education

Department of
Education
FREE STATE PROVINCE

GEOGRAPHY

GRADE 10

Stanmorephysics.com

March 2025

MARKS: 60

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TIME: 1 HOUR

This question paper consist of 8 pages

INSTRUCTIONS AND INFORMATION

1. Answer ALL the questions.
2. Answer the paragraph style questions as follows:

   Discuss ideas in detail.
   Write in the form of a paragraph.
3. ALL diagrams are included in the QUESTION PAPER.
4. Leave a line between subsections of questions answered.
5. Number the answers correctly according to the numbering system used in this question paper.
6. Do NOT write in the margins of your ANSWER BOOK.
7. Where possible, illustrate your answers with labelled diagrams.
8. Write clearly and legibly.

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QUESTION 1

1.1 Study FIGURE 1.1
Various options are given as possible answers to the following questions. Choose the answer and write only the letter (A – D) next to the question number (1.1.1 – 1.1.5) in the ANSWER BOOK, for example 1.1.9 B.

1.1.1 The increase in the average world temperatures.

A Ozone layer
B Droughts
C Global warming
D Change in climate

1.1.2 The increase of these gases contributes to an increase in temperatures.

A Oxygen, nitrogen
B Nitrogen, nitrous oxide
C Argon, carbon dioxide
D Carbon dioxide, nitrous oxide

1.1.3 A factor that is not evidence of global warming.

A Melting of ice
B Climate change
C Deforestation
D Increase in temperatures

1.1.4 Factors that contribute to increase in carbon dioxide in the atmosphere.

A Industrialization, increase in population, stock farming
B Industrialisation, decrease in population, stock farming
C Industrialization, biofuel, stock farming
D Industrialization, solar power, stock farming

1.1.5 An impact that is not the effect of global warming on the environment.

A Droughts
B Increase in diseases
C Extinction of plants
D Rising sea level

1.1.6 This strategy is not a sustainable solution to deal with global warming

A Carbon taxes
B Research to extract carbon dioxide from emission
C Incentives on reduced emissions
D More production resulting in economic growth of the country

1.1.7 Strategy to deal with global warming.

A Plant trees
B Deforestration
C Soil erosion
D Land degradation

1.1.8 Change to the earth's climate patterns.

A Climate change
B Droughts
C Desertification
D Floods

(8x1) (8)

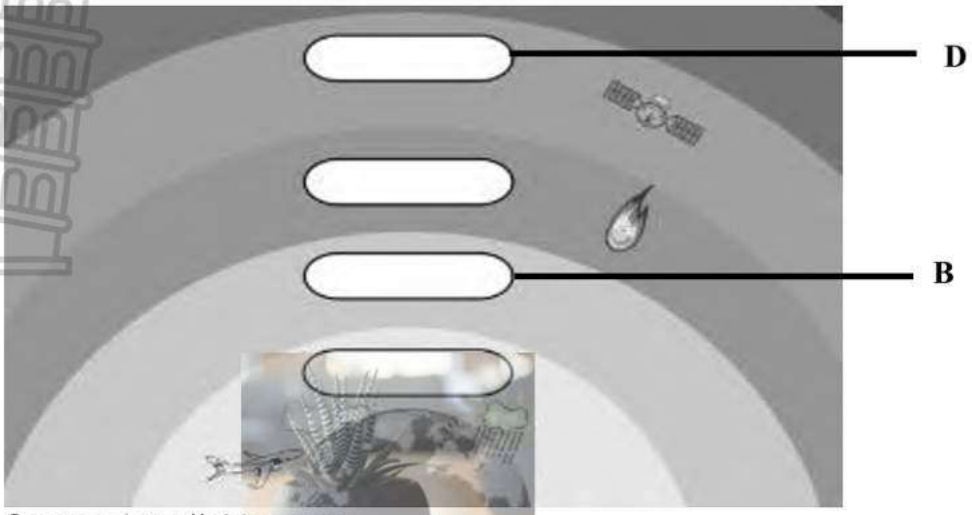
1.2 Match the statement in column A with the terms in column B. Write only the question number and X or Y. e.g 1.2.8 Y

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	COLUMN A	COLUMN B
1.2.1	The process at A below illustrate ……  	X - water vapour Y - carbon dioxide
1.2.2	Gasses that change from time to time.	X- Permanent gasses Y- Variable gases
1.2.3	Trees taken in…… and release……	X- oxygen, carbon dioxide Y- carbon dioxide, oxygen
1.2.4	……it's not an example of a permanent gas	X- Water vapour Y- Argon
1.2.5	……needed for respiration and plant growth	X- Nitrogen Y- Oxygen
1.2.6	People need proteins to grow and ……..is found in proteins.	X- Nitrogen Y- Oxygen
1.2.7	……it is mainly used in electrical appliances	X- Nitrogen Y- Argon

(7x1) (7)

1.3 FIGURE 1.3 The atmosphere



Source: http://r.bing.com

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1.3.1 Define the term *atmosphere.* (1x1) (1)

1.3.2 Identify layer **B** and **D**, where temperature increases with altitude. (2x1) (2)

1.3.3 Give a reason why the temperature increases with altitude in layer **B**. (1x2) (2)

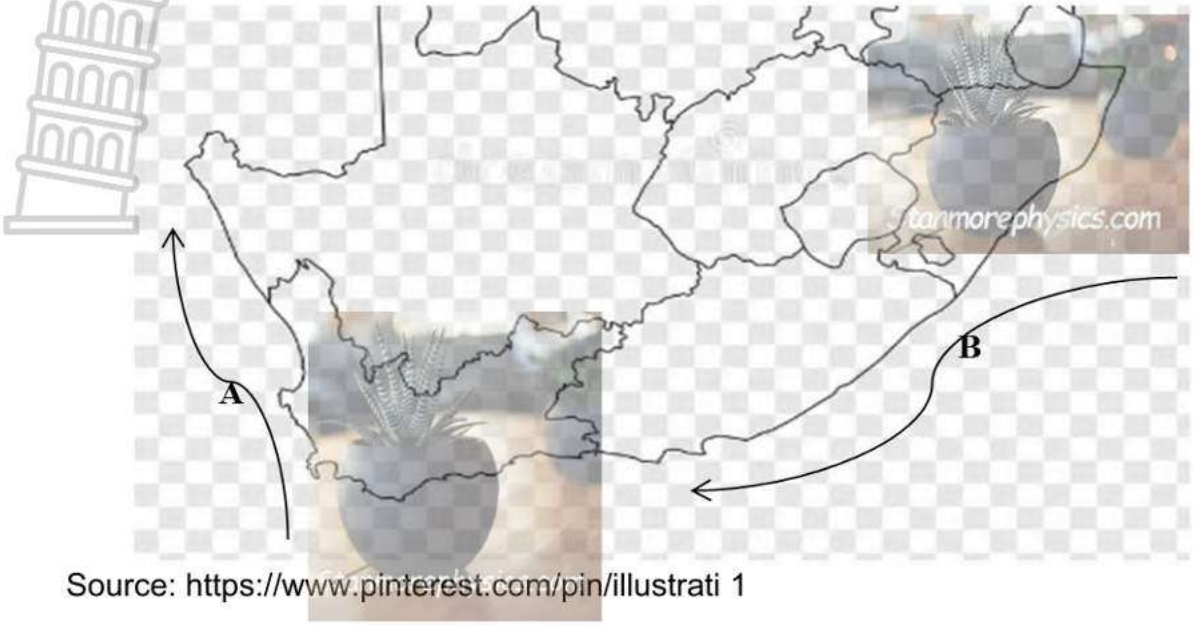
1.3.4 According to climatologists, the atmospheric component mentioned in 1.3.3 is depleting slowly.

1.3.4.a Explain why the atmospheric component mentioned in 1.3.3 is depleting slowly. (1x2) (2)

1.3.4.b Discuss the effects the depletion of the atmospheric component described in 1.3.3 has on people. (2x2) (4)

1.3.4.c Suggest strategies to minimize the impacts of depletion of this atmospheric component. (2x2) (4)
[15]

1.4 FIGURE 1.4 Factors that affect temperatures around the world.



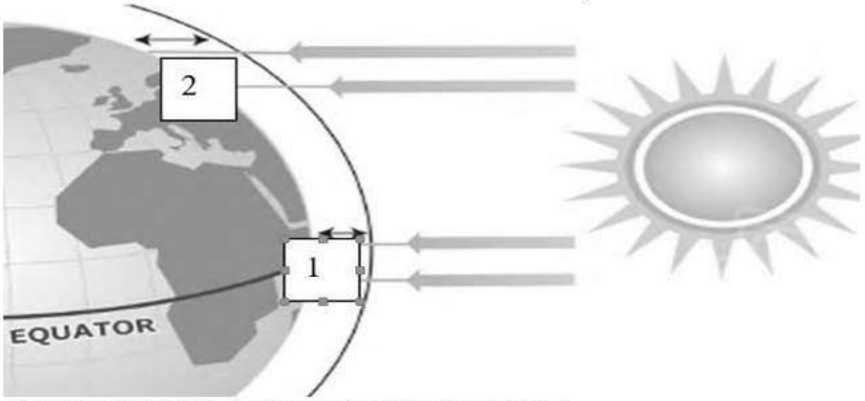
Source: https://www.pinterest.com/pin/illustrati 1

1.4.1 Name *ocean currents* ***A*** and ***B*.** (2x1) (2)

1.4.2 Describe the *moisture content* AND *temperature* in **A** and **B**. (2x2) (4)

1.4.3 Explain how ocean current **B** influences weather on the eastern part of South Africa (1x2) (2)

FIGURE 1.4.4 Factor that influences temperatures.



SOURCE: http://blogborgcollective.blogspot.com/2 1

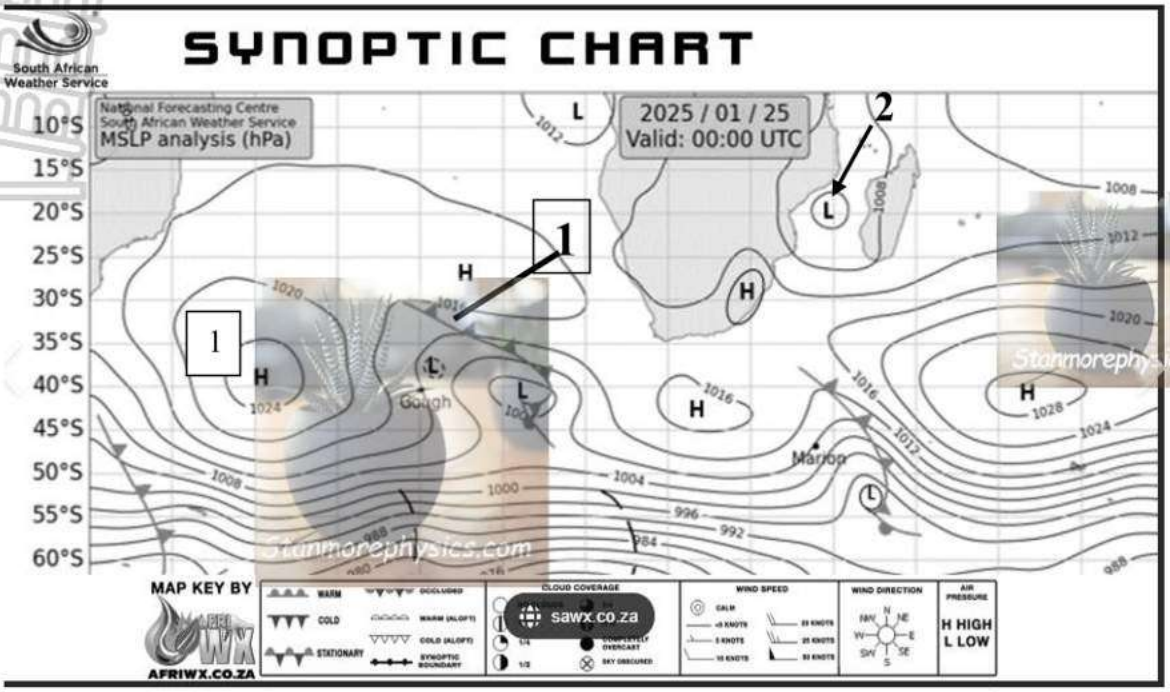
1.4.4.a Refer to figure 1.4.4 above and state the factor that influences climate in this figure. (1x1) (1)

1.4.4.b Identify the area at **1** that is warm. (1x1) (1)

1.4.4.c Discuss TWO reasons for your answer in 1.4.4.b. (2×2) (4)

1.4.4.d Identify the coldest area at **2** that is covered with ice (1x1) (1)
[15]

1.5 FIGURE 1.5 synoptic weather map



Source: sawx.co.za

1.5.1	Define the term isobars	(1x2)	(2)
1.5.2	Give isobaric interval of the synoptic weather map above.	(1x1)	(1)
1.5.3	Justify that **L** at feature **2** is a low pressure.	(1x2)	(2)
1.5.4	Identify feature **1**.	(1x1)	(1)
1.5.5	Outline the type of rain that will results from feature **1**.	(1x1)	(1)
1.5.6	In a paragraph of approximately eight lines, discuss the formation of the type of a rain mentioned in 1.5.5	(4×2)	(8)
			[15]
			[60]