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

013 GEOGRAPHY

(For Both School and Private Candidates)

Time: 3 Hours **Thursday, 06th November 2014 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 Songwe River (sheet 244/3) 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 in the answer booklet provided.

(i) Zeugens and yadangs differ in
- A position of the rock strata
- B position of the rock in the slope
- C place of formation
- D colour of the rock on which they are formed
- E the type of the rock on which they are formed.

(ii) An old age stage of the river is called
- A Valley Stage
- B Torrent Stage
- C Plain Stage
- D Mature Stage
- E Youthful Stage.

(iii) The summer solstice in the northern hemisphere occurs on
- A 23rd September
- B 21st September
- C 22nd December
- D 21st March
- E 21st June.

(iv) A Stevenson's box is painted by white colour in order to
- A improve insulation
- B be seen clearly
- C decorate it
- D allow thermometers to be placed
- E allow movement of air.

(v) A stony desert is called

A	hamada	B	reg	C	barchan
D	erg	E	rock pedestal.		

(vi) The temperature at Korogwe 950 metres is 24°C. What is the temperature of Kilimanjaro 5895 metres above sea level?

A	34°C.	B	5.67°C.	C	18.1°C.
D	10.24°C.	E	32°C.		

(vii) When two lateral forces act away from each other are known as
A horizontal forces
B orogenic forces
C vertical forces
D compression forces
E tension forces.

(viii) Water vapour is turned into water droplets in the process known as
A evaporation B convection C saturation
D condensation E transpiration.

(ix) Which of the following features produced by ice action is the result of both erosional and depositional activities?
A Arête. B Hanging Valley. C Erratic.
D Cirque. E Roche Mountonee.

(x) The name given to earthquake waves that travel within a crust is
A focus B epicentre C seismic
D surface waves E body waves.

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 in the answer booklet provided.

List A	**List B**
(i) A mass of magma which has emerged on the earth's surface.	A laccoliths
(ii) A wall like feature formed when magma cuts across a bedding plane.	B caldera
(iii) A sheet of magma which lies along a bedding plane.	C sills
(iv) A very large mass of magma which often forms the root of a mountain.	D volcano
(v) A dome-shaped feature formed when magma push up the overlaying layers.	E lava
	F crater
	G dyke
	H cone let
	I batholiths
	J lava cones

3. (a) Explain four mechanisms developed by plants in semi arid regions to adapt drought conditions.
(b) Describe the characteristics of equatorial forest.

SECTION B (27 Marks)

Answer **all** questions this section.

APPLICATION OF STATISTICS, INTRODUCTION TO RESEARCH AND ELEMENTARY SURVEYING

4. The table below shows agricultural production in Tanzania from 2000 to 2006 in `000 tonnes.

CROPS	**2000**	**2001**	**2002**	**2003**
Maize	65	35	60	70
Tobacco	25	30	20	25
Coffee	50	60	45	45

(a) Present the data by using a grouped line graph.
(b) Comment on the nature of production.

5. (a) What is a research problem?
(b) Name four sources of research problem.
(c) Explain four characteristics of research problem.

6. (a) Define chain survey.
(b) Give the main use of the following equipments in simple chain survey.
(i) Pegs
(ii) Cross staff
(iii) Arrows
(iv) Tape
(v) Chain
(vi) Ranging rods
(vii) Field sheet
(viii) An optical square.

SECTION C (28 Marks)

Answer **all** questions in this section.

MAP READING AND PHOTOGRAPH INTERPRETATION

7. Study the printed map extract of Songwe River (sheet 244/3), then answer the following questions:

(a) Calculate the area covered by forest in km^2 by using grid square method.

(b) Measure the length of railway line form grid references 040118 to 130122.

(c) Describe the nature of the relief of the area.

(d) Name four physical features found on the map.

(e) Giving evidences from the map, suggest three economic activities taking place in the area.

8. Study the photograph given below and then answer the questions that follow:



(a) With two reasons, identify the type of the photograph.

(b) Identify the type of the settlement pattern seen on the photograph.

(c) Name two economic importances of the area shown on the photograph.

(d) Explain two social and environmental problems that are likely to occur in the area.

SECTION D (20 Marks)

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

PART 1: REGIONAL FOCAL STUDIES

9. Suggest eight ways that may be adopted to solve the problems facing forestry in Tanzania.

10. Explain eight characteristics of shifting cultivation.

PART II: ENVIRONMENTAL ISSUES, POPULATION AND SETTLEMENT

11. Describe the natural and human causes of loss of biodiversity.

12. Examine the eight factors which lead to the growth of settlements in different parts of a country.

SONGWE RIVER

Sheet 244/3



Extract from Songwe River, Sheet 244/3
Series Y742, Edition 1-TSD/ Ministry of Lands.
Government of the United Republic of Tanzania 1983

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
- 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
- Air Photo Principal Point with Film No. JICA/91 R7B-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, 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