

**Subject: Chemistry** 

# **Question Paper**

Class : XI 11: Adsorption and Colloids Time : 1 Hour

#### **SECTION A**

## Q.1 : Choose the correct option :

- i) In Haber process of production of ammonia K2O is used as
  - a) catalyst
- b) inhibitor
- c) promotor
- d) adsorbate
- ii) Gum in water is an example of
  - a) true solution
- b) suspension
- c) lyophilic sol
- d) lyophobic sol
- iii) Size (diameter) of colloidal particle is ......
  - a) 10-6 to 10-9 m b) 10-9 to 10-12 m
  - c) 10-3 to 10-9 m d) 10-12 to 10-19 m
- iv) What is the colloid in which dispersion medium and dispersed phase are in solid state called?
  - a) Emulsion
- b) Gel
- c) Aerosol
- d) Solid sol

## Q.2 : Answer the following

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- i) What is Catalyst?
- ii) Define: Desorption.

### **SECTION B**

- : Answer the following : (ANY 2)
- Q.3: Distinguish between Adsorption and Absorption.
- Q. 4 : Explain Catalytic Activity.
- Q. 5: How can be colloids prepared by chemical methods.

#### **SECTION C**

: Answer the following : (ANY 2)

Total Marks:20

- **Q. 6**: Distinguish between Lyophobic sols and lyophilic sols.
- Q. 7 : Explain Freundlich adsorption isotherm.
- **Q. 8**: Explain coagulation of colloidal solution. What are the different methods of coagulation.

#### SECTION D

- : Answer the following: (ANY 1)
- **Q.9**: What are the factors affecting adsorption.
- Q. 10: Give the classifications of catalysts.

