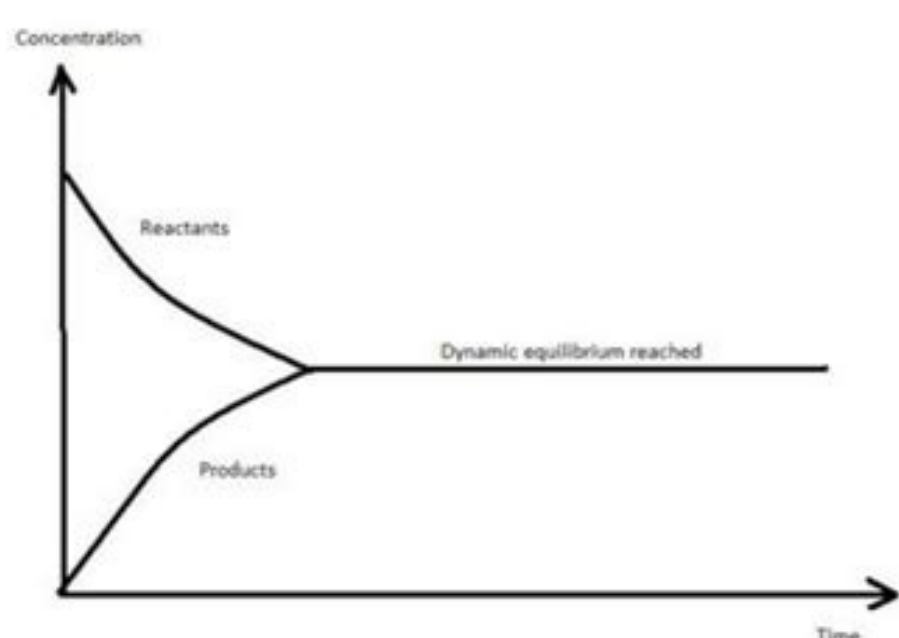


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# REVIEW OF Organic Functional Groups

Introduction to Medicinal  
Organic Chemistry

FIFTH  
EDITION

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CASE AUTHORS

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NCERT Exemplar Solutions of Class 12 Chemistry Chapter  
2 Solutions.

11. In comparison to a 0.01 M solution of glucose, the depression in freezing point of a 0.01 M  $MgCl_2$  solution is \_\_\_\_\_.

- (i) the same
- (ii) about twice
- (iii) about three times
- (iv) about six times

Solution:  
Option (iii) is the answer.

12. An unripe mango placed in a concentrated salt solution to prepare pickle, shrivels because \_\_\_\_\_.

- (i) it gains water due to osmosis.
- (ii) it loses water due to reverse osmosis.
- (iii) it gains water due to reverse osmosis.
- (iv) it loses water due to osmosis.

Solution:  
Option (iv) is the answer.

13. At a given temperature, osmotic pressure of a concentrated solution of a substance \_\_\_\_\_.

- (i) is higher than that of a dilute solution.
- (ii) is lower than that of a dilute solution.
- (iii) is same as that of a dilute solution.
- (iv) cannot be compared with an osmotic pressure of a dilute solution.

Solution:  
Option (i) is the answer.

14. Which of the following statements is false?

- (i) Two different solutions of sucrose of the same molality prepared in different solvents will have the same depression in freezing point.
- (ii) The osmotic pressure of a solution is given by the equation  $\Pi = CRT$  (where C is the molarity of the solution).
- (iii) Decreasing order of osmotic pressure for 0.01 M aqueous solutions of barium chloride, potassium chloride, acetic acid and sucrose is  $BaCl_2 > KCl > CH_3COOH > \text{sucrose}$ .
- (iv) According to Raoult's law, the vapour pressure exerted by a volatile component of a solution is directly proportional to its mole fraction in the solution.

Solution:  
Option (i) is the answer.

15. The values of Van't Hoff factors for KCl, NaCl and  $K_2SO_4$ , respectively, are \_\_\_\_\_.

- (i) 2, 2 and 2

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Textbook in History  
for Class XII

THEMES IN  
INDIAN HISTORY  
PART I

Sl. No.	Page No.	Question	Answer
1	1	11. In comparison to a 0.01 M solution of glucose, the depression in freezing point of a 0.01 M $MgCl_2$ solution is _____.	(iii) about three times
2	1	12. An unripe mango placed in a concentrated salt solution to prepare pickle, shrivels because _____.	(iv) it loses water due to osmosis.
3	1	13. At a given temperature, osmotic pressure of a concentrated solution of a substance _____.	(i) is higher than that of a dilute solution.
4	1	14. Which of the following statements is false?	(i) Two different solutions of sucrose of the same molality prepared in different solvents will have the same depression in freezing point.
5	1	15. The values of Van't Hoff factors for KCl, NaCl and $K_2SO_4$ , respectively, are _____.	(i) 2, 2 and 2



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