

Geography 1

004

19 Nov.2012 8.30am – 11.30am



RWANDA EDUCATION BOARD (REB)

ORDINARY LEVEL NATIONAL EXAMINATION 2012

SUBJECT: GEOGRAPHY

PAPER I : PHYSICAL GEOGRAPHY

DURATION : 3 HOURS

INSTRUCTIONS:

This paper consists of **THREE** Sections **A, B and C**.

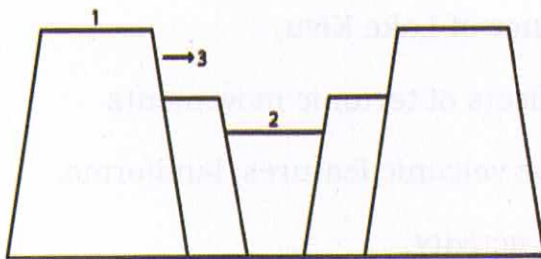
- Answer **ALL** questions in section A. **(55 marks)**
- Answer **THREE** questions in section B. **(30 marks)**
- Answer **one** questions in section C. **(15 marks)**

SECTION A: ANSWER ALL QUESTIONS IN THIS SECTION (55 MARKS)

1. a) Differentiate between solar and lunar eclipses. (4 marks)
b) Name the galaxy in which the earth is located. (1 mark)
2. What three consequences of the revolution of the earth? (3 marks)
3. a) Explain the causes of days and nights. (2 marks)
b) In which months of the year are days and nights of equal length on the Earth? (2 marks)
4. a) At what latitude and longitude is Rwanda located? (3 marks)
b) Explain why latitude and longitude are expressed in degrees. (1 mark)
5. Explain the causes of folding on the earth's surface. (3 marks)
6. a) Explain the origin of metamorphic rocks (2 marks)
b) Explain the importance of sedimentary rocks. (3 marks)
7. There are different forms of relief in Rwanda.
 - a) Name 3 regions of Rwanda, which are dominated by mountains. (3 marks)
 - b) What are the highest and the lowest altitudes in Rwanda? (2 marks)
8. a) What do we call lines that join all points which receive the same precipitations on a map? (1 mark)
b) What type of climate does northern Europe experience? (1 mark)
c) What are the characteristics of cumulonimbus clouds? (2 marks)
9. There are many rivers and lakes that drain waters of Rwanda.
 - a) Name the largest river basins that drain the waters of Rwanda. (2 marks)
 - b) Mention the main river that drains waters of each basin. (2 marks)
 - c) Explain the meaning of a crater lake giving an example of such a lake in Rwanda. (2 marks)
10. Draw the following drainage patterns: centripetal, radial and dendritic. (3 marks)
11. The Earth has external and internal structures.

Draw a sketch of the internal structure of the earth, name its parts and give their dimensions. **(3 marks)**

12. Examine the following diagram of fault and answer the questions that follow.



a). Name and explain different parts of the faults shown by the following numbers: 1, 2, and 3. **(3 marks)**

b). Explain the different consequences of faulting on East African region. **(2 marks)**

13. a) What is the natural border of the European continent in the east? **(1 mark)**

b) Name two countries bordering the Netherlands. **(2 marks)**

c) Name one lake of the American Great Lakes Region. **(1 mark)**

d) What is the largest river that drains South America? **(1 mark)**

SECTION B: ANSWER ANY THREE QUESTIONS OF YOUR CHOICE (30 marks)

14. Atmospheric pressure varies from one region to another.

a) Explain two factors of variation of atmospheric pressure? **(4 marks)**

b) Explain what low atmospheric pressure means. **(2 marks)**

c) How does the atmospheric pressure determine the movement of wind? **(2 marks)**

d) Name two major regions of the world characterized by low atmospheric pressures. **(2 marks)**

15. The soil is the superficial part of the crust completely decomposed where plants are grown and which is subject to erosion:

a) Name four parts that make up soil of soils. **(2 marks)**

- b) Explain four major causes of soil erosion in Rwanda. **(4 marks)**
- c) State four techniques used to preserve the soil in Rwanda. **(4 marks)**
16. Lake Kivu has great economic importance for Rwanda
- a) Explain the process of formation of Lake Kivu. **(2 marks)**
- b) Name four other lakes in Africa that were formed in the same way as Lake Kivu. **(2 marks)**
- c) Explain six economic importance of Lake Kivu. **(6 marks)**
17. Volcanic activity is one of the effects of tectonic movements
- a) Draw and name four extrusive volcanic features/landforms. **(4 marks)**
- b) Explain the origin of volcanic activity. **(2 marks)**
- c) Giving four examples, explain the importance of volcanism in Rwanda. **(4 marks)**
18. Earthquakes are some of the effects of tectonic movements
- a) Explain the main cause of earthquakes. **(2 marks)**
- b) Name the point on earth's surface where the first motion of earthquake occurs. **(1 mark)**
- c) Name four earthquake areas in the world. **(4 marks)**
- d) Give three major consequences of earthquakes? **(3 marks)**
19. Explain the distribution of rainfall and temperature in Rwanda. **(10 marks)**

SECTION C: ANSWER ONLY ONE QUESTION OF YOUR CHOICE (15 marks)

20. Study the map extract of ZAZA and answer the following questions

- a) i) Identify the man-made feature at grid reference 462573. **(1 mark)**
ii) Give a six figure reference grid for the stadium of south-east. **(1 mark)**
iii) What is the reference grid for the school to the north near Bitare? **(1 mark)**
- b) i) What is the bearing of Ntungamo from north? **(1 mark)**
ii) What is the direction of Ntungamo from Birenga? **(1 mark)**
- c) Mention the type of drainage pattern which is dominant on the map. **(2 marks)**
- d) Examine the line which joins Ntungamo and Birenga on the map and answer the following questions:
i) What is the lowest elevation (altitude) on the line? **(1 mark)**
ii) Give the highest elevation (altitude) on the line. **(1 mark)**
iii) Measure the length of the line from Ntungamo to Birenga in km. **(2 marks)**
- e) i) What are the cash crops grown in the Region? **(1 mark)**
ii) What type of settlement pattern in the map? **(1 mark)**
iii) What is the natural vegetation shown on the map? **(2 marks)**

SCALE/ECHELLE 1:50,000



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

21. Study the photograph provided below and answer the questions that follow



- a) Identify four man-made features shown on the photo. **(4 marks)**
- b) State the crop grown in the foreground of the photo. **(2 marks)**
- c) Name two provinces in Rwanda where this photo might have been taken **(1 mark)**
- d) State three problems which the people of this region might be facing. **(3 marks)**
- e) What two techniques might be used to fight against erosion in the area? **(2 marks)**
- f) Describe the relief shown in the photo. **(3 marks)**