Province of the
EASTERN CAPE
EDUCATION

SUBJECT	:	GEOGRAPHY
CODE	:	GEOG
GRADE	:	10
TASK	:	CONTROLLED TEST
TOTAL TIME	:	1 HOUR
TOTAL MARKS	:	60
IMPLEMENTATION	:	11 MARCH 2024

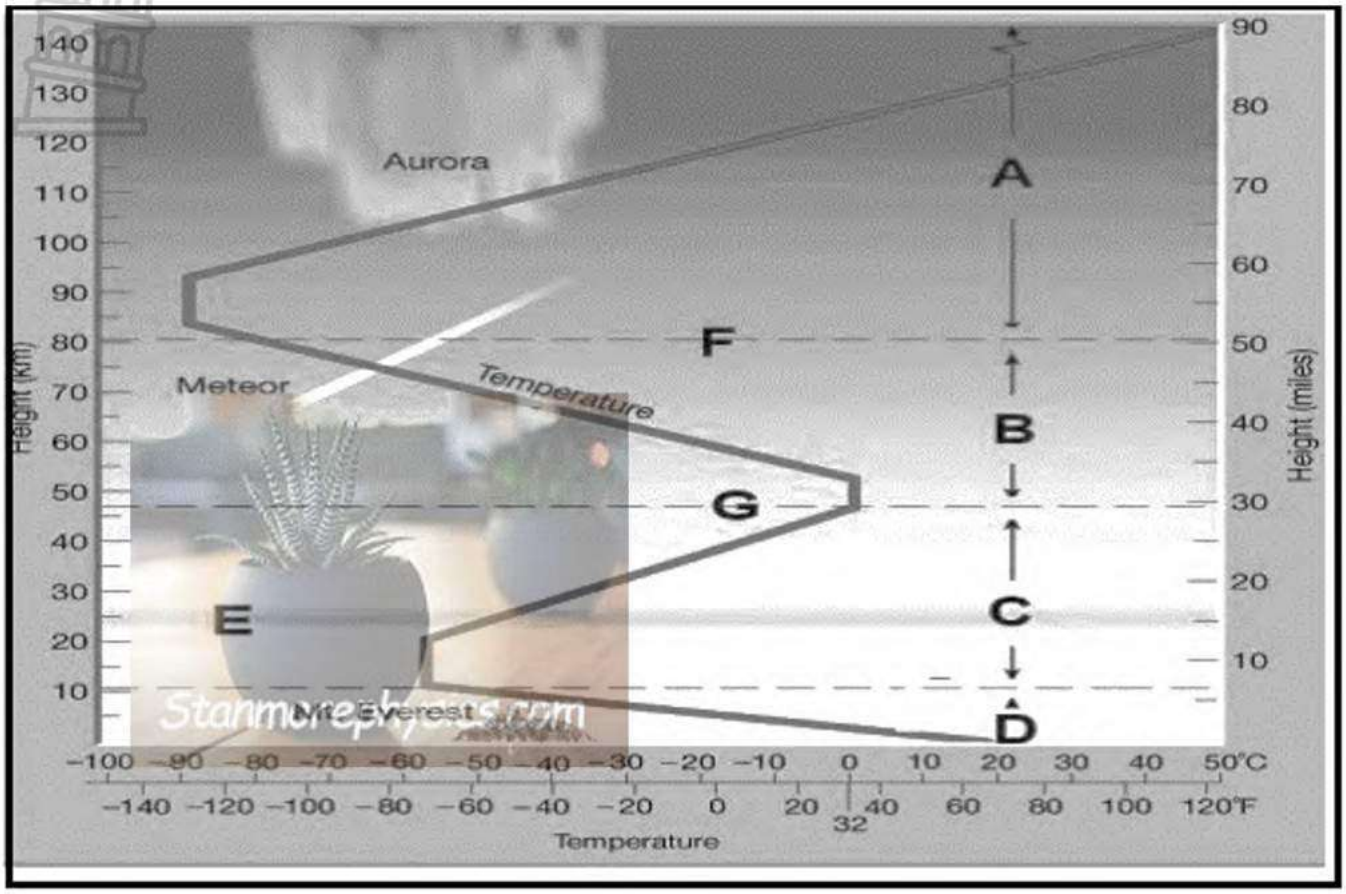
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This Question paper consists of 6 pages, including the cover page.

QUESTION 1

1.1 Refer to FIGURE 1.1 below showing the structure of the atmosphere and answer the questions asked

Figure 1.1



1.1.1 Name layer of the atmosphere at D that supports people, plants and animals.

1.1.2 Layer G is known as the …

1.1.3 The importance the layer at C is ...

1.1.4 The temperature decreases as altitude increases in layer D and in layer…

1.1.5 Temperature increases as altitude increases in layers...and ...

1.1.6 Give the name of the layer where meteors burn up when entering the earth's atmosphere.

1.1.7 Name the layer where weather processes occur. (8 x 1)(8)

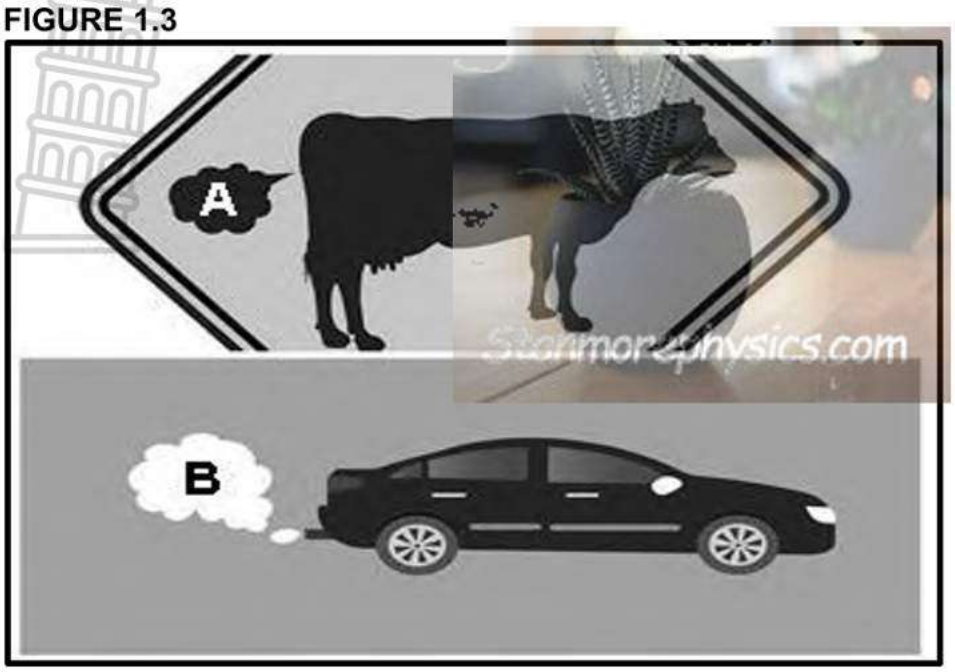
1.2 Match the terms in COLUMN B with the descriptions in COLUMN A. Write only the correct letter next to the question number 1.2.1 - 1.2.7 in your answer book, for example 1.2.1 D.

COLUMN A		COLUMN B	
1.2.1	The process by which liquid changes to gas.	A	Evapotranspiration
1.2.2	The change of state from gas to a solid form of water.	B	Condensation
1.2.3	The process by which water vapour in the atmosphere is changed into a liquid.	C	Runoff
1.2.4	The process where plant leaves release gas into the atmosphere.	D	Precipitation
1.2.5	The process whereby water is absorbed by the earth's surface.	E	Evaporation
1.2.6	A process when water is released from clouds in liquid form.	F	Infiltration
1.2.7	The process where water is transported in rivers over the land.	G	Sublimation
		H	Clouds

(7×1)(7)

1.3 Refer to FIGURE 1.3 illustrating the CAUSES OF GLOBAL WARMING below and answer the questions asked.

FIGURE 1.3



1.3.1 Define the concept global warming. (1 x 1) (1)

1.3.2 Identify TWO causes of global warming marked A and B in FIGURE 1.3. (2 x 1) (2)

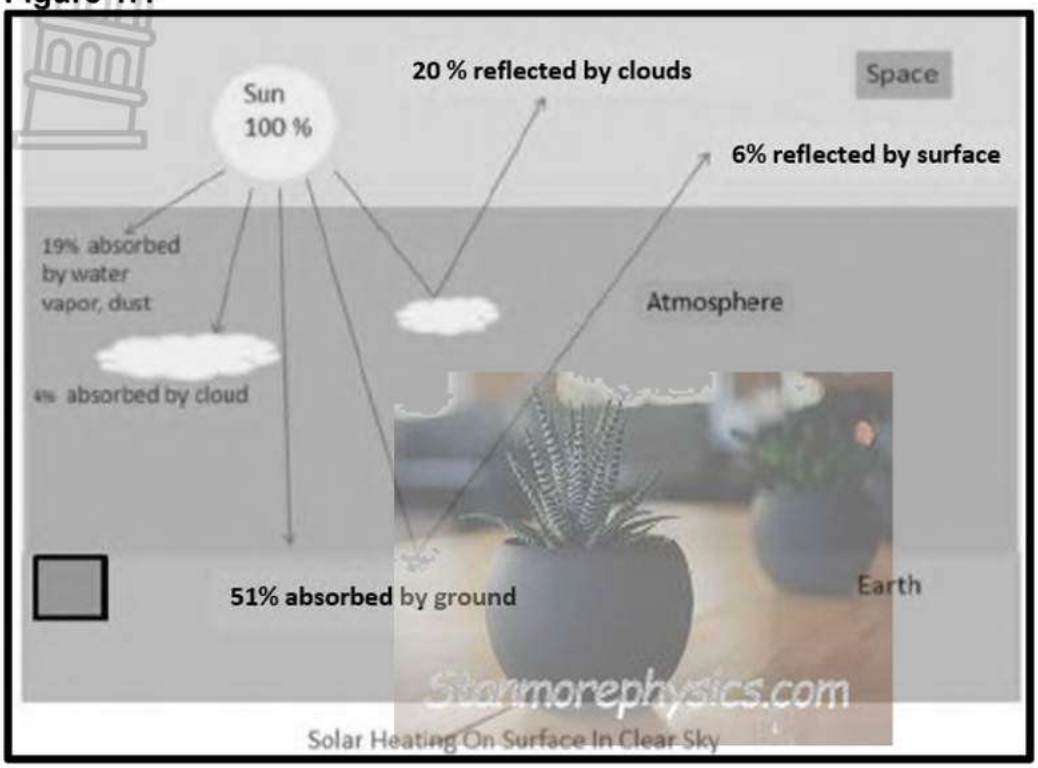
1.3.3 Describe any TWO impacts that global warming would have on people and the environment. (2 x 2) (4)

1.3.4 You were tasked by the local government to come up with proposals (suggestions) to reduce the impact of global warming. Write a paragraph of not more than EIGHT lines in which you highlight your proposals to reduce global warming. (4 x 2) (8)

[15]

1.4 Refer to FIGURE 1.4 illustrating HEATING OF THE ATMOSPHERE and answer the questions that follow.

Figure 1.4



1.4.1 What is insolation? (1 x 1) (1)

1.4.2 List THREE processes responsible for the loss of the sun's heat in the atmosphere. (3 x 1) (3)

1.4.3 How much is the percentage of the sun's energy that eventually reaches the earth? (1 x 2) (2)

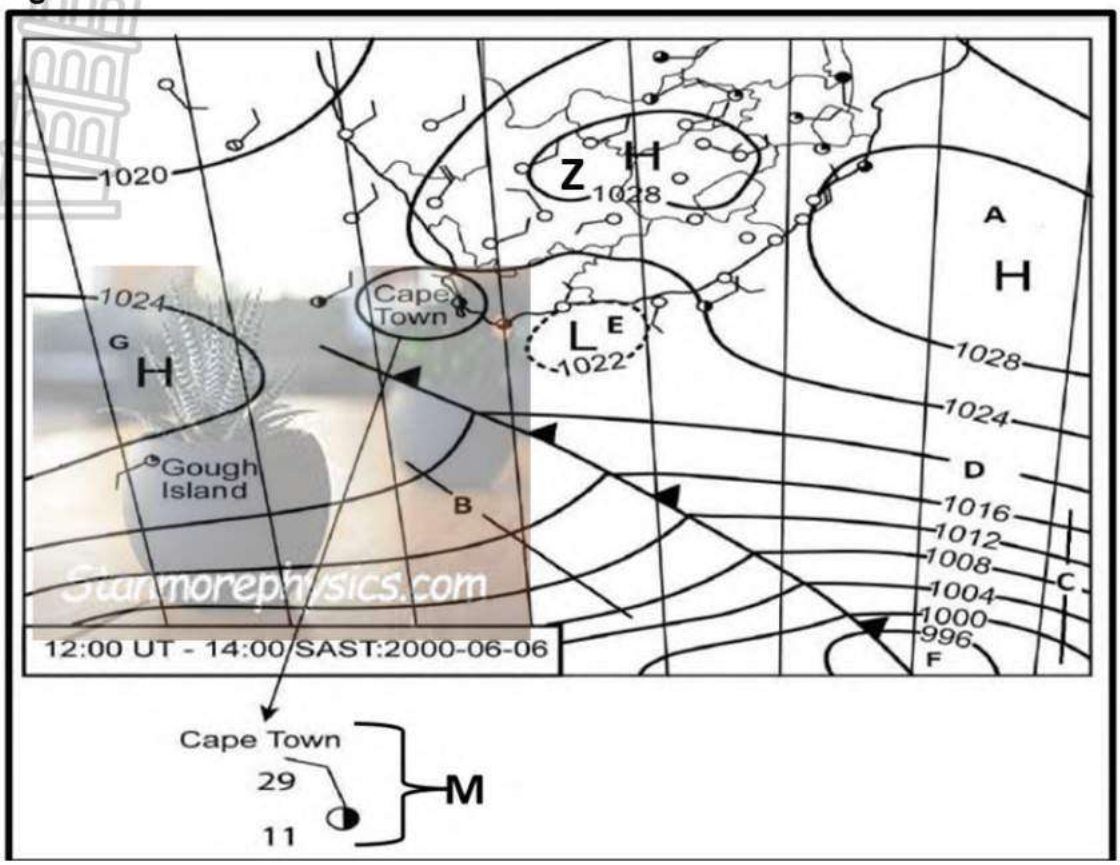
1.4.4 Name the surface responsible for the massive reflection of sun's rays on the earth's surface. (1 x 1) (1)

1.4.5 In a paragraph of approximately EIGHT lines, discuss the various ways in which the atmosphere is heated. (4×2) (8)

[15]

1.5 Study FIGURE 1.5 showing a SYNOPTIC WEATHER MAP and answer the questions asked.

Figure 1.5



1.5.1 What is a synoptic weather map? (1 × 2) (2)

1.5.2 (Choose the correct answer from those given in brackets). The season represented on the synoptic weather map is (**summer / winter**) season. (1 × 1) (1)

1.5.3 Provide a reason for your choice in question 1.5.2 above. (1 × 2) (2)

1.5.4 Explain why does point Z experience no rainfall? (1 × 2) (2)

1.5.5 State the importance of the line marked D on the synoptic weather map. (1 × 2) (2)

1.5.6 State the recording of atmospheric pressure reading at D. (1 x 1) (1)

1.5.7 Refer to the enlarged weather station labelled M.

(a) Describe the cloud cover, wind direction and wind speed in Cape Town. (3 x 1) (3)

(b) Explain why does Cape Town experience less chances of rainfall. (1 x 2) (2)

[15]