



THE VILLAGE
INTERNATIONAL SCHOOL
"We Nurture Dreams"

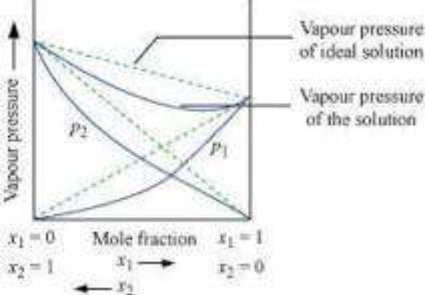
GRADE 12

MS

CHEMISTRY

MARKS: 20

	SECTION A	
1.	b. sucrose	1
2.	d. molarity	1
3.	b. temp increases K H value decreases	1
4.	b. pentose sugar+base	1
	SECTION B	
5.	When sucrose undergoes hydrolysis (dextro)it converts to glucose (+52.5 0) and fructose (-92.4 0) and the solution becomes laevo	2
6.	$M = \frac{W \times 1000}{M \times \text{vol}}$ $M = \frac{4 \times 1000}{60 \times 250}$ Molarity = 0.26 M	2
7.	According to Henrys law solubility of a gas in a liquid is inversely proportional to temperature. So more amount of oxygen gets dissolved in water. Solubility proportional to 1/temperature	2
	SECTION C	

8	<p> $\begin{array}{c} \text{CHO} \\ \\ (\text{CHOH})_4 \\ \\ \text{CH}_2\text{OH} \\ \text{D-glucose} \end{array} \xrightarrow[\Delta]{\text{HI}} \text{CH}_3 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_2 - \text{CH}_3$ <p style="text-align: center;">n-hexane</p> <p style="text-align: center;">(I)</p> <p> $\begin{array}{c} \text{CHO} \\ \\ (\text{CHOH})_4 \\ \\ \text{CH}_2\text{OH} \\ \text{D-glucose} \end{array} \xrightarrow{\text{Br}_2 \text{ water}} \begin{array}{c} \text{COOH} \\ \\ (\text{CHOH})_4 \\ \\ \text{CH}_2\text{OH} \\ \text{D-gluconic acid} \end{array}$ <p style="text-align: center;">(II)</p> <p> $\begin{array}{c} \text{CHO} \\ \\ (\text{CHOH})_4 \\ \\ \text{CH}_2\text{OH} \\ \text{D-glucose} \end{array} \xrightarrow{\text{HNO}_3} \begin{array}{c} \text{COOH} \\ \\ (\text{CHOH})_4 \\ \\ \text{COOH} \\ \text{Saccharic acid} \end{array}$ <p style="text-align: center;">(III)</p> </p></p></p>	
9.	<p>Its an example of negative deviation.</p> 	3
	SECTION D	

10.	a. Vapour pr decreases b. solvent c.It will form an isotonic solution so that no bulging or shrinking of cells happpens	3