

Q2. Arrange the halogens F_2 , Cl_2 , Br_2 and I_2 in order of their increasing reactivity with alkanes.

(a) $I_2 < Br_2 < Cl_2 < F_2$

(b) $Br_2 < Cl_2 < F_2 < I_2$

(c) $F_2 < Cl_2 < Br_2 < I_2$

(d) $Br_2 < I_2 < Cl_2 < F_2$

Sol:(a) The reactivity order of halogens with alkanes is $I_2 < Br_2 < Cl_2 < F_2$