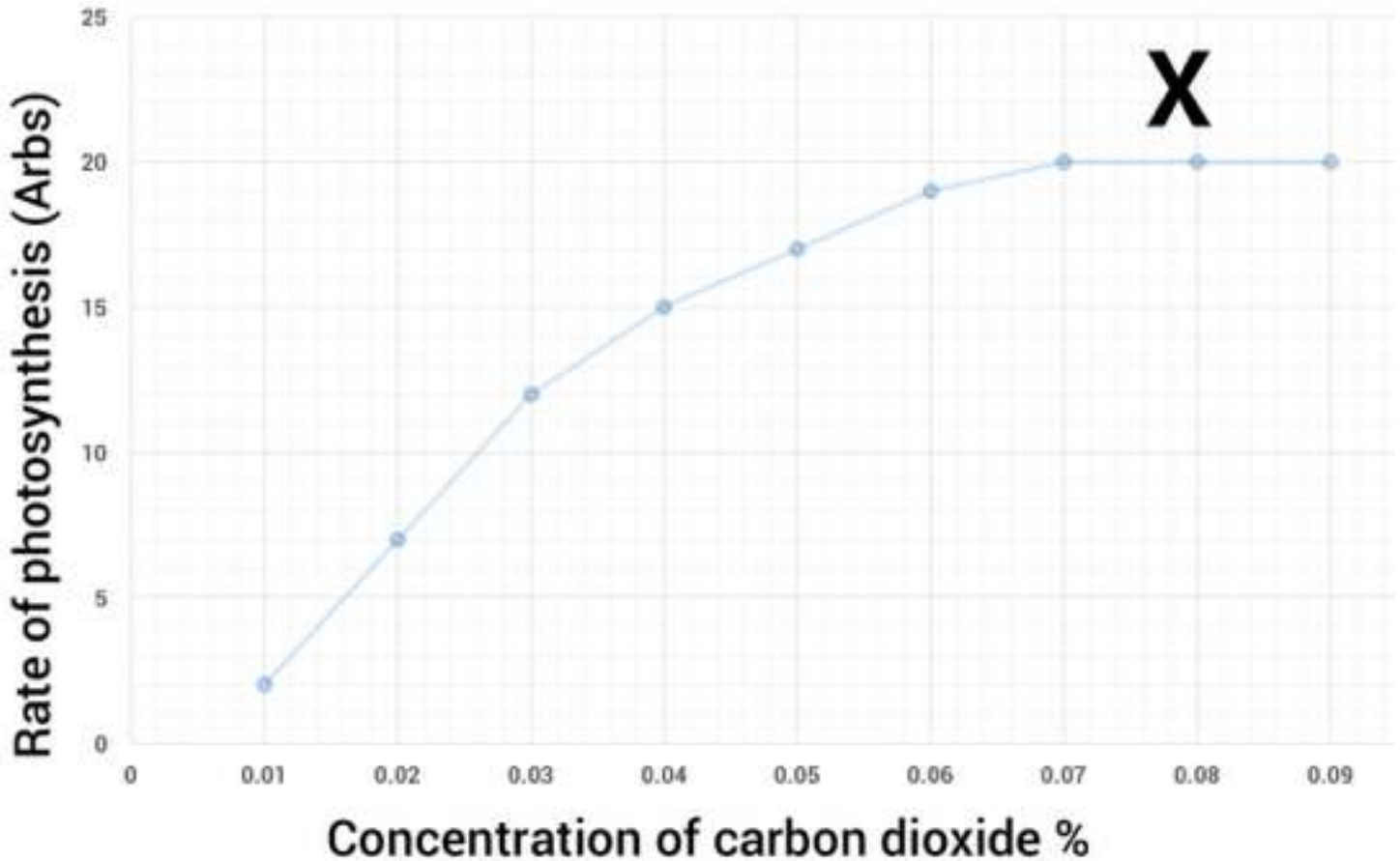


0 1

The graph below shows data on the effects of increasing carbon dioxide concentration on the growth of some strawberry plants



0 1

1

What was the maximum rate of photosynthesis of these strawberry plants?

20 (Arbs/arbitrary units) [1]

[1 mark]

0 1

2

At point X carbon dioxide is no longer a limiting factor.
Name **one** other factor that could be limiting the rate of the reaction

light intensity/temperature [1]

[1 mark]

TOP TIP : Even though the amount of chlorophyll does affect the rate of photosynthesis, we ignore it as a suitable limiting factor here as there is nothing a grower can do about it/to increase the amount

0	1
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3

For the factor you chose in the previous question, describe how a grower can enhance levels with a plant grown inside a greenhouse

[1 mark]

(for light intensity) use artificial lighting during winter or when it is dark [1]

(for temperature) use a heater [1]

0	1
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4

Growers need to make maximum profits from their strawberries. What do they need to consider before making decisions about the growing conditions for their strawberries?

[2 marks]

cost of providing those conditions/extra heat/extra lighting/extra carbon dioxide [1]

effect of treatment on profit i.e is the money spent on extra conditions less than the profit gained [1]

named other factor i.e. fertiliser/pesticide/herbicide [1]