

8.	Find K_p of the reaction $PCl_5 \rightleftharpoons PCl_3 + Cl_2$ at $25^\circ C$ $K_c = 2.2 \times 10^{-4} \text{ mol/l}$. $R = 0.0821$	2
SECTION C		
9.	Using a neat diagram explain the hybridization in ethene. $CH_2=CH_2$	3
10.	Using MO configuration compare the stabilities of O_2 , O_2^+ , O_2^- Also explain their magnetic nature.	3
11.	Applying Le Chatliers principle ,explain how concentration,pressure and temperature affects the maximum yield of SO_3 in the equilibrium reaction. $2 SO_2 + O_2 \rightleftharpoons 2SO_3 \Delta H = -223.5 \text{ KJ/mol}$	3
