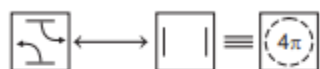


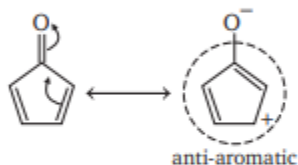
Which of the following molecules, in pure form, is/are unstable at room temperature? (2012)



According to Huckel rule, the compounds which have $4n$ ($n = 0, 1, 2, 3, \dots$) delocalised π -electrons in a close-loop are anti-aromatic and characteristically unstable. Compound *B* satisfy the criteria of anti-aromaticity as :

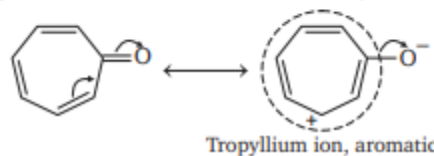


Compound *C* is anti-aromatic in its resonance form :



Compound *A* has 4π -electrons which are also delocalised but do not constitute close loop, hence non-aromatic.

Compound *D* is aromatic, characteristically stable.



Order of stability Aromatic > Non-aromatic > Anti-aromatic