DPP – 08
CLASS – 12th
TOPIC – Vant hoff factor

Q.1 Phenol associates in benzene solvent to form double molecules. By the freezing point depression method, the vant Hoff's factor has been found to be 0.54. To what degree, phenol is associated ?

(1) 0.46

(2) 0.54

(3) 0.98

(4) 0.92

Q.2 The Vant Hoff factor (i) for a dilute aqueous solution of Glucose is -

(1) Zero

(2) 1.0

(3) 1.5

(4) 2.0

Q.3 The ratio of the value of any colligative property for KCl solution to that for sugar solution is nearly.................time

(1) 1

(2) 0.5

(3) 2

(4) 2.5

Q.4 1 mol each of following solutes are taken in 9 mol water A. $NaCl$ B. K_2SO_4 C. Na_3PO_4 D. glucose Osmotic pressure will be in order

(1) A < B < C < D   (2) D < C < B < A

(3) D < A < B < C   (4) equal

Q.5 The relative lowering of vapour pressure is equal to the mole fraction of the non-volatile

solute, this statement was given by :

(1) Raoult

(2) Henry

(3) Joule

(4) Dalton

Q.6 The vapour pressure of a dilute solution of a non- volatile solute is not influenced by

(1) pressure applied on solution

(2) mole fraction of the solute

(3) nature of the solvent

(4) degree of dissociation of the solute

Q.7 The vapour pressure of a dilute aqueous solution of Glucose is 750 mm of mercury at 373 K. The mole fraction of solute is -

(1) 1/10

(2) 1/7.6

(3) 1/35

(4) 1/76

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Sol.1 (4)

Sol.2 (2)

Sol.3 (3)

Sol.4 (3)

Sol.5 (1)

Sol.6 (1)

Sol.7 (4)