

THE KENYA NATIONAL EXAMINATIONS COUNCIL  
Kenya Certificate of Secondary Education



Paper 1

312/1

**GEOGRAPHY**

Nov. 2023 – 2¾ hours

Serial No.
26124388

Name: ..... Index Number: .....

Candidate's signature: ..... Date: .....

**Instructions to Candidates**



- (a) Write your name and index number in the spaces provided above.
- (b) Sign and write the date of examination in the spaces provided above.
- (c) This paper consists of two sections; A and B.
- (d) Answer all the questions in section A.
- (e) In section B answer question 6 and any other two questions.
- (f) Answers must be written in the spaces provided at the end of question 10.
- (g) This paper consists of 20 printed pages.
- (h) Candidates should check the question paper to ascertain that all the pages are printed as indicated and that no questions are missing.
- (i) Candidates should answer the questions in English.

**For Examiner's Use Only**

Section	Questions	Maximum Score	Candidate's Score
A	1-5	25	
B	6	25	
		25	
		25	
<b>Total Score</b>		<b>100</b>	



Turn over

SECTION A (25 marks)

Answer *all* the questions in this section.



- 1 (a) Differentiate between weathering and mass wasting. ✓ (2 marks)
- (b) Identify **three** ways in which temperature change influences physical weathering. ✓ (3 marks)
- 2 Describe how a land breeze occurs. ✓ (5 marks)
- 3 (a) Distinguish between weather and climate. ✓ (2 marks)
- (b) State **three** negative effects of desertification on the physical environment. ✓ (3 marks)
- 4 (a) State **two** factors that influence river erosion. *Type forces* ✓ (2 marks)  
*Nature of materials*  
*Slope*
- (b) Name the **three** types of sand dunes. ✓ (3 marks)
- 5 Figure 1 shows zones of ground water. Use it to answer question 5 (a).

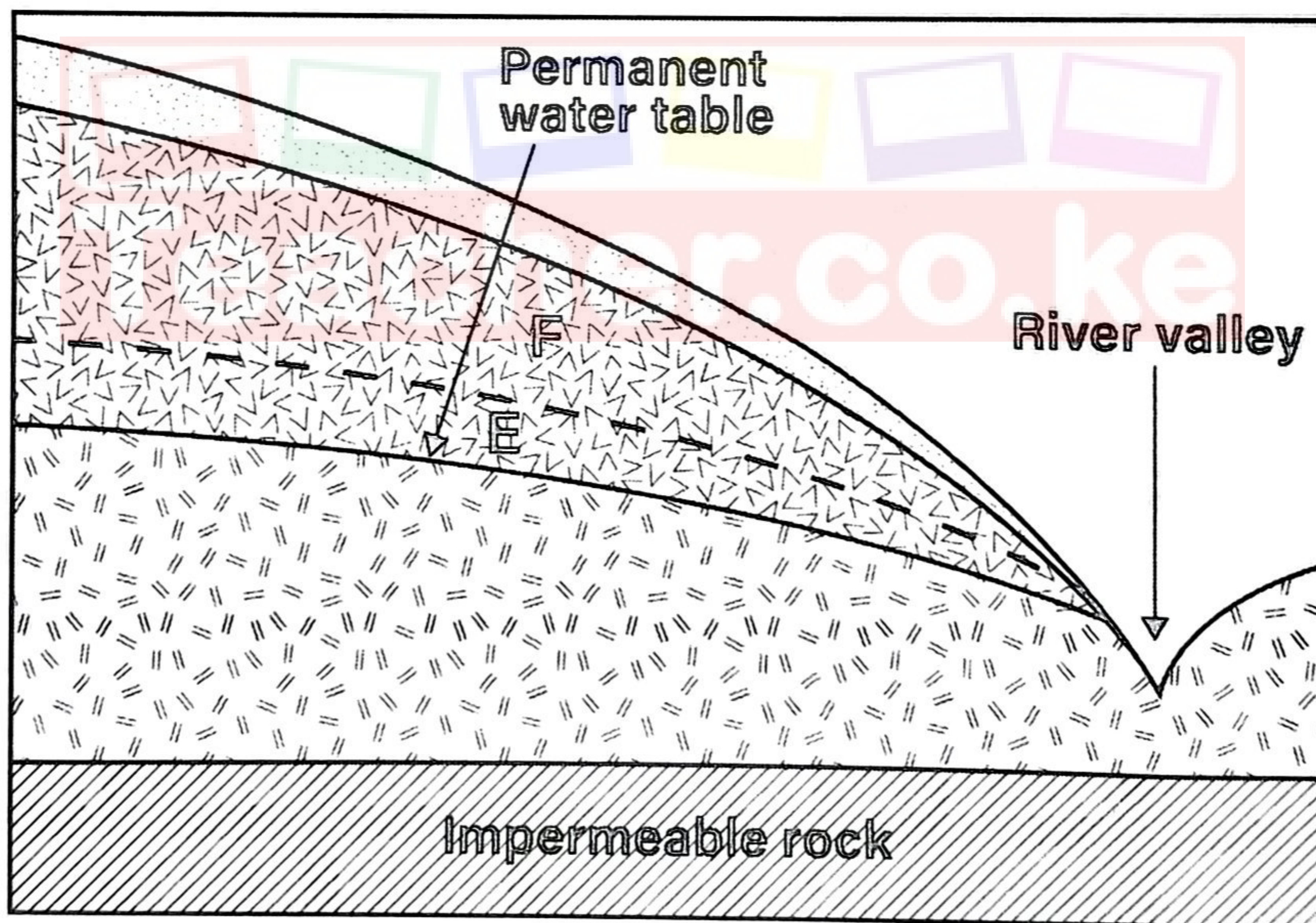


Figure 1

- (a) Name the zones marked E and F. ✓ (2 marks)
- (b) State **three** conditions that favour the formation of an artesian basin. ✓ (3 marks)

25



SECTION B (75 marks)

Answer question 6 and any other two questions from this section.

6

Study the 1965 map of Mumias 1:50,000 (Sheet 101/2) provided and answer the following questions.



(a) (i) Convert the scale of the map into statement scale. *0 5 KM* (2 marks)

(ii) Give the six figure grid reference for the school at Mungabo. (2 marks)

(iii) Identify three types of natural vegetation found to the south of Northing 36. (3 marks) *W*

(iv) What is the bearing of the school at Khamashia from the school at Ihonje? (2 marks)

(b) Using a vertical scale of 1 cm to represent 20 m, draw a cross section from grid reference 580410 to 670410. On the cross-section, mark and name:

- (i) all weather road - loose surface;
- (ii) riverine trees;
- (iii) river Nzoia;
- (iv) seasonal swamp.

(7 marks)

(c) Citing evidence from the map, explain two factors favouring trading in the area. *Roads cross market* (4 marks)

(d) Describe the relief of the area covered by the map. *Cones, gorges* (5 marks)

7

(a) (i) Give three sources of lake water. *Rain, the sun* (3 marks)

(ii) State three characteristics of lakes formed due to faulting. *Shallow, narrow, deep, long* (3 marks)

(b) Describe how the following lakes are formed:

(i) moraine dammed; *when river deposits blocks* (6 marks)

(ii) lagoon. *Bay is enclosed by deposition* (5 marks)

(c) Explain four ways in which lakes influence the climate of the surrounding areas. (8 marks)

- 8 (a) (i) Define the term glaciation. *The amount of material using glacier* (2 marks)
- (ii) Explain three negative effects of glaciation on human environment. (6 marks)
- (b) (i) Give three ways in which ice moves. *glacier?* (3 marks)
- (ii) Explain two factors that influence movement of ice. *nature of material, topography* (4 marks)
- (c) Describe how each of the following features is formed:
- (i) outwash plain; ✓ (4 marks)
- (ii) Roché mountonee. ✓ (6 marks)
- 9 (a) Give two reasons why wind is more active in hot deserts. ✓ (2 marks)
- (b) Describe how the following features found in hot deserts are formed:
- (i) mushroom block; *no daggers* (4 marks)
- (ii) yardangs. *no daggers* (4 marks)
- (c) Explain three ways in which features resulting from wind action in arid areas are important. ✓ *1: Power structure, 2: materials, 3: bones* (6 marks)
- (d) Some students carried out a field study on wind deposition features in an arid area in Kenya.
- (i) Name three secondary sources of information they are likely to rely on while preparing for the study. *Text books, periodicals, journals, press and reports* (3 marks)
- (ii) State three reasons why it was necessary for the students to visit the area before the actual field study. *familiarization, route map, what to carry* (3 marks)
- (iii) Give three advantages of studying wind depositional features through field work. (3 marks)



10



(a) Classify soils according to order.

*Informed  
Zonal  
A Zonal*

(3 marks)

(b) Explain how the following factors influence soil formation:

(i) parent rock; ✓

(4 marks)

(ii) climate. ✓

(6 marks)

(c) State five economic uses of soil. ✓

(5 marks)

(d) Students in a secondary school intend to carry out a field study on soils within their local environment.

(i) Give three activities the students are likely to carry out during the study.

(3 marks)

(ii) List four properties of soil the students would study. ✓

(4 marks)



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