

GEOGRAPHY

PAPER 1 | GRADE 12 | 2024

Time: 3 hours

Total: 225 marks

Language: English

This paper is for PRACTICE purposes only. Not an official Department of Basic Education paper.

INSTRUCTIONS AND INFORMATION

1. This question paper consists of FOUR questions.

2. Answer A

QUESTION 1: Geomorphology (Fluvial Processes)

[75 marks]

1.1 Study the cross-section of a river valley below:

[Diagram description: Shows a V-shaped upper course with steep sides, a meandering middle course with floodplain, and a wide flat lower course with a delta. Labeled: A=Upper course, B=Middle course, C=Lower course]

(a) Identify the stage of the river marked A, B and C.

(3)

Answer:

1.2 (b) Explain how a V-shaped valley is formed by erosional processes in the upper course.

(5)

Answer:

1.3 (c) Describe the THREE types of erosion that occur in a river and state WHERE in the river each is most dominant.

(6)

Answer:

1.4 Explain how a MEANDER develops over time. Include a labelled diagram of an oxbow lake formation. **(8)**

Diagram + explanation:

1.5 Define "base level" and explain its significance for river grading and the longitudinal profile. **(5)**

Answer:

1.6 A region receives 450mm of annual rainfall but experiences frequent flash flooding. Suggest THREE human activities that could exacerbate flooding in this region. **(6)**

Answer:

1.7 Describe the formation of a DELTA and name TWO conditions required for its formation. **(6)**

Answer:

1.8 Study the hydrograph provided:
[Hypothetical hydrograph: Shows sudden peak after 2-hour storm event, with lag time of 3 hours, then gradual decline over 12 hours]
(a) Define "lag time" and identify its value from the hydrograph. **(3)**

Answer:

1.9 (b) Suggest TWO factors that would increase the lag time. (4)

Answer:

1.10 (c) How would urbanization affect the shape of this hydrograph? Explain. (5)

Answer:

1.11 Evaluate the usefulness of dams for managing water resources in South Africa. Include advantages and disadvantages. (8)

Answer:

1.12 Describe how people adapt their lives and livelihoods in areas prone to flooding. (6)

Answer:

1.13 Name and describe TWO features formed by deposition in the lower course of a river. (6)

Answer:

1.14 Explain the concept of "river capture" (stream piracy) and draw a diagram to illustrate. (4)

Diagram + explanation:

[75 marks]

[illegible]

2.6 Explain the greenhouse effect and distinguish between the NATURAL greenhouse effect and ENHANCED greenhouse effect. **(6)**

Answer:

2.7 Discuss THREE observable impacts of climate change in sub-Saharan Africa with specific examples. **(9)**

Answer:

2.8 Describe how a BERG WIND forms and explain its effects on the Western Cape's weather. **(6)**

Answer:

2.9 Explain the formation of convectional rainfall. Draw a labelled diagram. **(6)**

Diagram + explanation:

2.10 South Africa is described as a "water-stressed" country. Explain what this means and suggest THREE sustainable solutions to the water crisis. **(9)**

Answer:

2.11 Compare the Mediterranean climate of the Western Cape with the subtropical inland climate of Gauteng. **(8)**

Answer:

2.12 Explain how El Nino events affect rainfall patterns in southern Africa. **(6)**

Answer:

2.13 Discuss how communities can adapt to increased drought conditions in semi-arid regions. **(4)**

Answer:

TOTAL FOR THIS QUESTION: 75

QUESTION 3: Population and Settlement

[40 marks]

3.1 Study the population pyramid provided:
[Description: Wide-based pyramid for a developing country with large young population, narrowing sharply at top]
(a) Is this a developing or developed country? Give THREE reasons. **(4)**

Answer:

3.2 (b) What challenges does this age structure present for the government? **(4)**

Answer:

3.3 Define "urbanisation" and explain THREE PUSH factors that drive rural-urban migration in South Africa. (6)

Answer:

3.4 Describe the characteristics of informal settlements (squatter camps) and explain why they develop. (6)

Answer:

3.5 Explain the concept of "primate city" and discuss whether Cape Town or Johannesburg fits this description. (5)

Answer:

3.6 Study the map of migration flows in South Africa:
[Description: Arrows showing net migration to Gauteng and Western Cape, net migration away from Eastern Cape and Limpopo]
Suggest reasons for the patterns shown on the map. (5)

Answer:

3.7 Evaluate the success of South Africa's housing policy (e.g. RDP housing) in addressing the housing backlog. (10)

Answer:

QUESTION 4: Map Work and Geographical Information Systems (GIS)

[35 marks]

4.1 Study the 1:50 000 topographical map extract provided. (Questions based on described features)

[Description: Map shows settlement near a river, road network including N-road, farm land, contours showing hill 450m, dam, indigenous forest area]

(a) What is the contour interval on a standard 1:50 000 topographic map? (1)

Answer:

4.2 (b) Calculate the gradient between point A (altitude 200m) and point B (altitude 450m) if the horizontal distance is 2,5 km. (4)

Answer:

4.3 (c) Using the map scale, calculate the actual distance if the map distance between two towns is 6,5 cm. (3)

Answer:

4.4 (d) What type of settlement pattern is shown? Suggest ONE reason for this pattern. (3)

Answer:

4.5 (e) A road engineer wants to build a road through the hilly area. What factors shown on the map should influence the road's route? (4)

Answer:

4.6 Calculate the area of a farm that measures 3 cm x 4 cm on a 1:50 000 map. Give answer in km². (4)

Answer:

4.7

Explain the difference between GIS and remote sensing. How are these technologies used in disaster management?

(8)

Answer:

4.8

Describe how aerial photographs and satellite images are used in urban planning.

(4)

Answer:

4.9

What is the bearing from point X at 200 degrees to point Y, and in what direction is that?

(4)

Answer:

TOTAL FOR THIS QUESTION:

35