



THE VILLAGE
INTERNATIONAL SCHOOL
"We Nurture Dreams"

DATE :7/6/2024 GRADE :12	MT 1 (2024-25) CHEMISTRY(043)	MARKS :20 TIME:50 MINS
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ANSWER ALL QUESTIONS.

Q NO	SECTION A (4x1=4)	MARKS
1.	Which is a non reducing sugar? a)glucose b)sucrose c)maltose d)lactose	1
2.	Which concentration term is temperature dependent? a)molality b)mole fraction c)mass/mass d)molarity	1
3.	Which statement is correct? a)when temperature increases K H increases. b)when temperature increases K H decreases. c)when temperature increases ,solubility increases. d)when temperature increases,vapour pressure decreases	1
4.	A nucleoside contains: a)pentose sugar+phosphoric acid b)pentose sugar +base c)base+phosphoric acid d)pentose sugar+base+phosphoric acid	1
	SECTION B (3x2=6)	
5.	What is meant by inversion of sugar?	2
6.	Find the molarity when 4 gm ethanoic acid (CH ₃ COOH) is dissolved in water to make 250 ml of solution.	2
7.	Why aquatic species are more comfortable in cold water?	2
	SECTION C (2X3 =6)	
8.	Write complete equations for the following reactions: a)glucose reacts with HI b)glucose reacts with bromine water c)glucose reacts with HNO ₃	3

9.	Explain using a graph why a mixture of acetone and chloroform deviates from ideal behaviour.	3
	SECTION D (1X4 =4)	
10.	<p>Colligative properties depend on the number of solute particles. Elevation in boiling point, depression in freezing point, osmosis are examples. In osmosis solute particles move from low concentration area to high concentration area.</p> <p>a)What happens to vapour pressure of a solution when a solute is added to a solvent?</p> <p>b)Which has lower boiling point? Pure solvent or a solution and why?</p> <p>c)Why intravenous injections have concentration of NaCl 0.9% (w/v)</p> <p>-----</p>	1+1+2