



**LIMPOPO**

PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF  
**EDUCATION**

**LIMPOPO PROVINCE**

**NATIONAL  
SENIOR CERTIFICATE**

**GRADE 12**



**GEOGRAPHY  
CONTROLLED TEST  
TERM 1 2022**

MARKS: 60

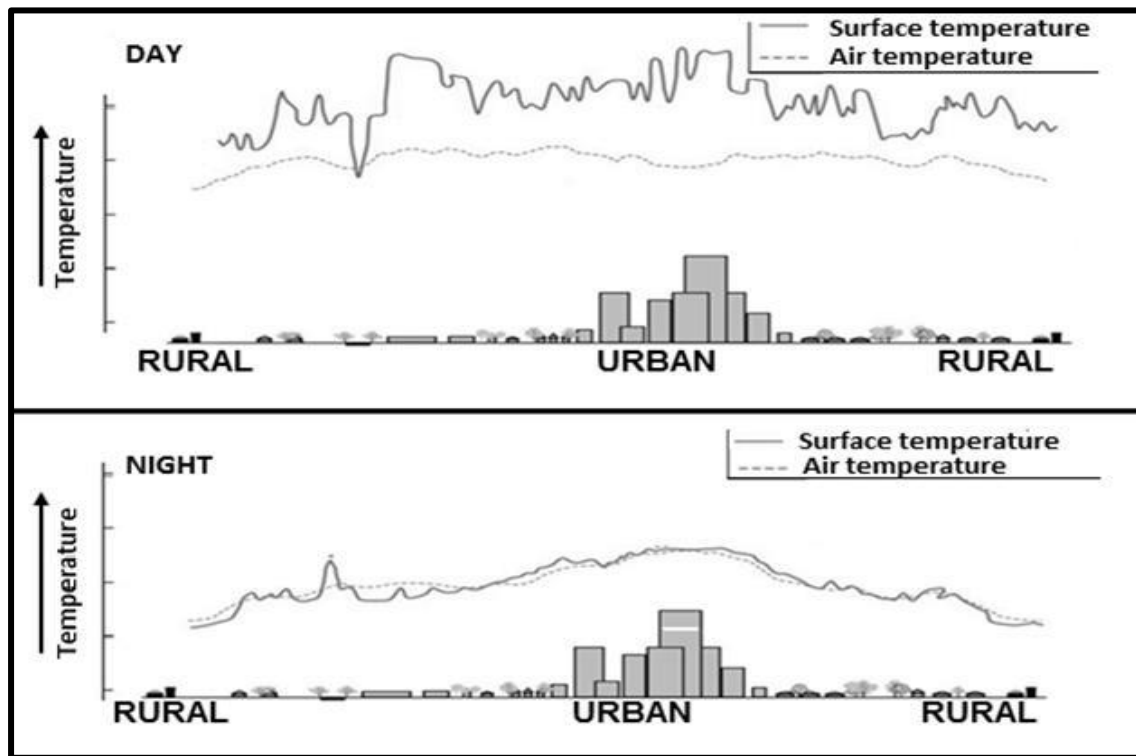
DURATION:  $1 \frac{1}{2}$  HOURS

This Question Paper consists of EIGHT(8) pages

**INSTRUCTIONS**

1. The question paper consists of TWO questions.
2. ALL diagrams are included in the QUESTION PAPER.
3. Where possible, illustrate your answers with labelled diagrams.
4. Leave a line between subsections answered.
5. Start EACH question at the top of a NEW page.
6. Number your answers correctly according to the numbering system used in this question paper.
7. Do NOT write in the margins of the ANSWER BOOK.
8. Write neatly and legibly.



**QUESTION 1 CLIMATE AND WEATHER****FIGURE 1.1.** Urban Heat Island effects during the Day and during the Night

Source: Geography P1 May-June 2021

1.1. Mention the time of day best described by each of the statements below. Simply write Night or Day next to the question number.

1.1.1. Reflects the highest temperatures in an urban heat island.

1.1.2. Artificial heat generation is at its lowest.

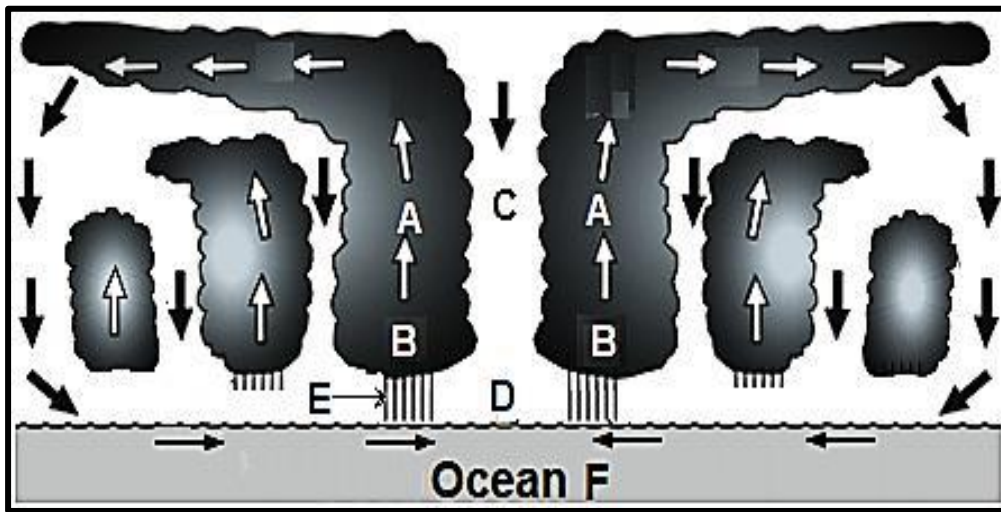
1.1.3. Increased human discomfort due to higher temperature.

1.1.4. Limited multiple reflection of heat.

1.1.5. Pollution is more concentrated.

(5 x 1) (5)

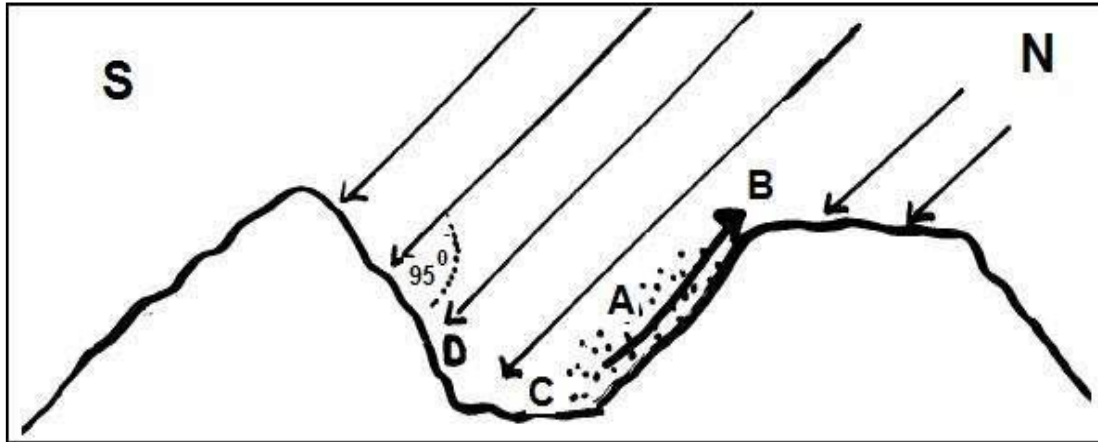
1.2. Refer to **Figure 1.2.** a cross section of a tropical cyclone. Choose the correct word(s) from those given in brackets to complete the statements. Write only the word(s) next to the question numbers (1.2.1. – 1.2.7)



Source: Google: Climate

- 1.2.1 Cloud **A** is a (cumulonimbus/ cumulus) cloud.
- 1.2.2. The updraft at **B** are caused by (convection/ advection) currents.
- 1.2.3. Area **C** is named the (eye/ eye wall).
- 1.2.4. The atmospheric condition experienced at **C** is (stable/ unstable).
- 1.2.5. **D** indicates an area of (divergence/ convergence).
- 1.2.6. **E** will experience (light rain / thunderstorms).
- 1.2.7. Ocean **F** is likely (warm/cold). (7 x 1) (7)

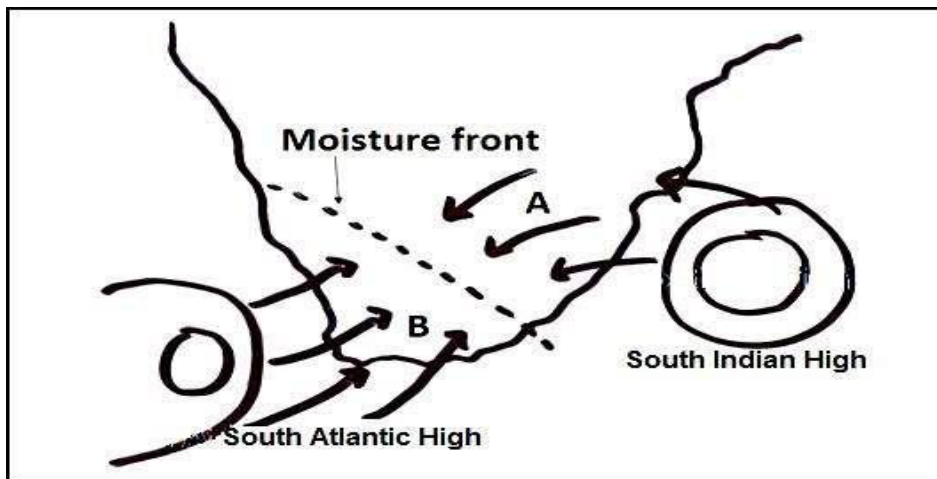
- 1.3. Refer to the sketch in **Figure 1.3** which shows aspect in a valley in the Southern Hemisphere and answer the questions that follow:



Examiner own sketch

- 1.3.1. Define the term *aspect*. (1 x 2) (2)
- 1.3.2. What evidence suggests that this valley is situated in the Southern hemisphere? (1 x 1) (1)
- 1.3.3. Explain why area **A** is referred to as the shadow zone. (1 x 2) (2)
- 1.3.4. Explain how wind **B** will develop during the day. (1 x 2) (2)

1.4. **Figure 1.4:** Sub-tropical High pressure cells



- 1.4.1. Define the term *moisture front*. (1 x 2) (2)
- 1.4.2. State moisture contents of the winds at **A**. (1 x 1) (1)
- 1.4.3, Explain in a paragraph of EIGHT lines the positive impact of line thunderstorms on farmers in the interior. (4 x 2) (8)

[30]

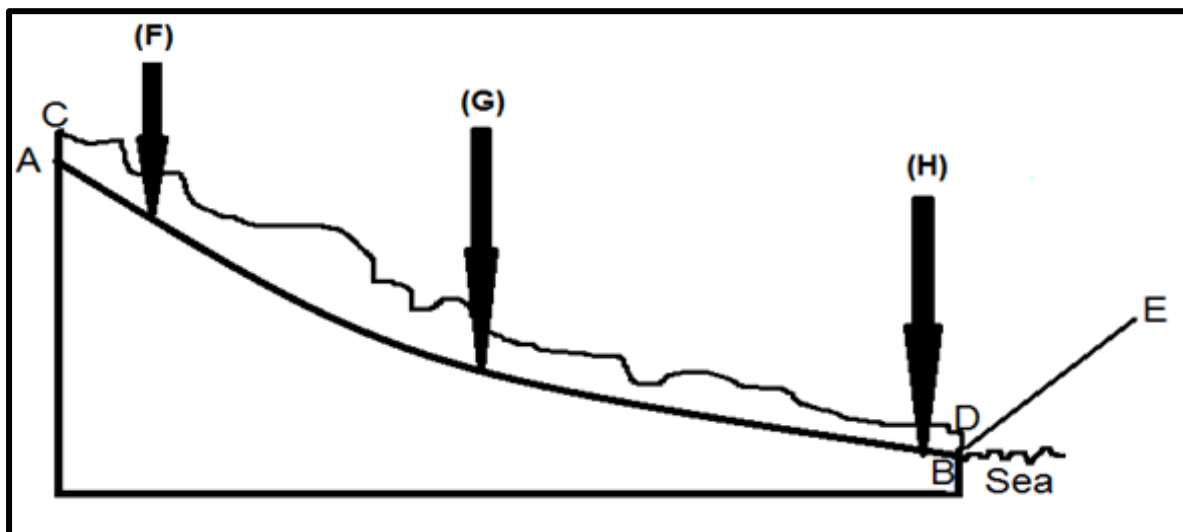
**QUESTION 2 GEOMORPHOLOGY**

2.1. Choose a term from column B that matches the geomorphological description in column A. Write only the letter (A-I) next to the question number (2.1.1-2.1.8).

COLUMN A	COLUMN B
2.1.1. Small stream that joins a larger river	A. Watershed
2.1.2. High ground separating two drainage basins	B. Aquiclude
2.1.3. Point where two streams join	C. Rapids
2.1.4. Associated with turbulent flow	D. Aquifer
2.1.5. Rock that hold water	E. Water table
	F. Confluence
	G. Tributary

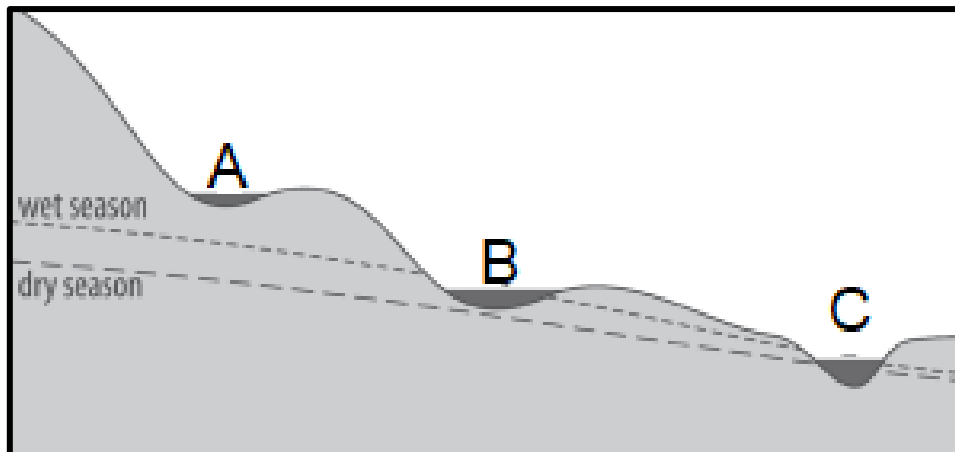
(5 x 1) (5)

2.2. Refer to FIGURE 2.2 which shows two river profiles A – B, and C - D.



- 2.2.1 Which profile shows a graded profile? (1 x 1) (1)
- 2.2.2 State one characteristic to support your answer in 2.2.1 (1 x 1) (1)
- 2.2.3. Name the temporary base level on the diagram. (1.x 1) (1)
- 2.2.4 Name the profile with the irregular shape in the diagram. (1 x 1) (1)
- 2.2.5 List most important process associated with the diagram. (1x 1) (1)

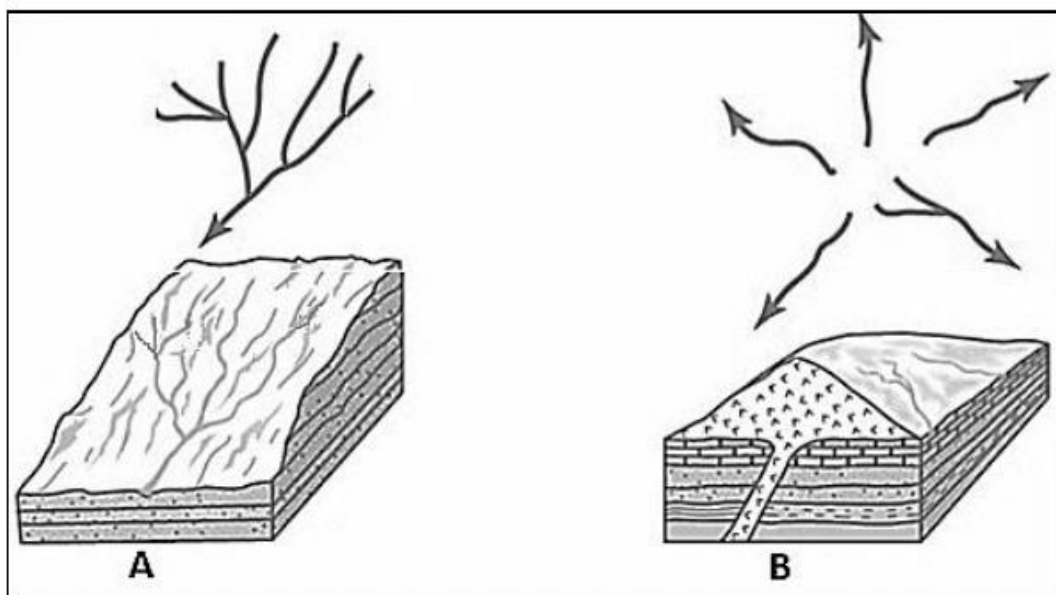
2.3. Figure 2.3 shows types of rivers



Adapted from Cambridge Study and Master; Support pack grade 12: Geography Geomorphology

- 2.3.1. Match **A**, **B** or **C** to a *permanent* and an *episodic* river. (2 x 1) (2)
- 2.3.2. Describe any physical factor that will influence the discharge (stream flow) of an *episodic* river. (1 x 2) (2)
- 2.3.5. Discuss in a paragraph of approximately EIGHT lines the impact of deforestation (vegetation removal) on a permanent river. (4 x 2) (8)

2.4. **FIGURE 2.4: DRAINAGE PATTERNS**



[Source: <https://www.bing.com/search?q=drainage+patterns&form>]

- 2.4.1. Identify drainage pattern **A** and **B**. (2 x 1) (2)
- 2.4.2. Give a characteristic of drainage pattern A evident in FIGURE 2.4. (1 x 2) (2)
- 2.4.3. Explain how the characteristics of the underlying rock structure result in the formation of drainage patterns **A** and **B**. (2 x 2) (4)

**[30]**

**[TOTAL: 60 MARKS]**

