.05^{o}C

Therefore, the mean annual temperature is 19.05°C

(ii) Annual range of temperature

= Maximum temperature – Minimum temperature
= 22.2 - 13.9
= 8.3°C

Therefore, the annual range of temperature is 8.3°C

(iii) Total annual rainfall

= 149.7 + 101.6 + 78.7 + 17.8 + 7.6 + 0 + 0 + 0 + 2.5 + 22.9 + 83.8 +132
= 596.6 mm

Therefore, the Total annual rainfall is 596.6 mm

(iv) The natural region for the station is ***Grassland*** or ***Savanna region***.

(v) The vegetation types found in the station are:

a) Tall grasses and trees near the equatorial region
b) Green grasses during rain season
c) Tropical trees like Baobabs, Palms and gum trees
d) Scattered thorn bushes near the desert
e) Short grasses during dry season

6. (i) To grow food crops like millets, groundnuts, beans, rice and onions and cash crops like coffee, cotton, sisal and tobacco

(ii) Animal keeping especially cows

7. Economic uses of water:
   - ✓ It is used for irrigation and farming
   - ✓ It is used for cooling systems in industries
   - ✓ It is used in production of hydro-electric power (HEP)
   - ✓ It is used for navigation (transportation of goods and people)
   - ✓ It is used for domestic purposes like cooking, washing
   - ✓ It is used for entertainment e.g. swimming
   - ✓ It is used in building activities e.g. making bricks, making pots
   - ✓ It is used as medicine for curing certain skin diseases especially hot spring water which contain some minerals or chemicals
   - ✓ It is used to produce salt e.g. ocean water which are salty
   - ✓ Also used by domestic and wild animals.
8. Four important conditions for the development of Tourism in Tanzania:
   - ✓ Attractive landscapes
   - ✓ Presence of abundance wildlife (Serengeti, Ngorongoro, Manyara, Mikumi)
   - ✓ Presence of sandy coastal beaches
   - ✓ Presence of Historical sites e.g. Olduvai gorge
   - ✓ Pleasant climatic conditions e.g. sunny conditions attracts tourists from cold countries during winter in their home countries
   - ✓ Good social services e.g. shopping centres, medication, water supply, electricity, etc.
   - ✓ Hospitality - the friendly welcome and entertainment of guests or strangers, which usually includes offering them food and drinks.
   - ✓ Presence of hotels and motels
9. Four problems associated with exploitation of forest resources:
   - ✓ Poor capital especially in the developing countries like Tanzania
   - ✓ Poor transport especially in the equatorial areas where the land is swampy
   - ✓ Low technology, which leads to the use of poor tools
   - ✓ Rapid population growth has led to the clearance of forests in many places
   - ✓ Uncontrolled harvesting of forest leaves the land open to agents of erosion
   - ✓ Climatic change caused by prolonged drought and unchecked soil erosion turns the areas into desert.

SECTION B:

10. Benefits brought by Gezira River Basin Scheme:
    - ✓ Helps to control floods
    - ✓ Improvement of navigation
    - ✓ Development of fishing in the constructed dams
    - ✓ Provision of water for domestic and industrial use
    - ✓ Provision of water for irrigation schemes leading to the expansion of farms and increased agricultural outputs. E.g. Cotton, millet, etc.
    - ✓ The scheme encourages the development of tourism as dams can be used as recreational centres
    - ✓ They are centres for hydroelectric power generation.
    - ✓ Farming education is provided. People are being trained on good farming methods like crop rotation, good seed selection, contouring, etc.
11. Problems associated with exploitation of energy resources:
    - ✓ Shortage of capital
    - ✓ Low technology
    - ✓ Poor transport and communication system
    - ✓ Low market due to low income of many people especially in developing countries
12. The characteristics of large scale Agriculture:
    - ✓ Farms are large which can be 100 to 400 hectares
    - ✓ The farmers are skilled
    - ✓ The production is mainly for commercial purposes
    - ✓ The farms are highly organized and scientifically managed
    - ✓ Monoculture in nature i.e. involves growing of one crop only e.g. cotton or tea or coffee or sisal only etc.
    - ✓ It needs large labour supply
    - ✓ It needs high capital to operate
    - ✓ High technology is used in production (hence high quality products).
    - ✓ It accelerates irrigation
    - ✓ The farms are owned by government or companies
13. (i) Advantages of Transport:
    - ✓ Encourages tourism
    - ✓ Encourages the development of agriculture
    - ✓ Leads to the development of mining industry
    - ✓ Leads to the development of towns
    - ✓ Leads to the development of social services e.g. dispensaries, schools, etc.
    - ✓ Helps the government leaders to solve people's problems

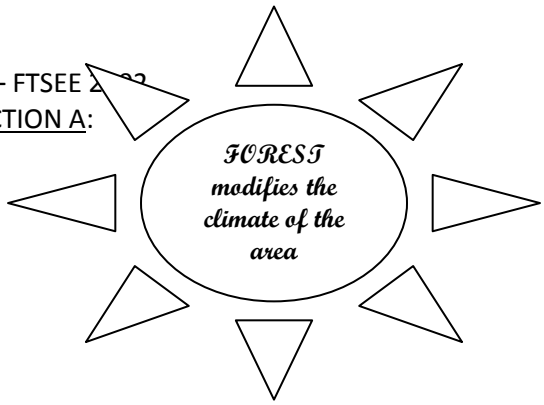
    (ii) Advantages of Communication:
    - ✓ It has lessened the isolation of remote places especially telecommunications and radios
    - ✓ It has enhanced the ability to warn of disasters and to organise relief or rescue more rapidly
    - ✓ Radio and Television have become important in the entertainment aspect
    - ✓ It helps government leaders to speak to their people and mobilize them for development
    - ✓ It helps in spreading education and promotion of technology
    - ✓ Has assisted the development of trade and commerce. E.g. By transmitting news of the world market and commodity prices and making advertisement using radios and televisions allows shipping firms to direct their vessels.

14. Measures that can raise the productivity of pastoralism in Africa:
    - ✓ There should be introduction of new breeds
    - ✓ Provide education to the farmers
    - ✓ Improvement of means of transport
    - ✓ The pastoralists should stop moving from one area to another.
    - ✓ Improvement of cattle dips

- ✓ Find permanent reliable markets for the animal products
- ✓ The government should be highly involved in livestock farming. E.g. by improving the marketing system.
- ✓ The farmers should be encouraged to grow grasses through irrigation so as to ensure reliable supply of pasture the year through.

NECTA – FTSEE 2022

SECTION A:



1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	B	C	C	C	C	B	B	C	A	B

2. Matching items

COLUMN A	i	ii	iii	iv	v
COLUMN B	A	E	G	I	D

3. True or False

QNS.	a	b	c	d	e	f	g	h	i	j
ANS.	FALSE	FALSE	TRUE	TRUE	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE

4. To convert the following:
   (a) A representative fraction of 1:700,000 into a statement scale in kilometre

   1km = 100,000cm

   ?km = 700,000cm

   = $\frac{700{,}000\text{cm} \times 1\text{km}}{100{,}000\text{cm}}$

   = 7km

   Therefore, one centimetre represents seven kilometres

   (b) A statement scale of 5cm to 1km into a representative fraction

   5cm to 1km = 5:100,000

   = 5/100,000

   = 1:20,000

   Therefore, 5cm to 1km in R.F. scale is 1:20,000

5. (i) Mean annual temperature

   = $\frac{\text{Sum of monthly temperatures in a year}}{\text{Number of months in a year}}$

   = $\frac{13.3 + 16.1 + 20.0 + 25.0 + 28.9 + 35.0\ 36.7 + 35.8 + 32.8 + 26.7 + 19.1 + 14.4}{12}$

   = $\frac{303.8}{12}$

   = 25.3^{o}C

   Therefore, the mean annual temperature is 25.3^{o}C

   (ii) Total annual rainfall

   = Sum of monthly rainfall throughout the year

   = 149.7 + 101.6 + 78.7 + 17.8 + 7.6 + 0 + 0 + 0 + 2.5 + 22.9 + 83.8 + 132

   = 596.6mm

   Therefore, the annual rainfall is 596.6mm

   (iii) Annual range of temperature

   = Maximum temperature – Minimum temperature

   = 36.7 – 13.3

   = 23.4^{o}C

   Therefore, the annual range of temperature is 23.4^{o}C

(iv) ***Mediterranean climate*** - summers are dry while winters are wet
(v) ***Tropic of Capricorn*** (December)

6. (i) Convectional rainfall
   (ii) Orographic or Relief rainfall
   (iii) Cyclonic rainfall
7. The map must have the following:
   a) Key
   b) Margin or Frame
   c) Title
   d) North direction
   e) Scale
8. Factors which make navigation difficult in most African rivers:
   → Most African rivers are seasonal
   → Presence of dangerous animals e.g. Hippopotamus, crocodiles, etc.
   → Presence of waterfalls and rapids
   → Silting of rivers reduces the deepness
   → Cataracts hinder navigation
   → Remoteness – some rivers pass very far away from settlements and economic areas.
   → Growth of vegetation/weeds in rivers hinder navigation
   → River meanders
   → Low technology in many African countries
   → Shallowness of most rivers
   → Narrowness of the rivers
   → Availability of rocks on river beds
   → The invasion of vegetation in these rivers leads to problems in fishing and navigation.
   → Some rivers cause conflicts especially when the river is shared by many countries like the Nile, Ruvuma and Kagera
   → Political reasons (political instability).

9. The factors affecting temperature of a place:
   → Altitude
   → Distance from the sea
   → Ocean currents
   → Latitude
   → Cloud cover
   → Prevailing winds
10. Proper ways of dealing with wastes:
   → Introduce the knowledge of re-cycling wastes into usable form again.
   → To damp them in the specified areas
   → Burning them
   → Digging holes and burying them.

SECTION B:

11. Problems which affect fishing industry in East Africa:
   → Poor fishing methods. E.g. using dynamites
   → Poor governments policy
   → Poor transport facilities
   → Shortage of capital
   → Shortage of markets
   → Lack of skilled labour to run the advanced fishing activities. Hence poor technology is applied/used
   → Lack of scientific research

- → Lack of good infrastructure. E.g. the roads of Tanzania are so poor
- → Lack of fishing campaign
- → Lack of preserving/storage facilities e.g. refrigerators
- → No cooperation among fishermen so as to get assistance in terms of advice and financial support
- → Tropical waters are too saline and of high temperature which discourages fish reproduction
- → Presence of dangerous animals like crocodiles and hippos, which can eat fish and fishermen
- → Water pollution as a result of waste disposal and oil spills
- → Waterborne diseases which affect both the fishermen and the fishes.

12. Problems that limit the development of mining industry in Tanzania:
    - Shortage of skilled labour
    - Lack of enough capital
    - Minerals occur in small quantities
    - Marketing problems. Price fluctuates in the world market.
    - Poor transport and communication. Most of the roads are impassable in the rainy season.
    - Lack of reliable power, there is a frequent cut-off.
    - Poor internal market to consume all minerals found in the country.
    - Presence of poor quality minerals e.g. mica.
    - Exhaustion of mineral deposits. This is due to the overexploitation e.g. Mwadui diamond mines, Saza (Gold mines - Chunya)
    - Poor conditions of workers in the mining areas which leads to frequent deaths
    - Poor government policy on foreigner investors.
13. The economic importance of minerals in South Africa:
    - Creation of employment opportunities (diamond mining)
    - Has stimulated the development of efficient and effective transport and communication systems like railways lines, roads, airways and sea ports that encourage exportation of goods.
    - It has promoted agriculture, forestry and tourism
    - It has stimulated the development of industries in the country.
    - International trade has expanded
    - Social services have improved to a great extent like education, health services and power supply.
    - Encourages the development of towns e.g. Kimberley and Johannesburg.
    - Diamond mines have provided the market for the locally produced foodstuffs
    - Source of government income.
14. Functions of the Tennessee River Valley Authority:
    - ➢ To control floods
    - ➢ To develop hydroelectric power generation centres
    - ➢ To control soil erosion. This had increased the size of arable land.
    - ➢ To improve navigation in the Tennessee River. This has improved commercial freight ships are operating in the river.
    - ➢ To improve water supply for irrigation, domestic use and industrial use.
    - ➢ To improve employment to the people
15. Characteristics of small scale agriculture:
    - ➢ Contains small plots
    - ➢ Hand to mouth production, i.e. no or little surplus for sale
    - ➢ Low technology is used in production. Poor tools are used in production (less expensive) e.g. hand hoes, pangas
    - ➢ Low capital is used
    - ➢ Uses family labour. Women are the main producers but have no rights of inheriting or owning the land.
    - ➢ The farmers are unskilled. Hence use poor farming methods.
    - ➢ Poor disease and pest control.
    - ➢ There is poor transport and communication network.

NECTA – FTSEE 2003

SECTION A:

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	A	C	B	D	D	B	D	C	B	C

2. Matching items

COLUMN A	i	ii	iii	iv	v
COLUMN B	E	A	D	H	J

3. True or False

STATEMENT	a	b	c	d	e	f	g	h	i	j
TRUE/FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE	TRUE

4. (a) (i) Area of the shaded part:

Total area = Full square + ½ (Half squares)

Full squares are 13

Half squares are 18

Total area = 13 + ½(18)

= $22km^2$

Therefore, the area of shaded part is 22 sq. kilometres.

(ii) Bearing of A from B is 165^o

(iii) Direction of B from A is ***NNW***

(iv) Grid references of point A and B are ***120140*** and ***110180*** respectively.

(b) (i) Mean annual temperature

$$= \frac{25.5 + 25.8 + 26 + 26 + 27.3 + 26.5 + 26.5 + 26.1 + 26.8 + 26.8 + 26.3 + 25.7}{12}$$

$$= \frac{315.3}{12}$$

$= 26.275^oC$

Therefore, the mean annual temperature is 26.3^{o}C

(ii) Annual range of temperature

= Maximum temperature – Minimum temperature

= 27.3 – 25.5

$= 1.8^oC$

Therefore, the annual range of temperature is 1.8^{o}C

(iii) Annual rainfall for the station

= Sum of rainfall throughout the year

= 246 + 186 + 185 + 198 + 184 + 176 + 174 + 197 + 183 + 206 + 261 + 266

= 2462mm

Therefore, the annual rainfall is 2462mm

(iv) The type of climate is ***Equatorial climate***

(v) Four crops that can be grown in the area:

- Natural rubber
- Cocoa
- Bananas
- Ground nuts

(c) Evidence to prove that the earth is round

- ✓ Circumnavigation of the earth
- ✓ Aerial photograph
- ✓ Sunrise and sunset
- ✓ Ship's visibility
- ✓ Lunar eclipse (the eclipse of the moon)
- ✓ The earth's curved horizon (the spherical horizon of the earth).

- ✓ Other planetary bodies are round. Therefore the earth also must be round.

(d) Five factors to be considered in the location of manufacturing industries:
- ✓ Raw material sources
- ✓ Easy transport and communication
- ✓ Easy marketing
- ✓ Near the source of labour
- ✓ Availability of power (e.g. Coal and electricity)
- ✓ Accessibility to the markets
- ✓ Land availability which should be far from residential areas
- ✓ Government policies

(e) Five uses of solar energy:
- ✡ Drying clothes, meat, fish, fruits and grains
- ✡ Used for generating electricity
- ✡ Used by growing plants in the photosynthesis process to manufacture their own food.
- ✡ Used for cooking and heating water (solar cooker)
- ✡ Used as a source of power to small radios, watches, calculators and small telephone systems
- ✡ Used as a source of vitamin D to human bodies
- ✡ Used in water cycle (Formation of clouds and rainfall through evaporation of water caused by the heating effect of the sun)
- ✡ Formation of coal, gas and oil (petroleum)

(f) Five advantages of plantation agriculture:
- ✓ High surplus and the quality of products is high
- ✓ Pests and diseases are highly controlled
- ✓ It is efficient due to the use of machinery
- ✓ It provides employment to a large population
- ✓ Source of government revenue
- ✓ It encourages industrial development
- ✓ There is an effective use of land
- ✓ It stimulates the development of infrastructures
- ✓ People around the plantations get new technology in agriculture

(g) Five characteristics of large scale agriculture:
- ✓ Farms are large which can be 100 to 400 hectares e.g. plantations and ranches
- ✓ The farmers are skilled
- ✓ The production is mainly for commercial purposes
- ✓ The farms are highly organized and scientifically managed
- ✓ Monoculture in nature i.e. involves growing of one crop only e.g. cotton or tea or coffee or sisal only etc.
- ✓ It needs large labour supply
- ✓ It needs high capital to operate
- ✓ High technology is used in production (hence high quality products).
- ✓ It accelerates irrigation. Some areas in the farm are irrigated instead of depending on rainfall only
- ✓ The farms are owned by government or companies

SECTION B:

5. **Sedentary livestock keeping** is a system of farming in which the farmer keeps the animals while settled permanently in one place. He does not move from place to place. The characteristics of sedentary livestock keeping includes the following (any 5):
- ✓ High technology is used
- ✓ Only few animals are kept by a farmer (because of scarcity of fodder)
- ✓ There is high disease control, because animals of other people do not come into contact.
- ✓ The system can take place even in densely populated areas.
- ✓ The animals are kept in shed (zero grazing).
- ✓ Manure from the animals is used to maintain the soil fertility for crops production.

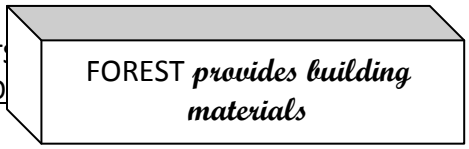
6. Features associated with rapid population growth:
   - ✓ Inadequacy of social services such as medical facilities, educational services and water supply
   - ✓ Overcrowding and poor housing
   - ✓ There is poor management of wastes and poor drainage in the sewage system
   - ✓ Outbreak or prevalence of diseases
   - ✓ Presence of large number of dependants like beggars
   - ✓ Poor industrial planning and lack of location sites

7. Suggestions on how to solve the problem of desertification:
   - ✓ Emphasize on the afforestation and reforestation
   - ✓ Avoid burning of forest and bushes
   - ✓ Educate the people to conserve the environment
   - ✓ Quarantine – not to cut trees for charcoal in most affected areas
   - ✓ Destocking – reduce the number of grazed animals.
   - ✓ Use modern agricultural methods e.g. strip cultivation, crop rotation, contouring, use organic fertilizers (manure)
   - ✓ Use other energy sources, instead of firewood and charcoal.
   - ✓ Reduction of air pollution which destroys ozone layer. This increases temperature which affects vegetation.

8. Problems associated with exploitation of forest resources:
   - ✓ Poor capital especially in the developing countries like Tanzania
   - ✓ Poor transport especially in the equatorial areas where the land is swampy
   - ✓ Low technology, which leads to the use of poor tools
   - ✓ Rapid population growth has led to the clearance of forests in many places
   - ✓ Uncontrolled harvesting of forest leaves the land open to agents of erosion
   - ✓ Climatic change caused by prolonged drought and unchecked soil erosion turns the areas into desert.
   - ✓ In tropical areas there are so many species but few are commercially valuable and they are more scattered.
   - ✓ Forests are very much dense especially in the equatorial region such that they cause difficulties during the cutting of trees
   - ✓ Coniferous trees in temperate areas face the problem of acid rain due to the industrial emissions and leaching when acids are added in the soil cause death of trees

9. Main problems facing transport and communication in East Africa:
   - ✓ Low capital for investing
   - ✓ Poor technology in construction of roads, railways, airports, ports, etc.
   - ✓ Remoteness areas
   - ✓ Political conflicts
   - ✓ Climatic conditions.
   - ✓ Land lockedness leads to high costs.
   - ✓ Variation of language between different places
   - ✓ Relief (topography) hinder the construction of infrastructure. Physical features like mountains with steep slopes limit the construction of infrastructure and movement of transport facilities.
   - ✓ High costs of repairing old facilities.

NECTA – FTS
SECTIO



1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	C	C	C	A	B	C	B	A	D	C

2. Matching items

COLUMN A	i	ii	iii	iv	v	vi	vii	viii	ix	x
COLUMN B	F	D	J	M	E	K	B	H	G	N

3. True or False

STATEMENT	i	ii	iii	iv	v	vi	vii	viii	ix	x
TRUE/FALSE	TRUE	FALSE	TRUE	FALSE	TRUE	FALSE	TRUE	TRUE	TRUE	FALSE

4. (a) (i) Annual range of temperature for station X
   = Maximum temperature – Lowest temperature
   = $23^oC - 10^oC$
   = 13^oC
   Therefore, the annual range of temperature for station X is 13^oC.
   (ii) Total annual rainfall
   = Sum of rainfall throughout the year
   = 10 + 15 + 20 + 50 + 130 + 180 + 175 + 150 + 100 + 70 + 18 + 15
   = 933mm
   Therefore, the total annual rainfall of station X is 933mm
   (iii) The type of climate is ***Mediterranean climate:***
   → hot, dry summers and mild, rainy winters; ***13^oC*** is the annual range of temperature
   → Annual rainfall is 933mm
   (iv) The station is located in the southern hemisphere (low temperature in M, J&J)
   (v) Crops grown in the region:
   → Cereal crops: **Wheat, maize**
   → Citrus fruits: **oranges, lemon, lime**
   → Grapefruits: **grape wine**
   → **Potatoes and vegetables**

   (b) (i) Three methods which may be used to measure the area of the lake:
   → Square (**grid** or tracing) method – plotting grid line on the given area to produce squares, here: Area = Full square + ½(Half squares)
   → **Stripping** method – dividing the given area into strips of fixed width and lengths can be measured by a ruler.
   → **Division** (Geometrical) method – the irregular area is divided into geometrical figures whose **Area** formulae are known.

   (ii) Three methods which can be used to measure the distance of the river:
   → A pair of dividers
   → A thread or thin string
   → A straight edge of paper.

   (iii) The scale of the map is represented by ***Representative fraction scale***.
   (iv) Scale, Title, key
5. (a) three necessary conditions for the construction of Hydro-Electric power (HEP) station
   → Reliable rainfall so as to ensure the sufficient and constant supply of water
   → Presence of enough waterfalls. This is a result of steep gradient or slope of a river
   → A space for reservoir to hold large amount of water

   (b) Three ways of dealing with water pollution in Tanzania:
   → Provision of education to the people
   → The people should avoid unnecessary dumping on the ground.
   → Avoid the use of poisonous chemicals in the farm (use biological means to control diseases in farms, e.g. crop rotation)
   → The wastes should be recycled

- → The wastes to be dumped should be treated
- → Mining activities should be controlled
- → Oil spills or tanks should be loaded properly
- → Discourage the use of chemicals in fishing activities
- → Discouraging clearing of the catchment areas as well as establishing settlements in those areas.
- → Good government policy on environmental conservation.

(c) Limitations of cotton production in the Cotton Belt of the USA:
- → Widespread destruction of cotton caused by the boll weevil
- → The depletion of soil fertility by continuous planting of a single crop (monoculture)
- → Competition from synthetic fibres

(d) Problems associated with oil drilling:
- → Shortage of capital
- → Flooding e.g. Nigeria
- → Shortage of skilled labour
- → Oil deposits occur in small quantities
- → Marketing problems. Price fluctuates in the world market.
- → Poor transport and communication. Most of the roads to the drilling areas are impassable in the rainy season.
- → Lack of reliable power in drilling areas.
- → Poor internal market to consume all oil found in the country.
- → Presence of poor quality minerals e.g. mica.
- → Exhaustion of oil deposits. This is due to the overexploitation
- → Poor government policy on foreigner investors.

(e) (i) Zero grazing is the feeding system in which animals are stall-fed. There is no movement of the animals from place to place.

(ii) Land reclamation refers to the practice of recovering of land that has been spoilt and making it useful through improvement practices for economic and social purposes.

(f) Three ways of minimizing the use of fuel wood at family level:
- → Using kerosene stove
- → To use biogas
- → To use solar cookers

(g) Three methods of soil conservation:
- → Reducing or stopping the use of harmful pesticides like dieldrin
- → To use manure instead of chemical fertilizers in agriculture.
- → Destocking and afforestation so as to give room for the improvement of the soil
- → Wastes from industries, farms and homesteads should be recycled
- → Natural ways to control pests and weeds should be applied instead of using pesticides and herbicides (e.g. use crop rotation, intercropping, etc)
- → To control population in order to relieve pressure on land
- → Proper farming methods should be practised in order to control soil erosion
- → Radioactive wastes should be buried deep down in the soil so that the upper levels cannot be affected greatly.
- → Educating people on how to undertake their activities judiciously in order to ensure sustainability of the land quality.
- → Contour cultivation and terracing on the hill areas. This reduces soil erosion on high altitude areas.

(h) Three economic importance of manufacturing industries in Africa:
- → Helps to improve social services e.g. schools, hospitals
- → Helps to improve the economy of the country
- → Helps to raise the standard of living of the people
- → Provides employment to the people
- → It is a source of foreign currency. It contributes to the earning of foreign currency in the country.

- → It encourages the growth of other sectors. E.g. growth of agricultural sector due to presence of low cost industrial fertilizers, trade and tourism
- → It improves transport and communication facilities.

(i) Three economic significance of mineral exploitation to any country:
- → Source of raw materials
- → Source of foreign currency. It contributes to the earning of foreign currency in the country. For, example; Copper in Zambia, Gold in South Africa, Tanzanite and Diamond in Tanzania, Oil in Nigeria, Middle East and Libya.
- → Provides employment to people
- → Stimulates the growth of towns
- → Stimulates the growth of manufacturing industries in the country, e.g. coal (from Kiwira Coal Mines) has lead to the development of Cement industries in Tanzania.
- → Encourages the development of social services like education, health services and power supply
- → It stimulates the development of efficient transport and communication systems like railway lines, roads and sea ports that enhances the exportation of goods.

(j) Three gender discrimination for women in Tanzania:
- → In many societies, women have not been given the right to own land or inherit the land
- → Women are not given enough chances to give their ideas within the community
- → Women are not given opportunity to acquire loans and get education

SECTION B:

6. Problems of marine transport
   - ✓ Depths of the ocean. Most of the harbours are too shallow
   - ✓ Presence of ridges in the oceans limit marine transport
   - ✓ Fluctuation of volume of water in the rivers
   - ✓ Presence of earthquakes in oceans causing Tsunamis
   - ✓ Water transport cannot be developed everywhere. It is specific in areas with water bodies.
   - ✓ Ships cross big water masses with no inhabitation (non residential areas), when they knock sea cliffs they do not get quick service.
   - ✓ It is slow. Perishable or urgently required goods such as tomatoes, oranges, newspapers, etc. cannot be transported through this means to final consumers
   - ✓ Strong storms and winds interferes with shipping schedule
   - ✓ Presence of dangerous animals like hippopotamus, crocodiles, etc. affects the life of travellers.
   - ✓ Costs are high in modifying routes, dredging and marking channels
   - ✓ Overloaded ships sinks easily threatening the lives of many people and property e.g. MV Bukoba in 1996.
7. Significance of developing agricultural sector in terms of social and economic development in Tanzania:
   - ✓ Provides employment to people. E.g. in plantations and ranches
   - ✓ Brings unity among people. E.g. People work together in the village farms
   - ✓ It helps to enhance traditions and customs. E.g. People celebrate after harvesting
   - ✓ Provides raw materials (cotton, tea, coffee, rubber, cloves, oil palm, sugar cane, Cocoa, Pyrethrum, sisal, milk, beef, animal skins, etc) necessary for industrial development
   - ✓ Provides food crops for humans
   - ✓ It stimulates the development of transport and communication systems
   - ✓ Encourages the improvement of the living standard of the people in the country
   - ✓ It contributes to the generation of capital and government revenue
   - ✓ It encourages the development of towns

8. Important conditions for developing tourism in Tanzania:
   - ✓ There is a wide variety of tourist attractions such as national Parks, Historical sites, Attractive landscapes, sandy coastal beaches
   - ✓ Maintaining peace and security in the country. This attracts the visitors into the country.

- ✓ Government policy. The government has promoted this industry, for example, there is a Ministry of National Resources and Tourism. Establishment of promotion offices in difference countries for advertising tourism in Tanzania, e.g. in Germany (Frankfurt), in England (London)
- ✓ Pleasant climatic conditions e.g. sunny conditions
- ✓ Good social services e.g. shopping centres, medication, water supply, etc.
- ✓ Hospitality - the friendly welcome and entertainment of guests or strangers, which usually includes offering them food and drink.
- ✓ Presence of hotels and motels

9. Problems which are encountered by most women in establishing business:
   - ✓ Domestic responsibilities. Most of the activities at home are done by women hence they have little time to engage in business activities
   - ✓ Lack of capital for establishing business
   - ✓ Lack of confidence in doing business
   - ✓ Lack of education, most women are not educated hence they can't run business
   - ✓ Lack of chances. E.g. Those who are married sometimes are not given that chance by their husbands
10. Advantages of developing solar energy:
    - ✓ It could be used in many parts of the world
    - ✓ Helps in avoiding disturbances such as buying electricity (LUKU)
    - ✓ It is non-pollutant (it is clean)
    - ✓ It is not costful
    - ✓ It is easy to install in new buildings

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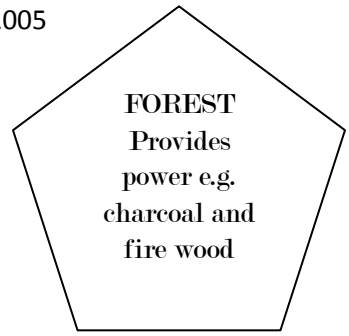
SECTION A:

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	A	D	C	C	C	A	C	D	A	D

2. Matching items

COLUMN A	i	ii	iii	iv	v	vi	vii	viii	ix	x
COLUMN B	F	D	H	I	L	B	E	J	G	A



3. True or False

STATEMENTS	i	ii	iii	iv	v	vi	vii	viii	ix	x
TRUE/FALSE	FALSE	TRUE	TRUE	FALSE	FALSE	FALSE	FALSE	FALSE	TRUE	FALSE

4. (a) (i) Area of the mine
   = Full squares + ½(Half squares)
   = 4 + ½(14)
   = 11sq. km
   Therefore, the area of the area of the Mine is 11 sq. Kilimetres
   (ii) The **bearing** of B from A is **045°**
   (iii) The **direction** of A from B is **SW**
   (iv) The Grid Reference of **A** and **B** is **210140** and **250180** respectively.
   (b) Climatic condition
   (i) Annual Range of temperature
   = Highest temperature – Lowest temperature
   = $18^oC - 10^oC$
   = 8^oC
   Therefore, the Annual range of temperature is 8^oC

(ii) Annual Rainfall for the station
= 0 + 0 + 0 + 50 + 75 + 150 + 175 + 200 + 75 + 50 + 25 + 0
= 800mm
Therefore, the annual rainfall of the station is 800mm

(iii) Mean annual Rainfall
= Total amount of rainfall
Total number of months
= 800mm
12
= 66.67mm
Therefore, the mean annual rainfall is 66.67mm

(iv) Climatic region of the station is ***Mediterranean Climate***
Reasons:
- → Temperature range is 8^{o}C, total annual rainfall is 800mm
- → Summers are warm and dry (N, D & J months), winters are cool and wet (M, J & J). Summers are hot and dry due to the influence of trade winds (off-shore winds). On-shore Westerlies blows from the ocean to bring cyclonic rainfall in winter.

5. (a) (i) Deforestation refers to the depletion or disappearance of trees and bushes by either man's influence or natural forces.

(ii) Three causes of deforestation:

Natural Causes of Deforestation
- → Volcanic eruptions – leads to fire outbreak and hence large scale forest conflagration, burying of trees by lava poured onto the surface.
- → Hurricanes – can uproot the trees
- → Aridity – leads to the drying up of the soil and the death of plants.

Man's causes of deforestation:
- → Poor methods of farming: Overgrazing and shifting cultivation
- → Expansion of human settlements – as a result of overpopulation
- → Mining activities
- → Uncontrolled burning of vegetation / bushes
- → Industrial development (Industrial activities)
- → Cutting trees for and charcoal fire wood
- → Lumbering

(b) Four forms of Transport
- → Land transport (human portage, animal transport, roads, railway transport)
- → Water transport
- → Pipelines
- → Air transport

(c) Four difficulties which face the improvement of agricultural sector in Tanzania:
- → Nature and type of the soil
- → Nature of climate
- → Water holding capacity of the particular soil
- → Accessibility of the area/farm
- → Poor technology
- → Shortage of markets
- → Shortage of capital
- → Government policy
- → Diseases and parasites
- → Poor methods of farming like shifting cultivation, bush fallowing

(d) Problems that hinder the development of tourism sector in Tanzania:

- → Lack of enough capital which can improve the tourism industry through investing much on this sector
- → Shortage of adequate accommodation and appropriate conference centres
- → Lack of advanced means of advertising the industry.
- → Poor means of transport and communication
- → Lack of good management and administration systems in tourism sector that makes tourists become discouraged by the system.
- → Lack of enough skilled people for running business of tourists like local and international Tour Operators and travel agencies in East African countries
- → Lack of good quality services
- → The spread of communicable diseases like TB, AIDS, RVF, etc.
- → Lack of scientific research on how to conduct better tourism business.
- → Bad climatic conditions within tourist attractions
- → Lack of hotels and restaurants within tourism areas

(e) Four measures to be taken to improve trade in developing countries:

- → Improve transport and communication networks
- → Improve the quality of produced goods
- → Good internal and external markets for the produced goods
- → Good advertisements of produced goods internally and externally

(f) Four types of irrigation systems:

- ✓ **Surface irrigation**: In surface irrigation systems water is moving over the land by simple gravity flow in order to wet it and to infiltrate into the soil. They can be subdivided into furrow, borderstrip or basin irrigation.
- ✓ **Localized irrigation**: Localized irrigation is a system where water is distributed under low pressure through a piped network, in a pre-determined pattern, and applied as a small discharge to each plant or adjacent to it. Drip irrigation, spray or micro-sprinkler irrigation and bubbler irrigation belong to this category of irrigation methods.
- ✓ **Sprinkler irrigation**: In sprinkler or overhead irrigation, water is piped to one or more central locations within the field and distributed by overhead high-pressure sprinklers or guns. A system utilizing sprinklers, sprays, or guns mounted overhead on permanently installed risers is often referred to as a solid-set irrigation system. Higher pressure sprinklers that rotate are called rotors and are driven by a ball drive, gear drive, or impact mechanism. Rotors can be designed to rotate in a full or partial circle. Guns are similar to rotors, except that they generally operate at very high pressures of 275 to 900 kPa and flows of 3 to 76 L/s, usually with nozzle diameters in the range of 10 to 50 mm. Guns are used not only for irrigation, but also for industrial applications such as dust suppression and logging.
- ✓ **Sub-irrigation**
- ✓ **Manual irrigation** – using buckets or watering cans

(g) Four necessary conditions for the location of industries:

- → Availability of power
- → Availability of raw materials
- → Availability of good transport and communication systems
- → Availability of labour (skilled and unskilled)
- → Easy marketing
- → Accessibility to the markets
- → Land availability which should be far from residential areas
- → Government policies

(h) Four Benefits of establishing Tennessee Valley Authority in U.S.A:

- → There has been **increase in the water supply** for irrigation, domestic use and industrial use.
- → The **floods have been highly controlled**. This has led to high disease control, for example malaria. Before the scheme, floods used to leave a lot of ponds in the surroundings favourable for the growth of mosquitoes, the causative of malaria.
- → **Increase on the size of arable land** due to soil erosion control.

- → **Navigation has been improved**.
- → There has been the **development of fishing industry** due to the construction of dams.
- → The project **has created job opportunities** for more than 50,000 people.
- → **Tourism developed** after the river development.
- → **Provision of hydroelectric power** has led to the development of different manufacturing and heavy industries.

(i) Four importance of developing river basin schemes in Africa:

- → Helps to control floods
- → Helps to Improve of navigation
- → Helps the development of fishing in the constructed dams
- → Provision of water for domestic and industrial use
- → Provision of water for irrigation schemes leading to the expansion of farms and increased agricultural outputs. E.g. Cotton, millet, etc.
- → The scheme encourages the development of tourism as dams can be used as recreational centres
- → They are centres for hydroelectric power generation.
- → Farming education is provided. People are being trained on good farming methods like crop rotation, good seed selection, contouring, etc.

(j) Four ways of empowering women in small scale agriculture:

- → Providing capital (soft loans)
- → Educating them
- → Establishing business projects
- → Understand their rights especially to own property

SECTION B:

6. Factors which prevents the development of fishing industry in East Africa:
   - ✓ Poor fishing methods. E.g. using dynamites
   - ✓ Poor governments policy
   - ✓ Poor transport facilities
   - ✓ Shortage of capital
   - ✓ Shortage of markets
   - ✓ Lack of skilled labour to run the advanced fishing activities. Hence poor technology is applied/used
   - ✓ Lack of scientific research
   - ✓ Lack of good infrastructure. E.g. the roads of Tanzania are so poor
   - ✓ Lack of fishing campaign
   - ✓ Poor preservation/storage facilities
   - ✓ Absence of fish food (plankton)

7. Ways of minimizing pollution caused by mining to the environment:
   - ✓ Improving the methods of extraction (avoid use of explosives)
   - ✓ Reducing the population pressure around mines
   - ✓ Reducing the use of old machines
   - ✓ Reclaiming areas which have been affected by mining. E.g. by planting trees
   - ✓ Developing other sources of energy rather than depending on energy resources from the grounds only.
   - ✓ Establishing other economic activities like fishing, tourism and market gardening instead of depending on mining only.

8. The aspects that have contributed to the development of dairy farming in Netherlands:
   - ✓ Availability of both internal and external markets
   - ✓ Presence of enough capital
   - ✓ Good government policy
   - ✓ Good climate which is associated with mild winters
   - ✓ Presence of fertile soils that support growth of grass.

- ✓ Availability of constant water supply
- ✓ High technology machines are used in cultivating the land for growing pastures.

9. The consequences of water shortage to the community:
   - ✓ Occurrences of conflicts between the communities sharing water sources
   - ✓ Eruption of diseases like cholera and diarrhoea due to low level of sanitation
   - ✓ Lack of water for domestic use like cooking and drinking
   - ✓ Hunger due to limited food crops production (i.e. no irrigation)
   - ✓ Shortage of power supply (HEP)
   - ✓ Poor transport (navigation)
   - ✓ Lack of proteins from fish causing kwashiorkor to children
   - ✓ Decline in the mining, fishing and tourism industries
   - ✓ No industrial production due to lack of coolants (water)
   - ✓ Death of plants leading to desertification and soil erosion
   - ✓ The family members, especially women travel long distances in search of water and this leads to fatigue (tiredness) and health deterioration.
   - ✓ Emission of bad smell due to decomposition of unwashed materials
   - ✓ Causes migration of people to areas expected to have water sources.

10. Advantages of sedentary farming:
    - ✓ Easy to manage
    - ✓ Easy control of diseases and parasites.
    - ✓ The animals are healthy and hence the yield is high
    - ✓ The farmer gets a balanced diet since there is availability of proteins and carbohydrates.
    - ✓ Manure is stored for other uses
    - ✓ The farmers does not waste time moving from place to place
    - ✓ The farmer can engage in other economic activities
    - ✓ It helps in conserving the environment (it reduce environmental destruction)
    - ✓ Supplies raw materials to industries
    - ✓ Technology advances faster

NECTA – FTSEE 2006

SECTION A:

FOREST is a Source of medicines

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	B	D	A	B	D	A	B	B	C	A

2. Matching items

COLUMN A	i	ii	iii	iv	v	vi	vii	viii	ix	x
COLUMN B	F	G	N	M	I	A	B	C	E	L

3. True or False

STATEMENT	i	ii	iii	iv	v	vi	vii	viii	ix	x
TRUE/FALSE	TRUE	FALSE	FALSE	FALSE	TRUE	TRUE	FALSE	TRUE	TRUE	FALSE

4. (a) (i) Annual range of temperature
   = Highest temperature – Lowest temperature
   = $38^oC - 30^oC$
   = 8^oC
   Therefore, the annual range of temperature is 8^oC
   (ii) Annual rainfall

= Total amount of rainfall throughout the year
= 10 + 20 + 26 + 15 + 8 + 0 + 0 + 0 + 12 + 18 + 15 + 10
= 134mm

Therefore, the annual rainfall for station X is 134mm

(iii) Mean annual temperature

$$= \frac{\text{Total amount of temperature in a year}}{\text{Number of months}}$$

$$= \frac{30 + 30 + 30 + 31 + 32 + 38 + 37 + 37 + 35 + 34 + 31 + 30}{12}$$

$$= \frac{395}{12}$$

$= 32.9^{o}C$

Therefore, the mean annual temperature is 32.9°C

(iv) Type of climate is ***Mediterranean Climate***

Reasons:

- » Temperature range is $8^{o}C$
- » Total amount of rainfall is 132mm per year
- » During winter there is rainfall while during summer it is dry.

(v) Station X is located in ***Northern Hemisphere*** (because of high temperatures in the months of June, July and August)

(b) (i) A **map** is scaled representation of all or part of the earth's surface on a flat surface, like paper, wood, wall or ground.

A **scale of a map** is a ratio between the distance on the map and the actual distance on the ground.

Mathematically,

$$\text{Scale} = \frac{\text{Map distance}}{\text{Ground distance}}$$

A scale has no units, since it is just a ratio of distances.

(ii) Four essentials of a map:

- » Title (Heading)
- » Key
- » Scale
- » Margin
- » Indication of North direction

(iii) Area of irregular figure

= Full squares + ½(Half squares)
= 12 + ½(26)
= 25 Sq. km

Therefore, the area of the thick forest is 25 square kilometres.

(iv) Actual distance

$$\text{Scale} = \frac{\text{Map distance}}{\text{Actual distance}}$$

$$\frac{1}{25{,}000} = \frac{29cm}{d}$$

$d = 25{,}000 \times 29cm$
$= 725{,}000cm$
$= (725{,}000\ 100{,}000)km$
$= 7.25km$

Therefore, the actual distance of Ruvu River is 7.25km

(v) Change the scale 1:25,000 into a statement scale:

1km = 100,000cm
X km = 25,000cm

$$X = \frac{1km \times 25{,}000cm}{}$$

100,000cm

= ¼km

Therefore, one centimetre on the map represents ¼ kilometres on the ground

5. (a) Two advantages of wind energy:
   - » Very clean (non-pollutant)
   - » Source of light
   - » For cooking
   - » For taping water from wells
   - » For charging batteries
   - » The land between turbines can still be farmed

   (b) Four problems facing timber industry in the Congo Basin:
   - » Poor capital especially in the developing countries like DRC
   - » Poor transport especially in the equatorial areas where the land is swampy
   - » Low technology, which leads to the use of poor tools
   - » Overcrowded vegetation (evergreen)
   - » Overlapping canopies
   - » Poachers and honey collectors – causes bush fires
   - » Civil wars in DRC
   - » Rapid population growth hence clearance of trees

   (c) (i) Agriculture is a system of production that involves growing of crops and keeping animals.

   (ii) Two types of subsistence in practice:
   - » Shifting cultivation
   - » Bush fallowing

   (d) Two aims of land reclamation:
   - » For agricultural activities i.e. cultivation and keeping animals
   - » For establishing settlements (Building)

   (e) Four types of human activities:
   - » Agriculture
   - » Fishing
   - » Trading
   - » Lumbering
   - » Mining

   (f) Four factors which favour the development of tourism:
   - » Good transport network i.e. roads, railways and airways
   - » Availability of hotels, restaurants, servers, games reserves
   - » Good government policy about tourism attractions
   - » Presence of attractive landscapes.
   - » Presence of abundance wildlife (Serengeti, Ngorongoro, Manyara, Mikumi)
   - » Presence of sandy coastal beaches
   - » Presence of Historical sites e.g. Olduvai gorge
   - » Pleasant climatic conditions e.g. sunny conditions and absence of diseases
   - » Good social services e.g. shopping centres, medication, water supply, etc.
   - » Hospitality of natives - the friendly welcome and entertainment of guests or strangers, which usually includes offering them food and drink.

   (g) Four problems associated with harnessing Hydro-Electric Power (H.E.P):
   - » Fluctuation of water volumes (River regime). This is caused by variations in rainfall and intensive evaporation
   - » Small rivers. Most East African rivers are small hence difficult to exploit them
   - » Absence of rapids and waterfalls which are essential for HEP.
   - » Shortage of capital for constructing dams (reservoirs)

- » Lack of skilled labours to run the exercise
- » Lack of advanced technology
- » Competition in using water e.g. irrigation, damming, etc.
- » Remoteness of the areas potential for H.E.P. production
- » The dams can lead to the outbreak of diseases

(h) Four factors that lead to the development of sheep farming in Australia:

- » Availability of both internal and external markets of wool
- » Presence of enough capital
- » Good government policy on sheep rearing
- » Good climatic condition i.e. cold
- » Availability of constant water supply
- » High technology machines are used in cultivating the land for growing pastures.
- » Easy transport network i.e. road and railway lines

(i) Four advantages of extracting gas from Songosongo:

- » Reduce overdependence on gas from outside
- » Stimulate the development of Iron and steel industries due to source of energy
- » Help in environmental conservation in a way that do not pollute the environment
- » Help increased generation of electricity for home and industries
- » Employment opportunity to people
- » Rise the standard of living of people
- » Stimulate the development of transport and communication

(j) Four effects of water shortage in the society:

- » Occurrences of conflicts between the communities sharing water sources
- » Lack of water for domestic use i.e. cooking, drinking, washing, etc.
- » Eruption of diseases like cholera due to low level of sanitation
- » Hunger due to limited food crops production (i.e. no irrigation)
- » Shortage of power supply (HEP)
- » Poor transport (navigation)
- » Lack of proteins from fish causing kwashiorkor to children
- » Decline in the mining, fishing and tourism industries
- » Death of plants leading to desertification and soil erosion
- » The family members, especially women travel long distances in search of water and this leads to fatigue (tiredness) and health deterioration.
- » Causes migration of people to areas expected to have water sources.

SECTION B:

6. Population pressure is a situation in which the number of people is greater than the carrying capacity of the available resources. It is related to overpopulation. Effects of high population pressure on forest resources:
   - ✓ Destruction of forests leading to drought
   - ✓ Cutting/burning the forests for settlements
   - ✓ Cutting forests for fuel
   - ✓ Cutting forests for timber leading to running away of wild animals
   - ✓ Soil erosion due to bad farming methods
   - ✓ Destruction of ecosystem (dying of species)

   Ways to overcome the problem of forest resource depletion:
   - ✓ Reforestation
   - ✓ Afforestation
   - ✓ Destocking

- ✓ To provide education on the farmers on modern farming methods like crop rotation, contouring and using organic manure
- ✓ To educate people on how to minimize the excessive use of fire wood (to have alternative sources of energy like gas)
- ✓ Establishment of games and forests reserves. Here the cutting of trees is completely restricted.
- ✓ To stop poachers and honey collectors who usually sets fire in the forest.
- ✓ Policies on how to replace the forest cleared

7. Problems which face the development of transport sector in Tanzania:
   - ✓ Lack of enough capital to buy equipment
   - ✓ Poor science and technology
   - ✓ Poor management to the available roads, railway line, port and airport
   - ✓ Poor services to the vehicles leads to interruption of passengers
   - ✓ Accidents threatens the lives of people
   - ✓ Lack of government support especially in rural areas
   - ✓ Presence of thieves, robbery

8. Mining is the process of extracting minerals from the earth. Minerals extracted include silver, iron ore, gold, copper and diamond.
   The importance of mining to the economy of a country includes:
   - ✓ Source of raw materials
   - ✓ Source of foreign currency
   - ✓ Source of income (revenue) to the government
   - ✓ Provides employment to people
   - ✓ Stimulates the growth of towns like Mwadui, Arusha, Johannesburg
   - ✓ Stimulates the growth of manufacturing industries
   - ✓ Encourages the development of social services like education, health services and power supply
   - ✓ It stimulates the development of efficient transport and communication systems like railway lines, roads and sea ports that enhances the exportation of goods.

9. Problems which hinder the development of manufacturing industry in Tanzania:
   - ✓ Lack of enough capital
   - ✓ Lack of good/advanced technology
   - ✓ Shortage of markets
   - ✓ Shortage of skilled labourers
   - ✓ Shortage of water supply in some parts of the country
   - ✓ Shortage of raw materials
   - ✓ Frequent cut-off of power
   - ✓ Price fluctuation of the produced goods
   - ✓ Poor transport and communication
   - ✓ Old machines
   - ✓ Poor research

10. Ways of conserving water sources:
    - ✓ Planting trees in the catchments areas
    - ✓ Avoiding agricultural activities around water sources
    - ✓ Limiting people to develop settlements around water sources
    - ✓ Discouraging deforestation
    - ✓ Destocking
    - ✓ Harvesting water – especially rainfall

NECTA – FTSEE 2007

SECTION A: (70 Marks)

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	B	A	B	D	D	C	D	A	B	A

2. Matching items

COLUMN A	1	2	3	4	5	6	7	8	9	10
COLUMN B	D	M	G	J	L	C	N	E	I	A

3. True or False

STATEMENT	i	ii	iii	iv	v	vi	vii	viii	ix	x
TRUE/FALSE	FALSE	TRUE	TRUE	TRUE	FALSE	TRUE	TRUE	FALSE	TRUE	FALSE

4. (a) Climatic Data

(i) Annual Range of Temperature

= Highest Temperature – Lowest Temperature

= $26^oC - 12^oC$

= 14^oC

Therefore, the annual range of Temperature is 14^oC

(ii) Mean Annual Temperature

$$= \frac{\text{Total annual temperature}}{\text{Number of months in a year}}$$

$$= \frac{12 + 13 + 15 + 16 + 19 + 22 + 25 + 26 + 24 + 20 + 17 + 15}{12}$$

$$= \frac{224^oC}{12}$$

= 18.67^oC

Therefore, the mean annual Temperature is 18.7^oC

(iii) Total Rainfall

= Sum of monthly rainfall throughout the year

= 150 + 87 + 87 + 60 + 30 + 12 + 0 + 0 + 25 + 75 + 110 + 140

= 776mm

Therefore, the total amount of rainfall for station Y is 776mm.

(iv) Type of climate is Mediterranean Climate

Reasons:

» Annual range of Temperature is 14^oC and total annual rainfall is 776mm

» Rainfall is high during winter and low/no rainfall in summer (July and August)

(b) Map Work

(i) Two ways used by the map to express scale are:

» Linear scale

» Representative fraction scale

(ii) Indicators from the map which show a:

Lowland - Swamp

Highland – Mountain/ Hill

(iii) The railway line is not straight from grid reference 260144 to 200144 because it is escaping the swamp.

(iv) The length of the railway line from grid reference 260144 to 200120 is 6.4km.

(v) The area covered by the swamp

= Full squares + ½(Half squares)

= 0 + ½(6)

= 0 + 3

= 3sq. km

Therefore, the area covered by the swamp is 3 square kilometres.

5. (a) Five Sources of Water:
   - → rainfall,
   - → wells,
   - → springs,
   - → rivers,
   - → lakes,
   - → seas,
   - → oceans and
   - → ice from glaciated regions.

   (b) Three causes of deforestation:
   - → Expansion of farming
   - → Need for wood fuel and charcoal
   - → Overgrazing
   - → Industrial development
   - → Uncontrolled burning of vegetation/bushes
   - → Expansion of human settlement
   - → Mineral extraction (mining activities)

   (c) Four main Hydro-Electric Power generating stations in Tanzania:

   Kidatu Dam is a hydroelectric dam located in the Rufiji River Basin in Tanzania. The installed capacity is **200 MW**. It has four turbines. The dam was constructed in 1976.

   Kihansi Dam is a hydroelectric dam located on the Kihansi River at the end of the Kihansi Gorge before the convergence with the Ulanga River in Tanzania approximately 450 km southwest of the capital Dar Es Salaam. The Kihansi Dam is a concretegravity dam owned by the Tanzania Electric Supply Company Limited. Its construction began in July 1995 and was opened by President Benjamin W. Mkapa on 10 July 2000. It cost $36 million. Its installed capacity is **180 MW**, and it helps provide approximately 13% of the total electrical power in Tanzania.

   Mtera Dam is a hydroelectric dam in Tanzania. The dam is located midway between Iringa and Dodoma, and travel time from Dodoma is about three hours on a gravel road. Mtera Dam is the biggest hydroelectric dam in Tanzania. It measures 660 square kilometres at full capacity. It was built in 1979 for the purpose of regulating water level at the downstream Kidatu Hydro-electric Dam. Its installed capacity is **80 MW**.

   Pangani Falls Dam is one of the dams in Tanzania. It is in Tanga Region. Its installed capacity is **68 MW**.

   Hale Dam is a hydroelectric dam in Tanzania. It is in Tanga Region. Its installed capacity is **21 MW**. Thousands of people were displaced to build the dam.

   Nyumba ya Mungu Dam is a hydroelectric dam in Tanzania. It is in Mwanga District, Kilimanjaro Region. The water runs down the slopes of Kilimanjaro in the deep valleys. These streams pour their water in the Nyumba ya Mungu reservoir. Nyumba ya Mungu means 'House of God'. Its installed capacity is **8 MW**. Visitors can enjoy boating, fishing, swimming and walking around the dam to enjoy the spectacular views.

   (d) Four Factors which influence industrial location:
   - → Raw material sources
   - → Easy transport and communication
   - → Easy marketing
   - → Near the source of labour
   - → Availability of power
   - → Accessibility to the markets
   - → Land availability which should be far from residential areas
   - → Government policies

SECTION B: (30 MARKS)

6. The negative effects of Tourism industry in Tanzania:
   - ✓ Tourism leads to environmental degradation (pollution, deforestation and soil erosion)
   - ✓ It leads to the spread of diseases like TB, RVF, AIDS, Ebola, etc
   - ✓ It can lead to the destruction of culture in the country. This can lead to occurrences of conflicts within the country.
   - ✓ It can accelerate terrorism within the country. The terrorists can come to the country as normal visitors
   - ✓ It may discourage the development of other sectors since it uses a lot of capital in its developmental stage.

7. Solar energy is the heat and light produced from the sun. Solar energy technology involves the use of solar cells (electric cells that converts solar energy directly into electricity, used in pocket calculators, watches, radios and light meters) and solar panels for heating water in homes and the production of electricity.

   The advantages of developing solar energy technology in Tanzania:
   - ✓ The supply is unlimited (renewable energy)
   - ✓ It is non-pollutant (clean) and efficient
   - ✓ It is easy to install in new buildings
   - ✓ Leads to the development of tourism. This is possible because electricity becomes available even in remote areas. E.g. Ngorongoro crater, meteorite in Mbozi, natural bridge on river Kiwira (Tukuyu), etc.
   - ✓ Helps to reduce the rate of deforestation (environmental degradation)

8. Problems facing fishing industry in East Africa:
   - ✓ Poor fishing methods. E.g. using dynamites
   - ✓ Poor governments policy
   - ✓ Poor transport facilities
   - ✓ Shortage of capital
   - ✓ Shortage of markets
   - ✓ Lack of skilled labour to run the advanced fishing activities. Hence poor technology is applied/used
   - ✓ Lack of scientific research
   - ✓ Lack of good infrastructure. E.g. the roads of Tanzania are so poor
   - ✓ Lack of fishing campaign
   - ✓ Lack of preserving/storage facilities e.g. refrigerators

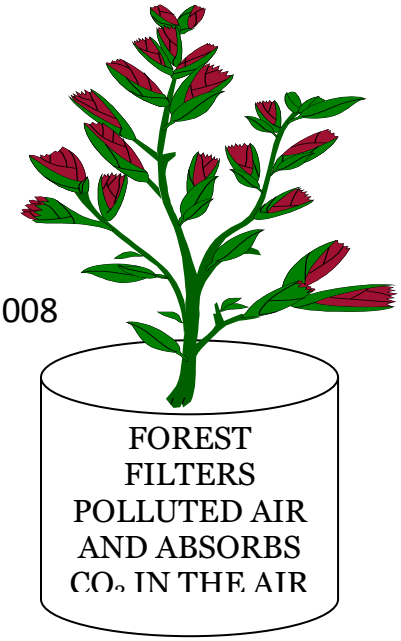
9. **Water** (formula H_2O) is a colourless, odourless and tasteless liquid that freezes to form ice at 0°C and boils to form steam at 100°C, at normal atmospheric pressure.

   Sanitation means measures taken to promote and preserve public health, especially through drainage and sewage disposal.

   Ways through which Tanzania can improve the situation of water supply and sanitation:
   - ✓ Introduce the knowledge of re-cycling wastes into usable form again.
   - ✓ To damp wastes in the specified areas
   - ✓ Restricting people from settling in the catchments areas since they can cause water pollution and destruction of vegetation.
   - ✓ Constructing water reservoirs like dams, barrages and tanks in rivers
   - ✓ Controlling the use of water especially in the homesteads and other intensive economic activities like irrigation schemes
   - ✓ Through afforestation and reforestation programmes
   - ✓ Removing sand, mud and silt from the rivers, lakes and dams (dredging)

10. Cotton is a shrubby plant with broad lobed leaves and egg-shaped seed pods, cultivated in tropical and subtropical regions for the creamy-white downy fibres which surround its seeds. Also cotton refers to the soft white fibre obtained from the cotton plant, used in the production of textiles.
    Problems facing cotton plantation agriculture in Tanzania:

    - Unreliable rainfall
    - Loss due to pests and diseases
    - Decline in fertility that leads to the fall in yields
    - Poor transport and communication



NECTA – FTSEE 2008

SECTION A:

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	B	D	C	A	B	D	C	B	D	D

2. Matching items

COLUMN A	i	ii	iii	iv	v	vi	vii	viii	ix	x
COLUMN B	I	M	C	L	A	J	N	D	B	K

3. True or False Statements

STATEMENT	i	ii	iii	iv	v	vi	vii	viii	ix	x
TRUE/FALSE	FALSE	TRUE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE	FALSE	FALSE

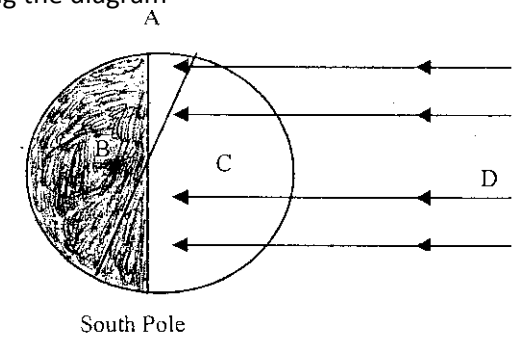
4. (a) Climatic Data:
    (i) Mean annual temperature
    = Total monthly temperatures throughout the year
    Total number of months in a year
    $= \frac{18 + 17 + 16 + 14 + 15 + 12 + 13 + 10 + 14 + 15 + 16 + 17}{12}$
    $= \frac{177}{12}$
    $= 14.75^{o}C$
    Therefore, the mean annual temperature is $14.75^{o}C$
    (ii) Annual range of temperature
    = Maximum temperature – Minimum temperature
    $= 18^{o}C - 10^{o}C$
    $= 8^{o}C$
    Therefore, the annual range of temperature is $8^{o}C$
    (iii) Total rainfall for the station
    = Sum of monthly rainfall throughout the year
    = 0 + 0 + 0 + 50 + 75 + 150 + 175 + 200 + 75 + 50 + 25 + 0
    = 800mm
    Therefore, the total annual rainfall for the station is 800mm.
    (iv) **January** has the highest temperature
    (b) Two ways in which relief features on a map may be represented:
    → Contour lines
    → Form lines
    → Hill shading
    → Trigonometrical stations
    → Spot heights

- → Colour tinting
- → Bench mark
- → Hachures

(c) Four essentials of a good map:

- → Key
- → Title
- → Scale
- → Margin
- → North direction

5. (a) Labeling the diagram



A is North Pole
B is Night
C is Day
D is Sun rays

(b) Two aims of land reclamation in the Netherlands:

- → Increase land for settlement and industrial development
- → Reduce danger of flooding as a control of floods
- → Obtain land for agriculture
- → Create recreational facilities for tourists
- → Supply of fresh water
- → Improvement of transport and construction of roads

(c) Two main sources of energy in Tanzania:

- → Water –Hydro-Electric Power (87%)
- → Natural gas e.g. Songosongo
- → Oil/Petroleum – thermopower
- → Wood fuel
- → Coal (Kiwira)
- → Solar
- → Biogas
- → Geothermal

(d) Two factors affecting temperature of a place:

- → Altitude
- → Latitude – distance from the Equator
- → Distance from the sea
- → Ocean currents
- → Prevailing winds
- → Aspects
- → Cloud cover

SECTION B: (30 Marks)

6. Mining is the process of extracting minerals from the earth. Minerals extracted include silver, iron ore, gold, copper and diamond.

Problems that limit the development of mining industry in Tanzania include:
- ✓ Shortage of skilled labour
- ✓ Lack of enough capital
- ✓ Minerals occur in small quantities
- ✓ Marketing problems. Price fluctuates in the world market.
- ✓ Poor transport and communication. Most of the roads are impassable in the rainy season.
- ✓ Lack of reliable power, there is a frequent cut-off.
- ✓ Poor internal market to consume all minerals found in the country.
- ✓ Presence of poor quality minerals e.g. mica.
- ✓ Exhaustion of mineral deposits. This is due to the overexploitation e.g. Mwadui diamond mines, Saza (Gold mines - Chunya)
- ✓ Poor conditions of workers in the mining areas which leads to frequent deaths
- ✓ Poor government policy on foreigner investors.

7. Subsistence small scale agriculture involves cultivation of crops in a small piece of land only enough for family consumption.

   The ways of improving the subsistence small scale agriculture includes the following:
   - ✓ Educate the farmers to acquire new technology
   - ✓ Use modern farming techniques i.e. use of machines, oxen and new seed varieties
   - ✓ Improvement of new infrastructure e.g. roads and railways
   - ✓ Government to provide loans to farmers
   - ✓ Equal participation in production between women and men
   - ✓ The use of manure and fertilizers to improve soil fertility
   - ✓ Introduce scientific methods for pest and disease control.
   - ✓ Improve internal markets of agricultural products.

8. Future benefits of Tanzania from Natural Gas:
   - ✓ Improve the industrial sector by solving problems of electricity
   - ✓ Provide foreign currency through selling to neighbouring countries that will be produced from natural gas.
   - ✓ Provide employment
   - ✓ Improve other sectors e.g. agriculture and industries.
   - ✓ Facilitate and promote good standard of life / improvement of social services.
   - ✓ Improvement of infrastructure (transportation).

9. Navigation means the movement of ships and aircraft. Navigation in rivers means the movement of ships in the rivers.

   Transport is the carrying of goods, people and other services from one place to another.

   Factors hindering navigation in African Rivers includes the following:
   - ✓ Most African rivers are seasonal
   - ✓ Presence of waterfalls and rapids
   - ✓ Silting of rivers reduces the deepness
   - ✓ Cataracts hinder navigation
   - ✓ Remoteness – some rivers pass very far away from settlements and economic areas.
   - ✓ Growth of vegetation/weeds in rivers hinder navigation
   - ✓ River meanders
   - ✓ Presence of dangerous animals e.g. Hippopotamus, crocodiles, etc.
   - ✓ Low technology in many African countries
   - ✓ Shallowness of most rivers
   - ✓ Narrowness of the rivers

- ✓ Availability of rocks on river beds
- ✓ The invasion of vegetation in these rivers leads to problems in fishing and navigation.
- ✓ Some rivers cause conflicts especially when the river is shared by many countries like the Nile, Ruvuma and Kagera
- ✓ Political reasons (political instability).

10. A desert is an arid land with little or no vegetation.
Desertification is the gradual transformation of habitable land into desert. It is usually caused by climate change or by destructive use of the land.

Suggestions on how to solve the problem of desertification:
- ✓ Emphasize on the afforestation and reforestation
- ✓ Avoid burning of forest and bushes
- ✓ Educate people to conserve the environment
- ✓ Quarantine – not to cut trees for charcoal in most affected areas
- ✓ Destocking – reduce the number of grazed animals.
- ✓ Use modern agricultural methods e.g. strip cultivation, crop rotation, contouring, use organic fertilizers (manure)
- ✓ Use other energy sources, instead of firewood and charcoal.

NECTA – F

SECTI

Scientific studies and researches are conducted in the FOREST areas to explore fauna and flora found in that particular forest

1. Multiple choices

QNS.	i	ii	iii	iv	v	vi	vii	viii	ix	x
ANS.	B	C	D	A	C	A	A	B	26cm	B

2. Matching items

COLUMN A	i	ii	iii	iv	v	vi	vii	viii	ix	x
COLUMN B	L	F	E	Q	M	P	N	I	H	A

3. True/False items

STATEMENT	i	ii	iii	iv	v	vi	vii	viii	ix	x
TRUE/FALSE	TRUE	FALSE	FALSE	TRUE	FALSE	TRUE	TRUE	FALSE	FALSE	TRUE

4. (a) Diagram showing a type of rainfall:
   i. The type of rainfall shown is ***Relief*** (Orographic) ***rainfall***. It occurs on mountains slopes (windward side)
   ii. A stands for ***Moist wind***
   iii. C stands for ***Dry wind***
   iv. D stands for ***Windward side***
   v. E stands for ***Leeward side*** (rain shadow)

   (b) Ways of locating positions on a map (any 2):
   Position is a place where someone or something is. The geographical position of a place or an area on a map may be show by using the following ways:
   i. Name of a place (place names)
   ii. Latitude and longitude
   iii. Grid reference
   iv. Direction (with reference to north)
   v. Compass bearing
   vi. Political and administration boundaries.

   (c) Bearing or Direction of:
   i. NNW is 337.5˚
   ii. 045˚ is NE

iii. 000˚ or 360˚ is N

5. (a) (i) The mean annual temperature

= Total of mean monthly temperatures
Total number of months in a year

$$= \frac{25.0 + 25.0 + 24.6 + 24.5 + 24.2 + 24.0 + 24.0 + 24.0 + 24.0 + 24.0 + 24.4 + 24.5}{12}$$

$$= \frac{292.2}{12}$$

= 24.35˚C

Therefore, the mean annual temperature for station K is 24.4˚C

(ii) Total annual rainfall for the station:

= Sum of the monthly rainfall
= 40.6 + 68.6 + 150.0 + 230.0 + 206.0 +114.0 + 64.0 + 84.0 + 194.0 + 226.0 + 150.0 + 50.8
= 1578mm

Therefore, the annual rainfall for station K is 1578mm

(iii) Annual range of Temperature

= Maximum temperature – Minimum temperature
= 25.0˚C – 24.0˚C
= 1˚C

Therefore, the annual range of temperature of station K is 1˚C

(iv) The type of climate for the station is Equatorial climate

Reasons:

- High temperature throughout the year. Annual range is about 1^{o}C.
- High rainfall throughout the year. The annual rainfall is 1578mm with no distinct dry season.

(v) The month which receives:

Highest rainfall is ***April*** (230.0mm)
Lowest rainfall is ***January*** (40.6mm)

(b) Definitions of terms:

i. ***Agriculture*** is a science dealing with crop production and livestock rearing.
ii. ***Topographicalmaps*** are the ones which show the important natural and manmade features and their position on the earth's surface.

(c) Conditions necessary for establishing Hydro-Electrical Power (any 2)

- ✓ Reliable rainfall over high mountains so as to ensure the supply of water
- ✓ Presence of big sources of water like rivers and lakes whose volume do not fluctuate
- ✓ Presence of a good site like waterfalls
- ✓ Presence of enough capital
- ✓ Presence of enough skilled labour

SECTION B: (30 Marks)

6. Problems which face the development of the Transport Sector in Tanzania (use the below points and any related ones to write the essay)

- ✈ Lack of enough capital
- ✈ Poor science and technology
- ✈ Poor management to the available roads, railway line, port and airport
- ✈ Poor services to the vehicles lead to interruption of passengers
- ✈ Accidents threatens the lives of people
- ✈ Remoteness areas
- ✈ Climatic conditions.
- ✈ Relief (topography) hinder the construction of infrastructure

7. Achievements that were brought by the Tennessee Valley Authority in North America:
(Written in essay form to guide you on essay writing)

Tennessee River is the tributary of Ohio River in the United States of America (USA). The Ohio River is in turn the tributary of the Mississippi river. The Tennessee valley receives high rainfall over 1250mm and in the higher areas it can be as highest as 2000mm. The valley is well known in the world in terms of successfully controlling the problem of severe soil erosion.

The achievements of the Tennessee Valley Authority to the economy of USA:

There has been **increase in the water supply** for irrigation, domestic use and industrial use.

The **floods have been highly controlled**. This has led to high disease control, for example malaria. Before the scheme, floods used to leave a lot of ponds in the surroundings favourable for the growth of mosquitoes, the causative of malaria.

Increase on the size of arable land due to soil erosion control. This has encouraged the introduction of modern farming methods such as crop rotation, terracing and contour ploughing on slopes leading to high yields.

Navigation has been improved. This has facilitated the transportation of raw materials to the industries and the manufactured goods to the markets.

There has been the **development of fishing industry** due to the construction of dams.

The project **has created job opportunities** for more than 50,000 people. That is, some in agriculture, fishing activities and others in the manufacturing industries developed.

Tourism developed after the river development. For example, many parks and camping areas have been established. This in turn has raised the income of the country.

Provision of hydroelectric power has led to the development of different manufacturing and heavy industries. For example, machinery and aluminium smelting in Alabama and Atlanta in Georgia, Atomic power station and aluminium smelting at Alcoa.

One can conclude that, river basin development schemes are essential for the growth of economy of any country.

8. How Forests are endangered in Tanzania:
   - Expansion of farming
   - Cutting forests for fuel
   - Overgrazing
   - Industrial development
   - Uncontrolled burning of vegetation/bushes
   - Cutting/burning the forests for settlements
   - Mineral extraction (mining activities)
   - Cutting forests for timber leading to running away of wild animals

   Ways to overcome the problem of forest resource depletion:
   - Reforestation
   - Afforestation
   - Destocking
   - To provide education on the farmers on modern farming methods like crop rotation, contouring and using organic manure
   - Establishment of games and forests reserves. Here the cutting of trees is completely restricted.
   - To stop poachers and honey collectors who usually sets fire in the forest.

9. Negative results of Tourism in Tanzania (Negative effects of Tourism industry in Tanzania):

- Tourism leads to environmental degradation (pollution, deforestation and soil erosion)
- It leads to the spread of diseases like TB, RVF, AIDS, Ebola, etc
- It can lead to the destruction of culture in the country. This can lead to occurrences of conflicts within the country.
- It can accelerate terrorism within the country. The terrorists can come to the country as normal visitors
- It may discourage the development of other sectors since it uses a lot of capital in its developmental stage.

10. Problems caused by the mining industry in Tanzania (Negative effects of mining to the environment and people of Tanzania):
    - Land degradation
    - Deforestation
    - Waste land for agriculture and other industries
    - Environmental pollution (water, land, air and noise pollution)
    - Society conflicts
    - Mass wasting. This has led to loss of life e.g. Mererani Arusha.
    - It attracts people causing high population pressure in the mining centres, which in turn causes many social and economic problems like poor housing, unemployment, spread of diseases, etc.
    - Mining causes the decline of other economic sectors especially agriculture since many people rush to the mining centres to supply labour.
    - The pits which are left becomes mosquito bleeding areas when filled with rain water
    - Mining leads to the disappearance of valuable plant species.