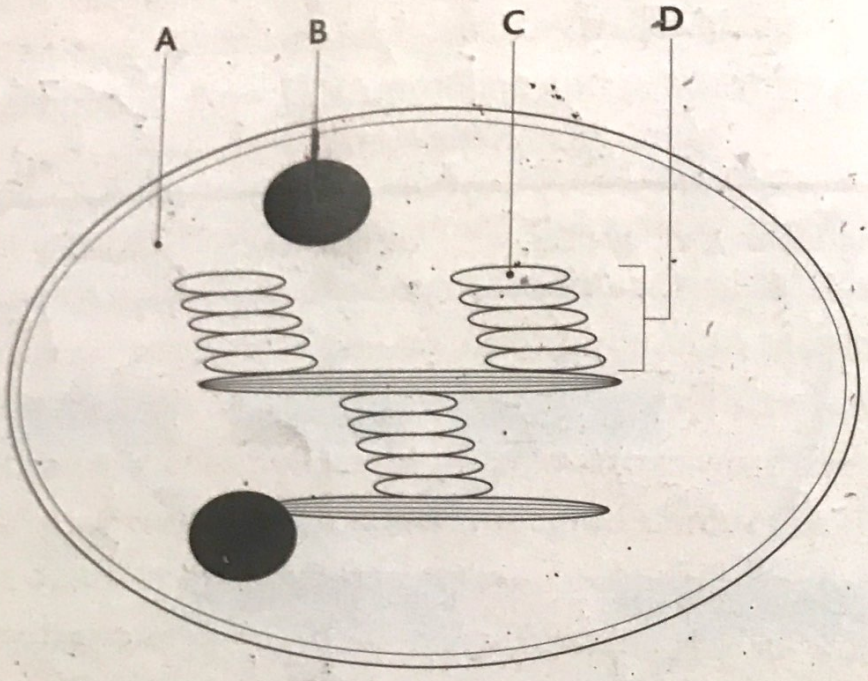
1 The diagram below shows a chloroplast.



a i Name the parts labelled A, B, C and D. (2)

ii State the part of the chloroplast, shown on the diagram, where oxygen is produced. (1)

iii Explain how oxygen is produced in chloroplasts during photosynthesis. (3)

b Oxygen inhibits the enzyme that catalyses the fixing of carbon dioxide. High concentrations of oxygen, within a chloroplast, can reduce the rate of photosynthesis.

Describe and explain the effect of high concentrations of oxygen on the rate of carbohydrate production in a chloroplast. (3)

c Suggest **two** environmental conditions that could increase the rate of oxygen production by plants.

(2)

(Total 11 marks)