THE UNITED REPUBLIC OF TANZANIA
NATIONAL EXAMINATIONS COUNCIL OF TANZANIA
CERTIFICATE OF SECONDARY EDUCATION EXAMINATION

013 **GEOGRAPHY**

(For Both School and Private Candidates)

Time: 3:00 Hours **Year: 2023**

Instructions

1. This paper consists of sections A, B and C with a total of **eleven (11)** questions.
2. Answer **all** questions in sections A and B and **two (2)** questions from section C.
3. Section A carries **sixteen (16)** marks, section B **fifty four (54)** marks and section C carries **thirty (30)** marks.
4. All writing must be in **blue** or **black** ink **except** drawing which must be in pencil.
5. Map extract of Liwale (Sheet 280/4) is provided.
6. Programmable calculators, communication devices and any unauthorised materials are **not** allowed in the examination room.
7. Write your **Examination Number** on every page of your answer booklet(s).

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SECTION A (16 Marks)

Answer **all** questions in this section.

1. For each of the items (i) – (x), choose the correct answer from the given alternatives and write its letter beside the item number in the answer booklet(s) provided.

(i) What will happen when the orbit of heavenly body is nearest to the Sun?

A Perihelion B Aphelion C Sunrise
D Equinox E Sunset

(ii) At the road construction site, John saw a layer of land with finest soil particles and more humus. Identify the layer observed by him.

A B horizon B E horizon C D horizon
D A horizon E C horizon

(iii) Keino want to transport his car from Japan to Tanzania. Which mode of transport would be best to use?

A Water B Pipeline C Cable
D Animal E Road

(iv) Songoro prefer to cultivate vegetables, maize and beans in his farm. What type of farming is he practicing?

A Mixed farming B Bush fallowing
C Large scale farming D Crop rotation
E Shifting cultivation

(v) Sometimes people living in the Central part of Tanzania experience sudden vibrations of the Earth's surface caused by movement of the molten rocks below or within the crust. Identify the instrument to be used to measure the magnitude of such vibrations.

A Hygrometer B Thermometer C Wind vane
D Richer Scale E Barometer

(vi) Coastal areas do not maintain its shape due to erosional and depositional processes. Which factors influence those processes?

(i) The strength of the wind that blows over the sea
(ii) Weather condition in the area
(iii) The depth of the sea water along the coast
(iv) The nature of the rocks on the coast

A (i), (ii) and (iv) B (i), (ii), (iii) C (i), (iii) and (iv)
D (ii), (iii) and (iv) E (ii) and (iv)

(vii) It is noon in Adis Ababa (39^0E). What will be the time in Dar es Salaam which is located along the same longitude?

A 12:00 pm B 12:00 am C 06:00 pm
D 11:00 am E 06:00 am

(viii) Which factors cause Tanzania's population structure to be dynamic?

A Fertility, mortality and migration
B Fertility, fecundity and migration
C Mortality, fertility and fecundity
D Migration, mortality and fecundity
E Mortality, emigration and fecundity

(ix) What could be the appropriate method for extracting gold deposits which are near to the surface?

A Shaft mining B Underground mining C Open cast mining
D Alluvial mining E Placer mining

(x) Why are Japanese ship building industries located along the coast?

A Government policy B Presence of skilled labour
C Availability of capital D Good supply of power
E Presence of natural harbours

2. Match the description of environmental issues in **List A** with their environmental concepts in **List B** by writing a letter of the corresponding response beside the item number in the answer booklet(s) provided.

List A		List B	
(i)	A state in which an area experiences prolonged dry period.	A	Desertification
(ii)	Addition of unwanted substances into the environment.	B	Deforestation
(iii)	Deterioration of the quality of the land through loss of soil fertility.	C	Loss of biodiversity
(iv)	Gradual changes of rainfall and temperature in a place.	D	Drought
(v)	Processes that lead to the perish of plant and animal species in an area.	E	Soil erosion
(vi)	Process through which fertile land become dry, waterless and without vegetation.	F	Land degradation
		G	Climate change
		H	Pollution

SECTION B (54 Marks)

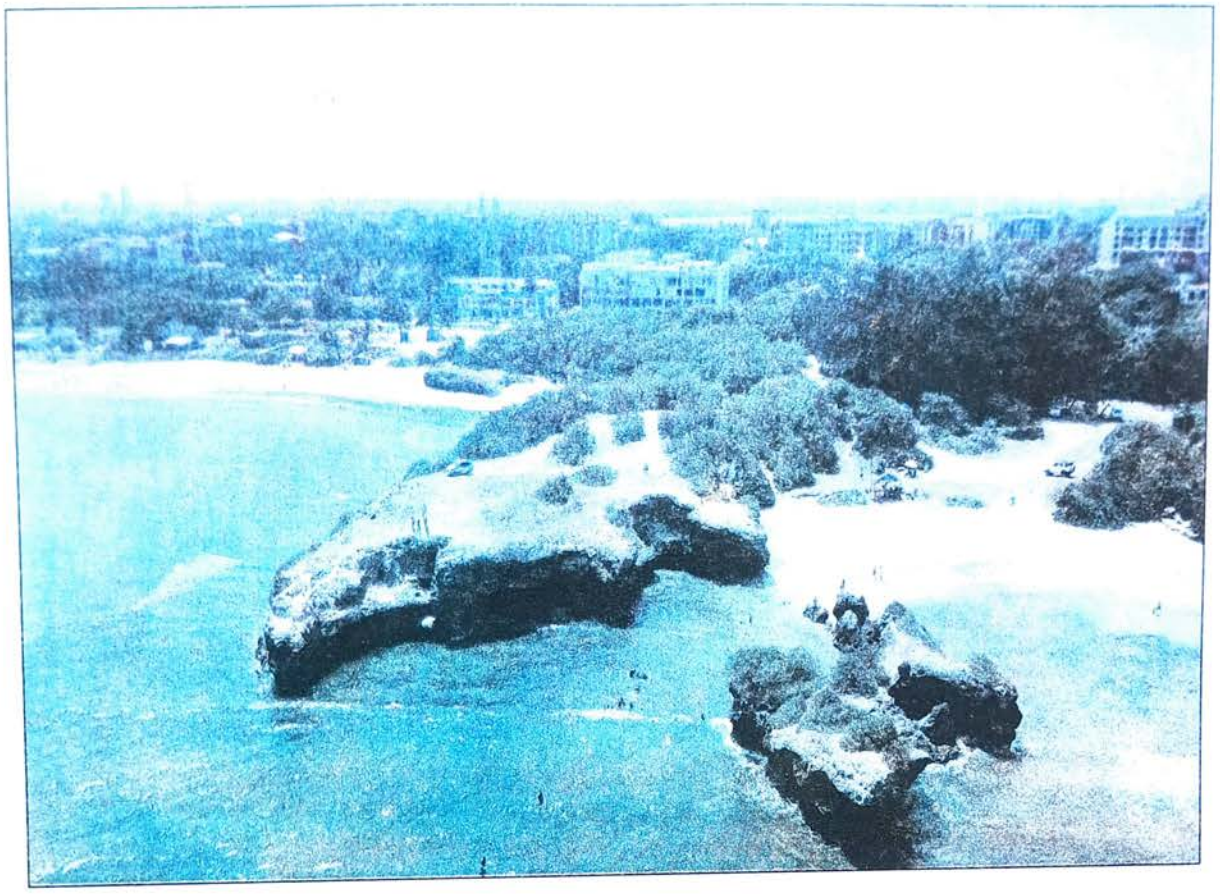
Answer **all** questions in this section.

3. Carefully study the map extract of Liwale (sheet 280/4) and answer the questions that follow:
   (a) Giving a reason, identify the dominant type of rock in the mapped area.
   (b) Describe three characteristics of the rock mentioned in (a).
   (c) Briefly describe two possible reasons for the growth of Liwale town.
   (d) By using RF scale, measure the distance of a road in kilometers from grid reference 814218 to 809165.

4. The school head prefect was assigned to select representatives for a research on waste management in their school.
   (a) How is the process used to select the representatives for the research called?
   (b) Identify two techniques that will be used to select the representatives named in (a).
   (c) Explain three advantages of the process named in (a).

5. You have been assigned to measure a linear distance between lines of traverse in measuring a new plot for a school playing ground.
   (a) Suggest a suitable survey method for the activity.
   (b) Mention the first and the last steps that you will use to accomplish the activity.
   (c) Briefly explain three survey equipments you will use in the field.

6. Study carefully the given photograph and answer the questions that follow:



(a) With two reasons, suggest the type of photograph.
(b) Mention the depositional, erosional and man-made features seen on the photograph. Give two features for each.
(c) Describe three stages of formation of the main marine erosion feature seen at the South Eastern part of the foreground.

7. The Form Four students watched a video showing a landscape of Switzerland and observed several features developed by ice action.
(a) Briefly describe four highland erosional features observed by the students.
(b) Draw a well labeled diagram showing features described in (a).

8. (a) How do vegetation adapt to the environment in the desert areas? Give five points.
(b) Explain four characteristics of vegetation found in desert areas.

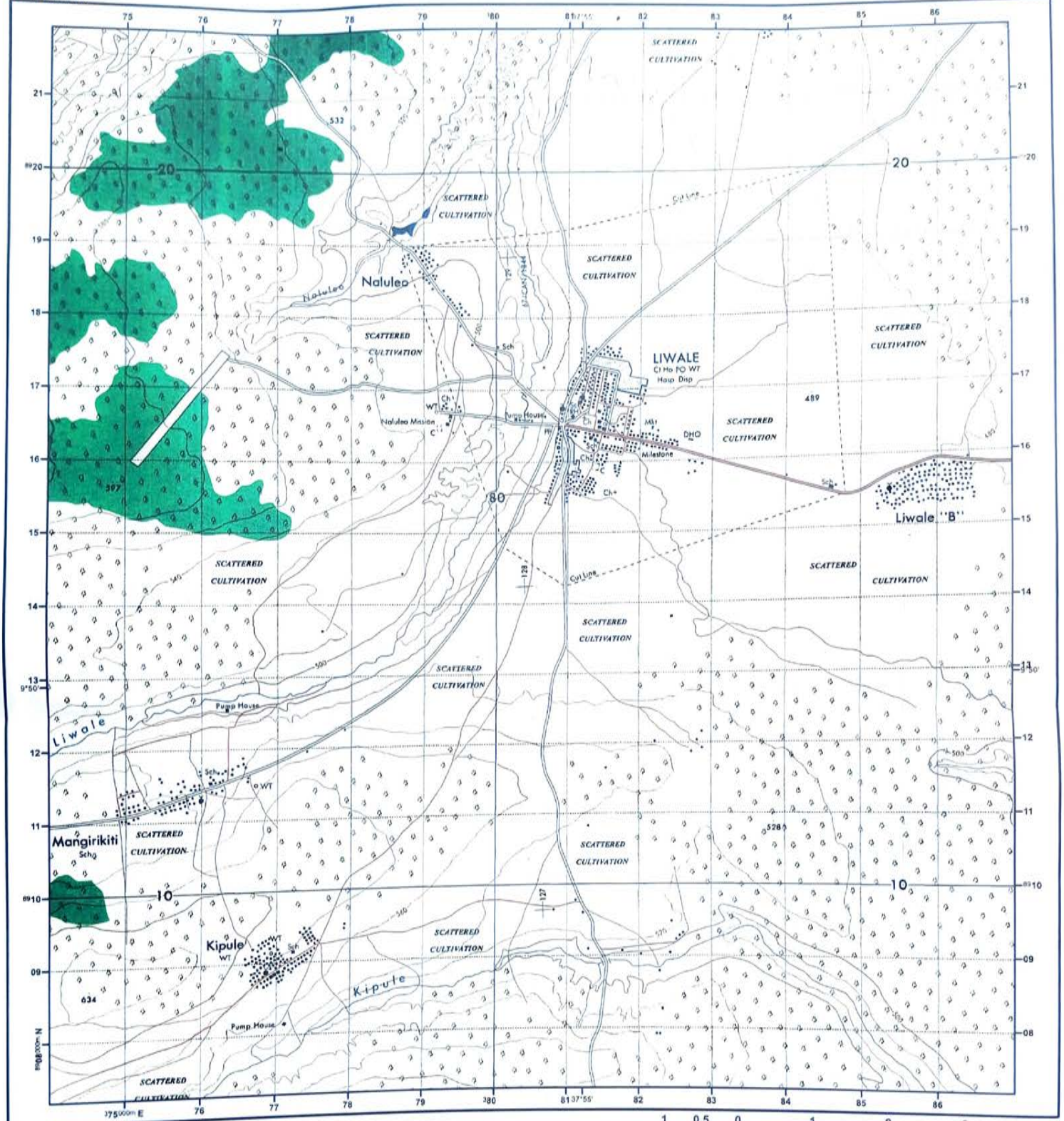
SECTION C (30 Marks)

Answer **two (02)** questions from this section.

9. Juma was travelling from Iringa to Dar es Salaam. On his way, he experienced gradual increase in temperature. In six points, analyse the causes of such a situation.

10. Environmental degradation is a serious problem caused by human activities. Examine six measures to be taken to prevent the situation.

11. Describe six sources of the renewable energy found in Tanzania.



Extract from Liwale, Sheet 280/4
Series Y742, Edition 1 - TSD, Ministry of Lands.
Government of the United Republic of Tanzania, 1986

HEIGHTS IN METRES

Scale 1: 50,000

1 0.5 0 1 2 3 Kilometers

Town or area with Permanent Buidings
Other Populated Area, Houses
All Weather Road: Bound Surface
All Weather Road: Loose Surface
Dry Weather Road
Main Track (Motorable)
Other Track and Footpath
Cut Line
Railway, Siding, Station, Level Crossing
Railway Light
Airfield Runway
Grass
Telephone Line
Power Line
Antiquity
Mineral Works
Contours (V.I. 20m) Depression
Boundaries: International
Regional
District
Municipality/ Township
Forest
Thicket
Bamboo
Plantation: (Coffee C, Palm Sisal S, Sugar Su, Wattle W
Woodland
Scrub
Scattered Trees
Palm Trees
Mangrove Swamp
Tree Swamp
Papyrus Swamp, Marsh, Boge
Seasonal Swamp



Borehole, Waterhole.
Well, Spring

ABBREVIATIONS

CBP	Cotton Buying Post
Ch	Church
CtHo	Court House
DC	District Commissioner
Disp	Dispensary
HC	Health C enter
Hosp	Hospital
Mkt	Market
M	Mission
MoW	Ministry of Works
Mosq	Mosque
PO	Post Office
PP	Police Post
PS	Police Station
RH	Rest House
Sch	School
T	Telephone
TG	Telegraph