

Chemistry

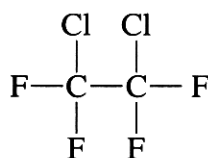
Section I – Part B (continued)

Marks

Question 25 (6 marks)

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

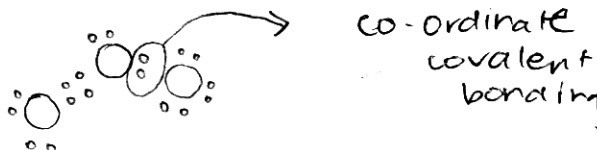
1



..... 1,2-dichloro tetrafluoroethane
~~ethane~~

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

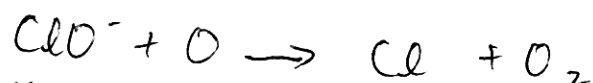
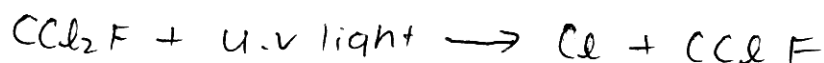
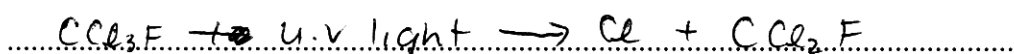
2



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

3

..... It is a vicious cycle, as U.V light attacks
 CFCs, releasing a Chlorine. Chlorine combines
 with Ozone to produce ClO^- and O_2 .
 ClO^- then combines with a free oxygen to
 produce Cl and O_2 .



The process starts again with Cl attacking ozone
 and so on.