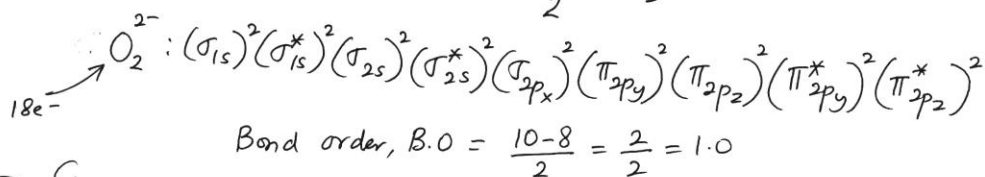
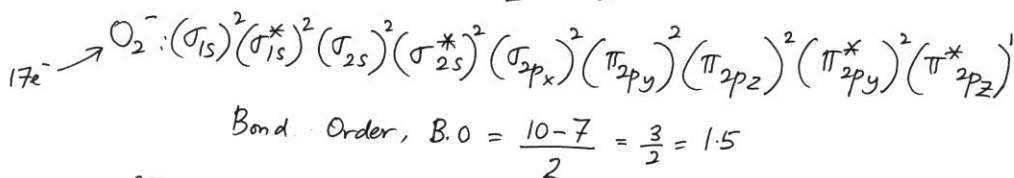
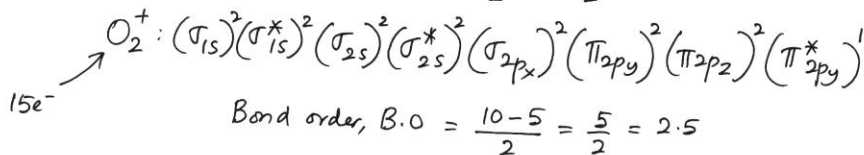
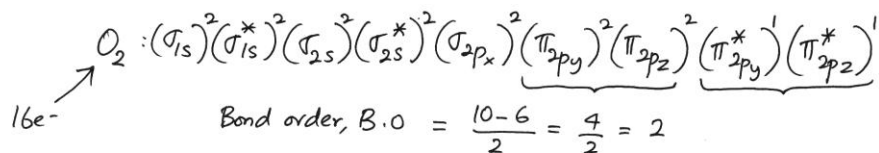
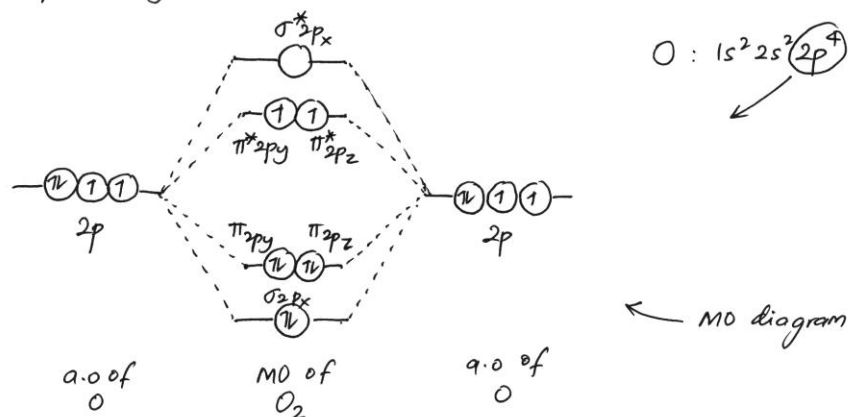


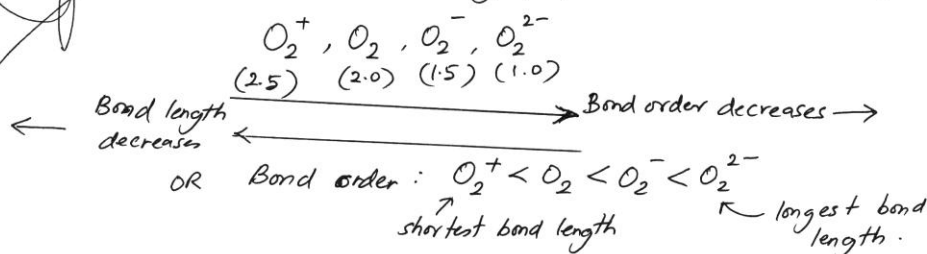
Sem 1 (2003/2004) : Molecular Orbital, MO Theory

Q6 (a) Bond length for O_2^+ , O_2 , O_2^- , O_2^{2-} is 1.12, 1.21, 1.28 and 1.49 Å respectively.



Original

Bond order is inversely proportional to bond length.

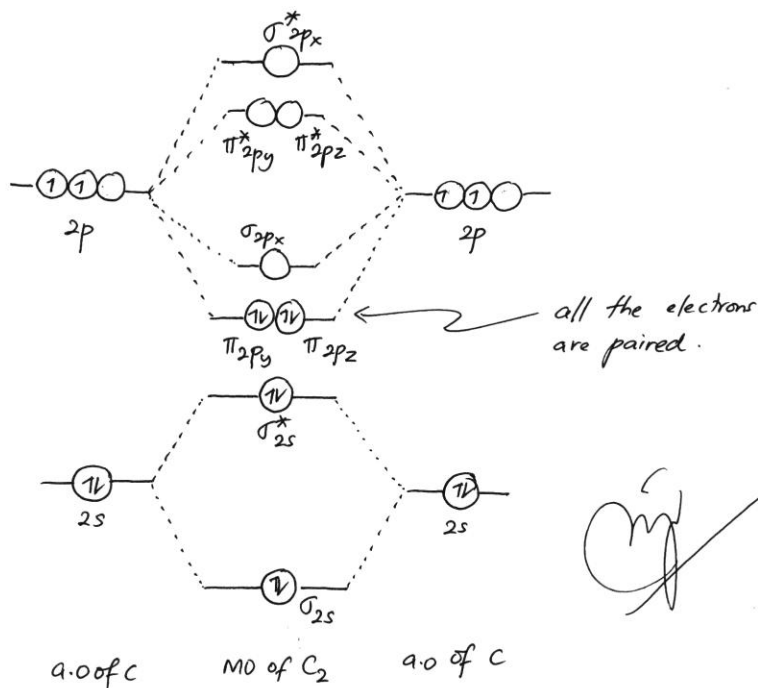
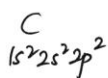


$\frac{1}{2}$

Sem 1 (2003/2004) 6b

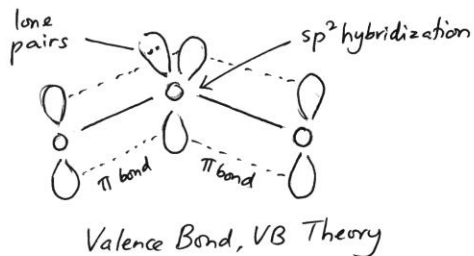
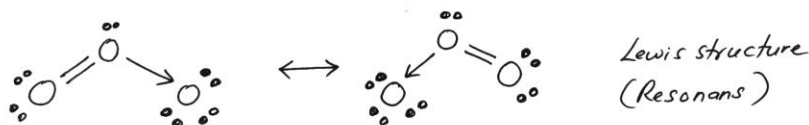
Sem 1 (2003/2004): Molecular Orbital, MO Theory

Q₆ (b) C₂ - diamagnetic properties?



Molecular orbital of C₂ do not have any unpaired electron
So C₂ has diamagnetic properties.

Q₆ (c)



2/2