

**Geography I**

**005**

**27/11/2017 8.30 AM - 11.30 AM**



**Rwanda Education Board**

**ORDINARY LEVEL NATIONAL EXAMINATIONS, 2017**

**SUBJECT: GEOGRAPHY**

**PAPER I: PHYSICAL GEOGRAPHY**

**DURATION: 3 HOURS**

**INSTRUCTIONS:**

- 1) Write your names and index number on the answer booklet as written on your registration form and **DO NOT** write your names and index number on additional answer sheets of paper if provided.
- 2) Do not open this question paper until you are told to do so.
- 3) This paper has **THREE** sections: **A**, **B** and **C**.

**SECTION A:** Attempt all questions

**(55 marks)**

**SECTION B:** Attempt any **THREE** questions.

**(30 marks)**

**SECTION C:** Attempt only **ONE** question.

**(15marks)**

- 4) Use a **blue** or **black** pen.

**SECTION A: Attempt all questions (55marks)**

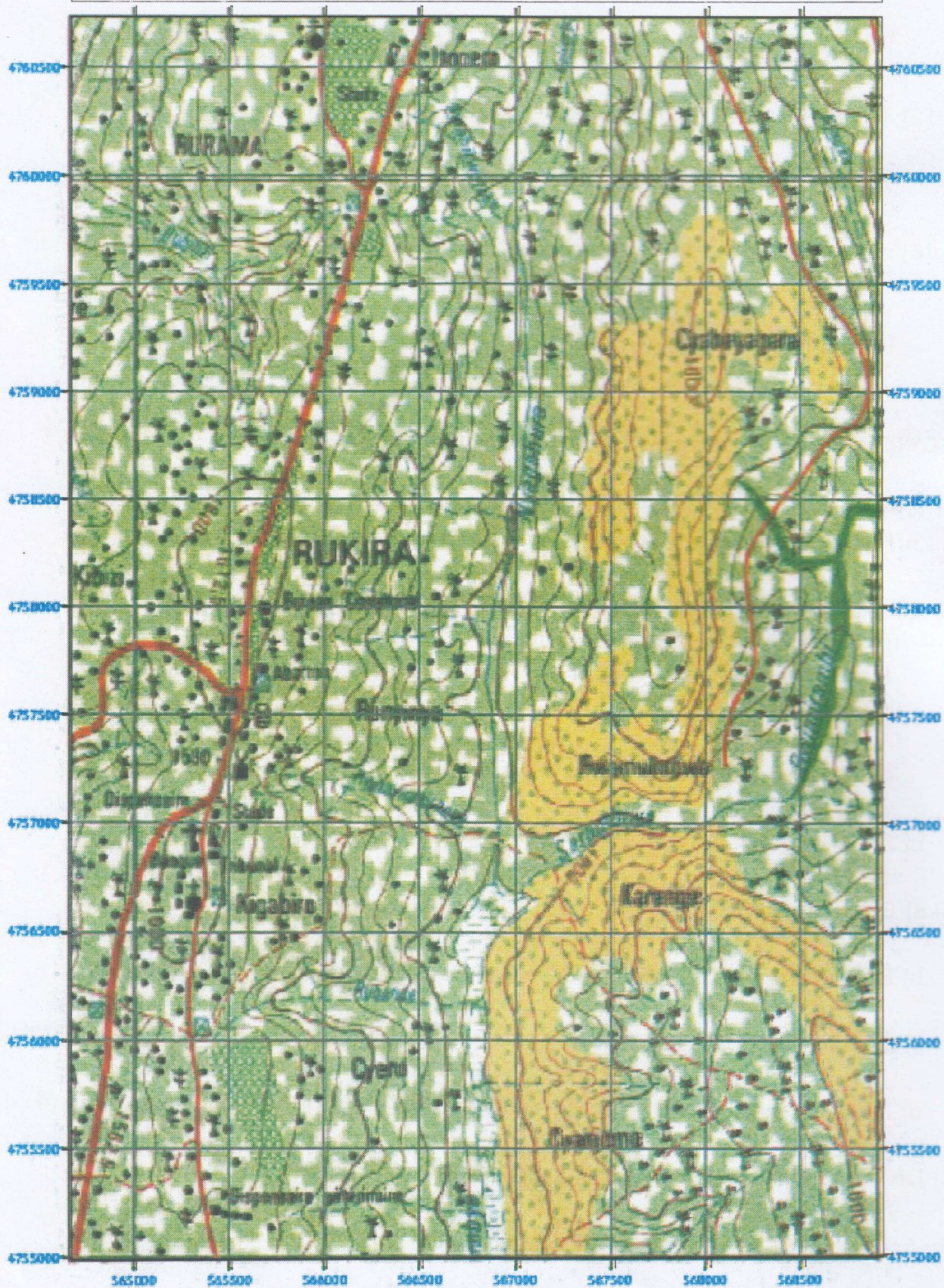
- 1) Differentiate between "galaxy" and "constellation". **(2marks)**
- 2) State three factors that determine the shape of the earth. **(3marks)**
- 3) Briefly describe the characteristics of the oceanic crust. **(3marks)**
- 4) With the aid of a diagram, explain how the solar eclipse occurs. **(4marks)**
- 5) Explain what is meant by the terms:
  - a) Global warming. **(2marks)**
  - b) Relative humidity. **(2marks)**
- 6) a) i) Why is the Stevenson screen painted white? **(1mark)**  
ii) Why does the screen in 6 a)(i) have louvers? **(1mark)**  
b) Differentiate between climate and weather. **(2marks)**
- 7) Explain how the following features are formed:
  - a) Escarpment. **(3marks)**
  - b) Tilt block. **(3marks)**
- 8) Describe two ways in which faulting influences the drainage patterns. **(2marks)**
- 9) Name three important gases in the earth's atmosphere. **(3marks)**
- 10) Briefly explain the three processes below that make up the water cycle:
  - a) Surface Runoff. **(2marks)**
  - b) Infiltration. **(2marks)**
  - c) Transpiration. **(2marks)**

- 11) a) Describe two main causes of flooding. **(2marks)**  
b) Describe four characteristics of desert soils. **(4marks)**
- 12) a) Describe the characteristics of igneous rocks. **(2marks)**  
b) Explain the effects of faulting on drainage of an area. **(4marks)**
- 13) a) Describe the characteristics of topographical maps. **(3marks)**  
b) How do hachures show relief features on a topographical map? **(3marks)**

**SECTION B: Attempt any three questions (30marks)**

- 14) With the aid of a well-labelled diagram, explain the structure of the earth's atmosphere. **(10marks)**
- 15) a) Describe the formation of the following two deposition features found in the lower stage of a river:  
(i) Meander. **(3marks)**  
(ii) Ox-bow lake. **(3marks)**  
b) Explain the significance of rivers on development. **(4marks)**
- 16) a) Briefly describe the characteristics of savanna climate. **(5marks)**  
b) Explain the significance of savanna vegetation to man. **(5marks)**
- 17) a) Explain three determinants of weathering. **(6marks)**  
b) Distinguish between weathering and erosion. **(4marks)**
- 18) Discuss the significance of folding to man. **(10marks)**

# Topographical map of Rwanda; Rukira



Source:  
 Topographic map of Rwanda in 43 sheets  
 at 1/50000 scale was produced by IGN in 1989.  
 The harcopy maps were scanned and  
 vectorized by NCSR in 2006.

Geographic Coordinate System:  
 Coordinate System : ITRF 2005  
 Projection : Transverse Mercator  
 Datum : ITRF 2005

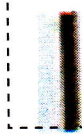

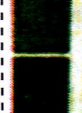


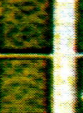






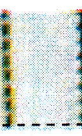
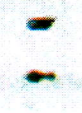




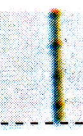

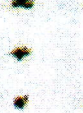
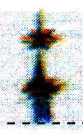



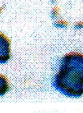



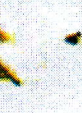



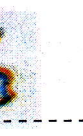

Scale/Echelle  
 1:25,000

Scale bar showing 0 to 1 Km.

# MAP KEY

SCALE/ECHELLE 1:25,000

1000 m 500 0 1 2 3 4 5km

	<b>Main tarmac road</b> Route national asphaltée		<b>Dense/nucleated settlement, sparse, scattered</b> Habitat concentré, disperse, remarquable		<b>Natural forest, plantation</b> Forêt naturelle, boisement
	<b>Main murrum road</b> Route national non asphaltée		<b>Hospital, health centre, dispensary</b> Hopitale, centre de santé, dispensaire		<b>Savannah or pasture.</b> Savane ou pasturage
	<b>Feeder road</b> Route communal		<b>Sectorial bureau, school, dipping tank</b> Bureau de secteur, école, dipping tank		<b>Upland crops, valley crops</b> Cultures des collines
	<b>Track</b> Piste carrossable		<b>Religious edifices: church, temple, mosque</b> Edifices religieux: église, temple, mosquée		<b>Rangeland, cash crop</b> Prairie, cultures industrielles
	<b>Path</b> Sentier		<b>Border post, market</b> Poste de douane, marché		<b>Papyrus</b> Papyrus
	<b>Boulevard/road lined with trees</b> Route bordée d'arbres		<b>International airport, aerodrome/air strip</b> Aéroport international, aérodrome		<b>Bananas, sugar cane, coffee</b> Bananier, cane à sucre, café
	<b>Road under construction</b> Route en construction		<b>River</b> Rivière		<b>Rice, tea, cotton</b> Riz, thé, coton
	<b>Power/electric line</b> Ligne de transport d'énergie électrique		<b>Pond, marsh, a well</b> Etang, marc, puits		<b>Quinine, pyrethrum, bamboo</b> Quinquina, pyréthre, bambou
	<b>Bridge, footbridge</b> Pont en dur, pont en bois		<b>Lake, swamp</b> Lac, marais		<b>Terraces</b> Talus
	<b>Contours</b> Courbe de niveau		<b>Falls, dam</b> Chutes, barrage		<b>Rock, cliff</b> Rocher, abrupt
	<b>Contours, contour intervals, depression</b> Coube de niveau, intercalaires, cuvette		<b>Border pillar, radio booster station</b> Borne frontier, antenne relais de radio		<b>Trigonometrical pillar</b> Détail particulier
	<b>Quarry, factory and/or industrial complex</b> Carrière, usine et/ou complexe industriel		<b>Mine 1 operational 2 derelict</b> Mine 1 en activité 2 arrêtée		

**SECTION C: Attempt only one question (15marks)**

19) Study the map extract of **RUKIRA** (on page 4) and answer the questions given below:

- a) (i) Identify two types of settlement from the map extract. **(2marks)**
- (ii) Give reasons to support the answer given in 19 (a) (i) above. **(3marks)**
- b) (i) Describe the relief of the area shown on the map extract. **(3marks)**
- (ii) Describe the vegetation of the area. **(3marks)**
- (iii) Explain the influence of relief on vegetation distribution. **(4marks)**

20) Study the photograph provided on the next page (page 8) and answer the questions given below:

a) (i) Name the type of photograph shown on page 8. **(1mark)**

(ii) Name the economic activity taking place in the photograph. **(1mark)**

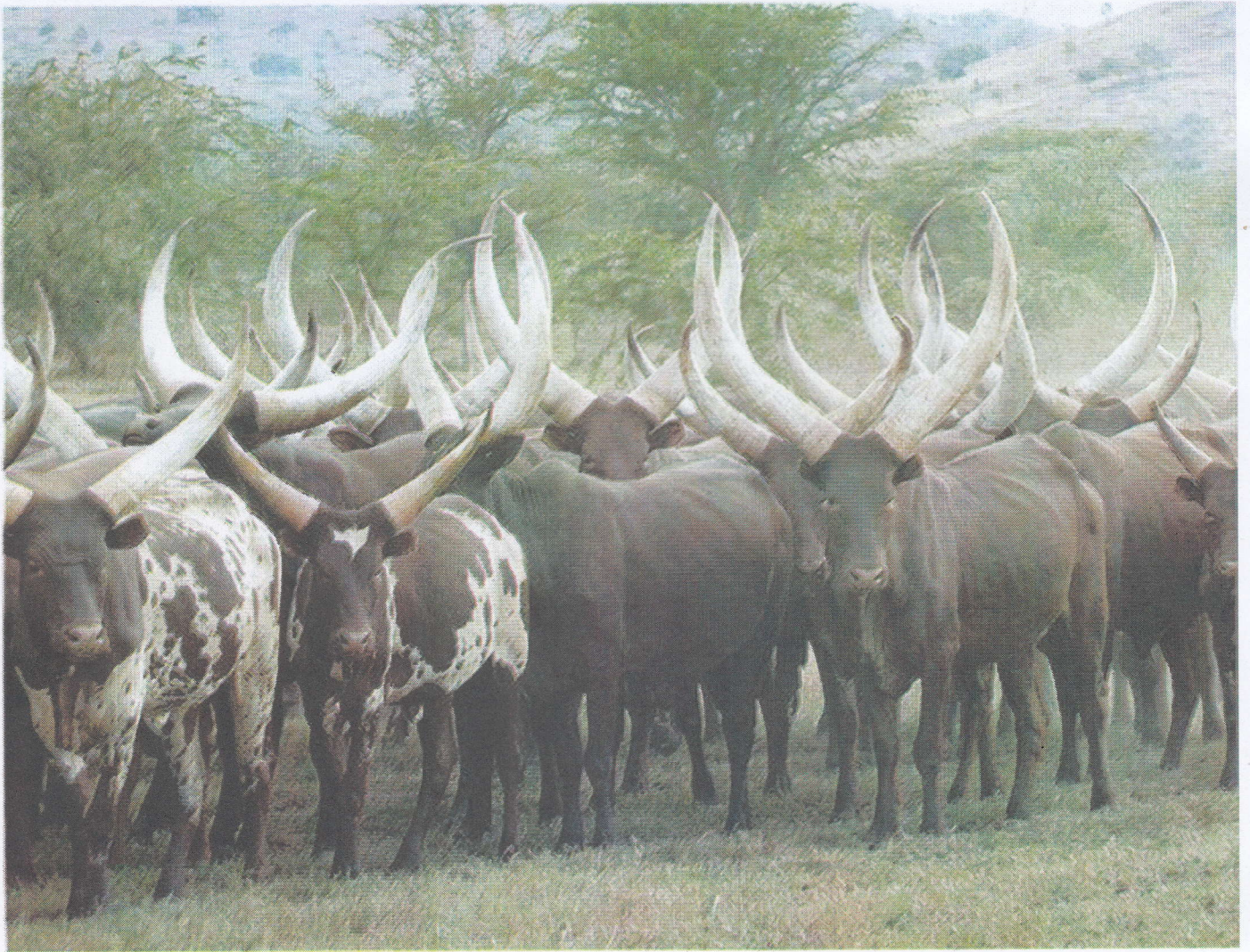
b) In which season was the photograph likely to have been taken? **(1mark)**

c) (i) Describe the animals shown in the photograph. **(3marks)**

(ii) Give reasons why these animals are kept. **(4marks)**

d) Explain the problems faced by the people who practice this activity. **(4marks)**

e) Name an area in Rwanda where this photograph could have been taken. **(1mark)**



Photograph