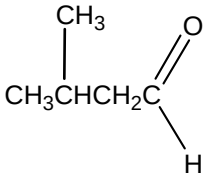
CH1012 Tutorial 6

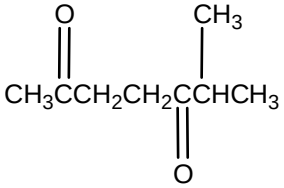
Name:

1. Provide a **molecular orbital** diagram for Be_2^+.
   Predict the **bond order** and the **magnetic class** of this diatomic ie paramagnetic or diamagnetic.

2. Using **Band Theory** describe how a p-type semiconductor differs from an n-type semiconductor.

3. Provide **IUPAC names** for the following molecules:

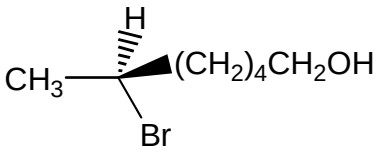


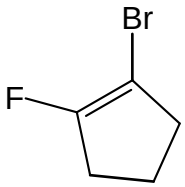


4. Draw **skeletal structures** for the following molecules:

4-iodo-4-ethyl-2-methylhexane benzyl bromide

5. Provide **IUPAC names** for the following molecules:





6. Draw **skeletal structures** for the following compounds:

(a) 2-chloro-3,3-dimethylheptanoic acid (b) 3-bromo-3-ethyl-1-pentene