

I. Very short answer type questions:

- 1) Give two examples of practical applications which is based on high compressibility of gases.
- 2) Select the substances from the following which do not have property of sublimation camphor, potassium permanganate, copper sulphate, naphthalene.
- 3) Which of the following will give you more severe burns and why? Steam at 373k or water at 373k.
- 4) Name the two components of a colloidal solution.
- 5) Convert the following a) 25°C into Kelvin b) 300k into Celsius.

II. Short answer type questions:

- 1) What are the two components of a solution? Write two properties of a solution.
- 2) Alloy is considered as a mixture. Why?
- 3) Roopa mixed sugar and common salt in a pot by mistake. What will be the nature of this mixture? Write any two observations on the basis of which you would categorize it.
- 4) Water is a liquid . Justify by giving two reasons.

III. Long answer type questions:

- 1) Compare solution , suspension and colloids in terms of a) Stability b) Filterability c) Tyndall effect.
- 2) a) How tincture of iodine is prepared? B) Define solubility.
c) What would happen if you were to take a saturated solution at a certain temperature and cool it slowly?
- 3) A solution is prepared by adding 40gm of sugar in 100gm of water. Calculate the concentration in terms of mass by mass percentage of solution.