Model Question paper

Colligative Properties 3

11th Standard

Chemistry

Reg.No. : | | | | | | |

I. Answer all the questions.

II. Use blue pen only.

Time : 00:45:00 Hrs

Total Marks : 30

Part - A

2 x 1 = 2

1) Which of the following 0.1 M aqueous solutions will have the lowest freezing point

(a) Potassium sulphate (b) Sodium chloride (c) Urea (d) Glucose

2) The Van't Hoff factor of 0.005 M aqueous solution of KCL is 1.95. The degree of ionisation of KCL is

(a) 0.94 (b) 0.95 (c) 0.96 (d) 0.59

Part - B

2 x 2 = 4

3) What do you understand by molal elevation of boiling point? What are abnormal solutes?

4) Volatile hydrocarbons are not used in the brakes of automobile as lubricant|, but non-volatile hydrocarbon are used as lubricants? Why?

Part - C

3 x 3 = 9

5) What are isotonic solutions?

6) What are the advantages of Berkley-Hartly method?

7) Explain how the degree of dissociation of an electrolyte may be determined from the measurement of a colligative property?

Part - D

3 x 5 = 15

8) Describe about Beckmann thermometer.

9) What is elevation of boiling point? Explain its determination by Cottrell's method.

10) What are abnormal colligative properties? Explain with example and write its determination using Van't Hoff factor.

****