

## Chemistry

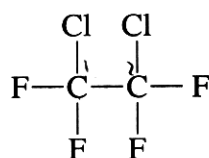
## Section I – Part B (continued)

Marks

## Question 25 (6 marks)

- (a) What is the systematic name of the CFC in the diagram?

1



1,2-dichloro-1,1,2,2-tetrafluoroethane.

- (b) Identify the bonding within ozone, using a Lewis electron-dot diagram.

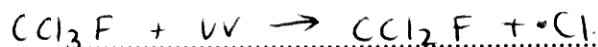
2



- (c) Discuss how CFCs damage the ozone layer, using
- relevant equations
- .

3

~~When~~ when CFC's are released they are unreactive and over time diffuse up to the stratosphere. UV light breaks down the CFC to produce chlorine free radicals ( $\cdot\text{Cl}$ ).



The chlorine free radical initiates the decomposition of ozone.

This is shown by the equations.

