

**Geography and
Enveronment I**

005

31/07/2023 8:30 AM – 11:30 PM



ORDINARY LEVEL NATIONAL EXAMINATIONS, 2022-2023

SUBJECT: GEOGRAPHY AND ENVIRONMENT I

PAPER I: PHYSICAL GEOGRAPHY

DURATION: 3 HOURS

INSTRUCTIONS:

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

SECTION A: This section is compulsory. **(60 marks)**

SECTION B: Attempt any **TWO** questions. **(30 marks)**

SECTION C: This section is compulsory. **(10 marks)**

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

SECTION A: Attempt all questions. (60 marks)

- 1) List any four effects of the earth's rotation. **(4 marks)**
- 2) a) Name two discontinuities available in the internal structure of the earth. **(2 marks)**
- b) Name any three main parts of the external structure of the earth. **(3 marks)**
- 3) a) Give any two characteristics of igneous rocks. **(2 marks)**
- b) Explain how sedimentary rocks are formed. **(2 marks)**
- 4) a) What is weather forecasting? **(2 marks)**
- b) Give any four elements of weather. **(4 marks)**
- 5) Give any three characteristics of mangrove vegetation. **(3 marks)**
- 6) Name any four outlet rivers in Africa. **(4 marks)**

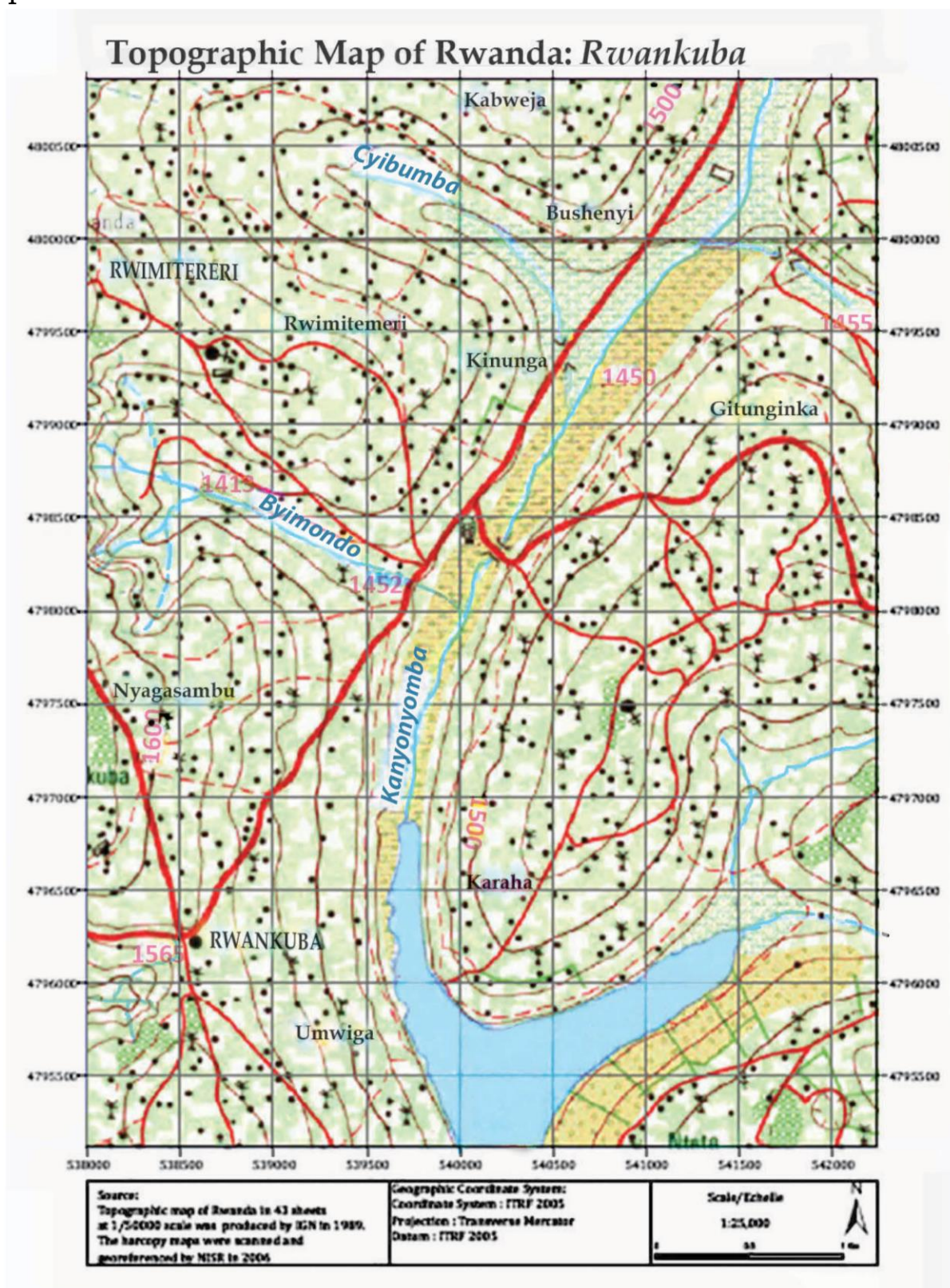
- 7) Explain how the following agents cause soil erosion. **(2 marks)**
- a) Heavy rainfall **(2 marks)**
 - b) Steep slopes **(2 marks)**
 - c) Winds **(2 marks)**
- 8) Explain any three factors that affect soil formation. **(6 marks)**
- 9) Identify any four characteristics of birunga forests. **(4 marks)**
- 10) a) What is a Stevenson screen? **(2 marks)**
- b) State any three qualities of a Stevenson screen. **(3 marks)**
- 11) Differentiate between active and dormant volcanoes and give an example of each. **(4 marks)**
- 12) Mention any five characteristics of equatorial climate. **(5 marks)**
- 13) Briefly evaluate the impact of pollution to human beings and their surroundings. **(4 marks)**

SECTION B: Attempt any two questions. (30 marks)

- 14) Discuss the measures that are put in place to conserve the environment. **(15 marks)**
- 15) Propose the measures that should be taken to minimize the spread of aridity and desertification. **(15 marks)**
- 16) a) i) What is meant by lava damming? **(2 marks)**
ii) Name two lava dammed lakes in Rwanda. **(2 marks)**
- b) Why do most rivers of Rwanda flow Eastwards? **(3 marks)**
- c) Explain the effects of the river reversal in Rwanda. **(4 marks)**
- d) List any four African rift valley lakes. **(4 marks)**

SECTION C: This question on map work is compulsory (10 marks)

17) Study the map of Rwankuba 1:25000 provided and answer the questions that follow.





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

a) Identify the drainage patterns shown in the map. **(2 marks)**

b) Show the highest and the lowest altitude of the area covered by the map. **(2 marks)**

c) Show three main activities that are shown in the map and justify each activity. **(6 marks)**

END