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

013 GEOGRAPHY

(For School Candidates Only)

Time: 3 Hours **Wednesday, 10th October 2012 a.m.**

Instructions

1. This paper consists of sections A, B, C and D.
2. Answer **all** questions in sections A, B and C and **one (1)** question from each part of section D.
3. Map extract of Korogwe (Series Y742 sheet 129/2) is provided.
4. Credit will be given for the use of relevant sketch maps and diagrams.
5. Calculators and cellular phones are **not** allowed in the examination room.
6. Write your **Examination Number** on every page of your answer booklet(s)

SECTION A (25 Marks)

Answer **all** questions in this section.

PHYSICAL AND MATHEMATICAL GEOGRAPHY

1. For each of the items (i) - (x), choose the correct answer from among the given alternatives and write its letter beside the item number.

(i) The outer layers of the earth include:
- A Atmosphere, Lithosphere and Troposphere
- B Atmosphere, Troposphere and Biosphere
- C Atmosphere, Hydrosphere and Biosphere
- D Atmosphere, Lithosphere and Biosphere
- E Atmosphere, Hydrosphere and Lithosphere.

(ii) Which of the following is the effect of mass wasting?
- A Frost action
- B Interlocking spur
- C Rock fall
- D Exfoliation
- E Rock disintegration.

(iii) The columns of clay capped by boulders formed due to rain action are known as:
- A soil creep
- B gullies
- C land slide
- D earth pillars
- E cuesta

(iv) Which of the following features is formed by river erosion?
- A pot hole
- B ox bow lake
- C delta
- D flood plain
- E lagoon.

(v) Rotation of the earth results to:
- A elliptical orbit
- B change of seasons
- C day and night
- D leap year
- E standard time.

(vi) _____ are good examples of fold mountains in Africa.
- A Uluguru and Oldoinyo Lengai
- B Jos and Karoo
- C Elgon and Kilimanjaro
- D Atlas and Cape Ranges
- E Udzungwa and Kilimanjaro.

(vii) Which one of the following is a process of wind erosion?
- A Abrasion
- B Corrosion
- C Hydrolysis
- D Exfoliation
- E Attrition.

(viii) A great circle is a circle on a globe whose plane:
- A passes through the centre of the globe
- B has the shortest distance between two points
- C is perpendicular with the globe
- D marks a line of longitude
- E marks a line of latitude.

(ix) The intensity of an earthquake is measured by:

A	epicentre	B	seismograph	C	richter scale
D	chronometer	E	mercalli scale.		

(x) Soil texture refers to:
- A arrangement of soil particle
- B size of individual soil particles
- C soil catena
- D soil PH
- E grained structure.

2. Match the items in **List A** with the responses in **List B** by writing the letter of the correct response beside the item number.

List A	**List B**
(i) The earth's zone which is made up of nickel and iron.	A Crust
(ii) A wall like feature formed when a mass of magma cuts across the bedding plane.	B Lava
(iii) The upper most layer of the earth.	C Magma
(iv) A sheet of magma which lies along the bedding plane.	D Mode
(v) Magma which reaches the earth's surface and solidifies to form extrusive features.	E Dyke
	F Sill
	G Core
	H Volcano
	I Batholiths
	J Mantle

3. (a) What is an earthquake?
(b) Briefly explain five effects of earthquakes.
(c) Describe four ways of reducing the risks of earthquakes.

SECTION B (27 Marks)

Answer **all** questions this section.

APPLICATION OF STATISTICS, INTRODUCTION TO RESEARCH AND ELEMENTARY SURVEYING

4. Carefully study the hypothetical data presented below showing the export of crops from Tanzania.

The Export of Crops in Tonnes

Year	**Cloves**	**Sisal**	**Cotton**
1990	4000	3500	7000
1991	2500	2000	4500
1992	3500	1500	6000
1993	6000	1000	8500
1994	6500	1500	9000

(a) Present the data using compound bar graph.

(b) Explain two advantages and disadvantages of compound bar graph.

5. (a) What is meant by sampling techniques as used in research?

(b) Briefly explain the following concepts as they are applied in sampling:
   (i) A sample
   (ii) Random sampling
   (iii) Systematic sampling
   (iv) Stratified sampling

(c) Outline the procedures of conducting an interview.

6. (a) (i) Define the term levelling survey.
   (ii) State four benefits of levelling survey.

(b) Explain essential equipments used in levelling surveying.

SECTION C (28 Marks)

Answer **all** questions in this section.

MAP READING AND PHOTOGRAPH INTERPRETATION

7. Study the printed map extract of Korogwe (Series Y742 sheet 129/2), then answer the following questions:

   (a) Describe the relief of the mapped area.

   (b) Calculate the area of the whole map of Korogwe in Km^2 by using grid squares.

   (c) Examine the settlement patterns of the area.

   (d) Express the scale of the map into statement scale.

8. (a) Name three types of geographical photographs.

   (b) Specify the type of geographical photograph which is:
   (i) taken horizontally on the ground.
   (ii) used in map making.

   (c) Explain five differences between the photograph you have mentioned in (b) (ii) above and topographical maps.

SECTION D (20 Marks)

Answer **one (1)** question from each part.

PART 1: REGIONAL FOCAL STUDIES

9. By using concrete examples, explain five negative effects of tourism in East Africa.

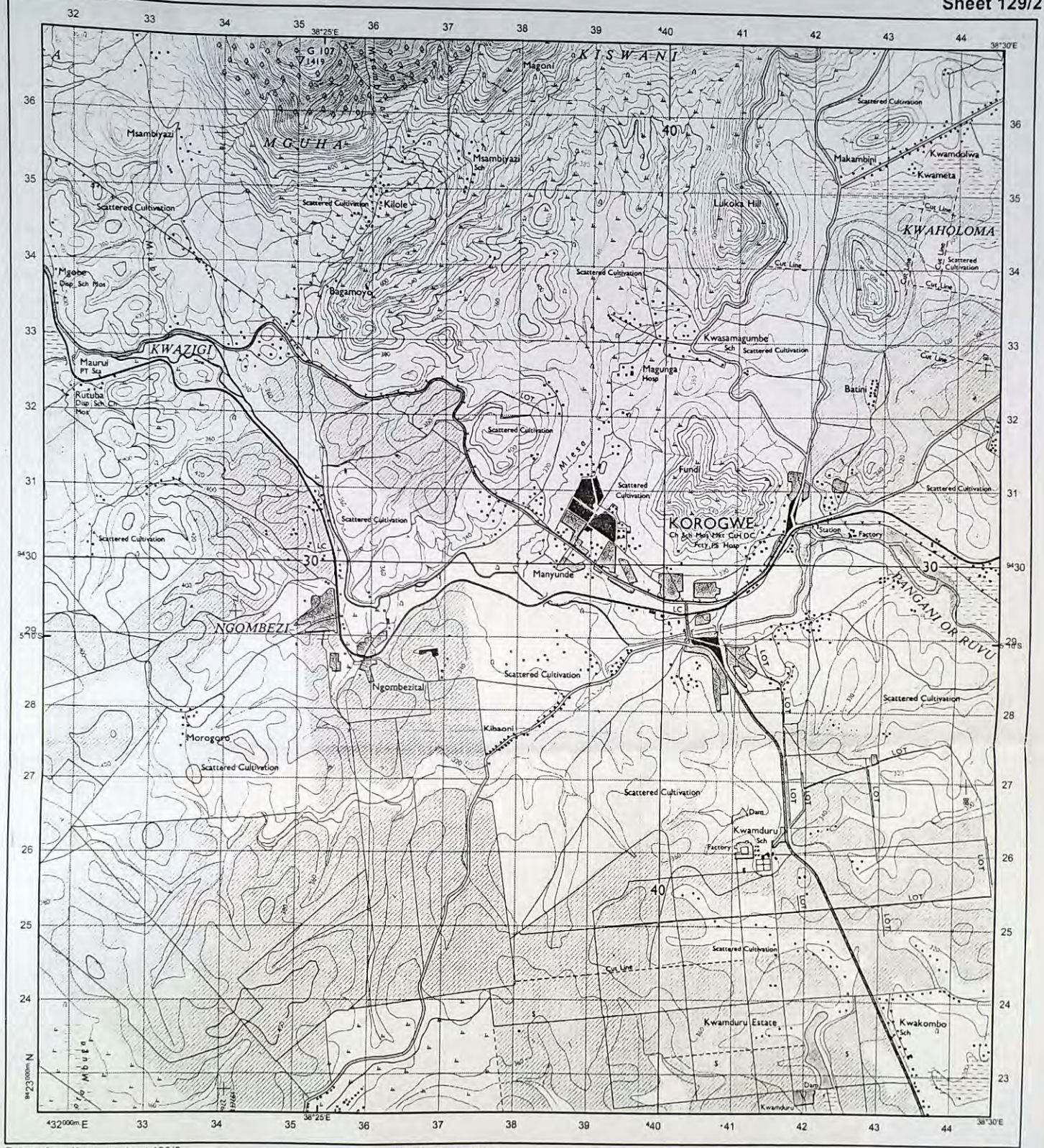
10. Elaborate eight reasons indicating why the transportation sector is important to the economy of Tanzania.

PART II: ENVIRONMENTAL ISSUES, POPULATION AND SETTLEMENT

11. Explain eight environmental problems related to the rapid population growth.

12. (a) Describe five objectives of conducting census in a country.

   (b) Explain three limitations of census in African countries.



Extract from Korogwe sheet 129/2
Series Y742, Edition 3-TSD/ Ministry of Lands,
Government of the United Republic of Tanzania 1988

HEIGHTS IN METRES

Scale 1: 50,000

1 0.5 0 1 2 3 Kilometers

Town or area with permanent buildings
Other populated area, Houses
All Weather Road:- Bound Surface — Road A12 Number
All Weather Road:- Loose Surface — Culvert Bridge
Main Track (Motorable)
Other Track and Footpath
Cut Line — Cut Line
Railway, Siding, Station, Level Crossing — Sta LC
Railway Light
Airfield Runway

Telephone Line
Telephone Line along Road
Power Line
Crater
Steep Slope
Spot Height (in metres) — 204
Contours (V.I.20m) — Depression — 200 180 160
Air Photo Principal Point with Film No. — JICA/91 R/B-5
Watercourse, Waterfall, Rapids, Dams
Watercourse, (Wide), Waterfall Rapids
Watercourse (Indefinite)
WateTank, Windpump

Borehole, WateHole, Well, Spring
Bund, Major Fence, Hedge
Cliff
Forest
Thicket
Bamboo
Riverrine Trees
Plantation:- (Coffee C, Palm P, Sisal S, Sugar Su, Wattle W)
Woodland
Scrub

Scattered Trees
Palm Trees
Mangroove Swamp
Tree Swamp
Papyrus Swamp, Marsh, Boge
Seasonal Swamp
Sand or Mud — Inland — Coastal
Outcrop Rock
Coral

ABBREVIATIONS

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