Daily Tutorial Sheet-5	Level-1

61.(A) Rate of forward reaction increases by addition of reactant at equilibrium. Hence addition of O_2 increases forward reaction.

62.(A) For exothermic reaction equilibrium shifts to the left on increasing the temp.

63.(A) $2SO_2 + O_2 \rightleftharpoons 2SO_3$ is favoured by increase in pressure

64.(A) Generally, solid $\rightleftharpoons$ liquid is endothermic process, on increasing temperature amount of solid decreases.

65.(A) On increasing pressure, equilibrium shifts in the direction where number of moles of gaseous reactant or product is less. Thus high pressure and low temperature is favorable condition.

66.(A) On increasing temperature for exothermic reaction equilibrium shifts towards backward direction.

67.(D) To pump out CO_2

68.(D) Addition of Cl_2 at constant volume will take the reaction to the right.

69.(A) $K_c = \dfrac{1}{[O_2]^5}$

70.(A) $K_p = K_c (RT)^{\Delta ng}$

$K_p = K_c (RT)^{-1} \quad \Rightarrow \quad \dfrac{K_p}{K_c} = \dfrac{1}{RT}$

71.(B) $K_p = K_c (RT)^{\Delta ng}$

72.(C) $K_p = K_c (RT)^{\Delta ng} = 26 \times (0.0821 \times 523) = 0.61$

73.(A) For endothermic reaction, increase in temperature favours the product formation.

74.(A) For the given reaction low temperature & high pressure will be favourable condition.

75.(B) $K_p = K_c (RT)^{\Delta n}$

$K_p = K_c (RT)$

$K_p = K_c$ when $(RT) = 1$

$T = \dfrac{1}{R} = \dfrac{1}{0.0821} = 12.18\,K$