

**Marks
12**

- Complete the following table.

Molecule	CO ₂	SO ₂
Draw a Lewis structure		
Name the molecular geometry		
Does the molecule have a dipole moment? Give a reason for your answer.		
Give the hybridisation of the central atom.		

Comment on the relative strength of a π -bond in carbon dioxide compared to a π -bond in sulfur dioxide.

--

Both oxides dissolve in water to give a weak acid. Choose one of the oxides and write balanced equations representing the formation of the corresponding weak acid and the dissociation of the acid into ions.

--

Use one of the molecules/ions from the above equations to illustrate the concept of resonance.

--