Printed Pages : 3

BOP122

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 150202

Roll No.

B. Pharm.

(SEM. II) THEORY EXAMINATION, 2014-15

PHARMACEUTICAL CHEMISTRY - III

Time : **3** Hours]   [Total Marks : **70**

SECTION - A

1   Attempt all questions each equestion carries   **1x14=14**
one mark.

(a)   Give the geometry of methane molecule?

(b)   Give unit of specific conductivity.

(c)   Define ionic Bonding.

(d)   What is effect of temperature on viscosity?

(e)   Give the nature of bonding in SO_2.

(f)   Nuclear fission is exothermic reaction.
(True / False)

(g)   Define Entropy?

(h)   What is optical activity?

(i)   Define Hydrogen bonding.

(j)   Define viscosity.

(k)   Give the unit of Equivalent conductance.

(l)   Define heat of neutrilization.

(m)   Define Internal Energy.

(n)   In an ideal gas Joule-Thomson effect is zero.
        (True / False)

SECTION - B

2   Attempt any six part, each carries 4 marks.   4x6=24

(a)   Discuss hybridization and type of hybridizations,
        with suitable examples.

(b)   Give the difference between physical adsorption
        and chemisorptions.

(c)   Explain Faraday's laws of electrolysis.

(d)   Define surface tension. Discuss any one method
        for its determination.

(e)   Give pharmaceutical application of adsorption.

(f)   Define dipole moment and what is Debye?

(g)   Explain Hess's Law of constant heat summation.

(h)   Explain Joule-Thomson effect.

SECTION-C

3 Attempt any four parts each part carries   **8x4=32**
8 marks.

(a) Describe Ostwald's dilution law of weak electrolytes and give limitations.

(b) Explain phase rule. Discuss its application to water system.

(c) Explain second order reaction and derive its rate equation.

(d) Explain the distribution law. Discuss the limitation and practical application of the distribution law.

(e) Write notes on any two of the following.

    (i) Optical rotation.

    (ii) Enzyme catalysis

    (iii) Bond energies.

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