

ONE TWO ACADEMY**STD 10 SCIENCE****Solutions****Total:- 25 marks****Time:- 45 minutes****Answer the following questions:****4 x 1 = 4**

1. Polar compounds are soluble in ____ solvents.
2. What is meant by binary solution?
3. Why water is called a universal solvent?
4. Why do we mean when we say “ 25% alcohol solution “.

Answer any three of the following questions:-**3 x 2 = 6**

5. The aquatic animals live more in cold regions Why?
6. Define Hydrated salt.
7. Classify the following substances into deliquesce and hygroscopic.
Conc. Sulphuric acid, copper sulphate pent hydrate , Silica gel, Calcium chloride and Gypsum salt.
8. Define Solution.

Answer any two of the following questions:-**2 x 4 = 8**

9. In what way hygroscopic substances is different from deliquescent substances.
10. a. Define volume percentage.
b. 3.5 litres of ethanol is present in 15 litres of aqueous solution of ethanol. Calculate the volume percent of the ethanol solution.
11. ‘A’ is a blue-coloured crystalline salt. On heating, it loses its blue colour and gives ‘B’. When water is added, ‘B’ gives back to ‘A’. Identify A and B, and write the equation.

Answer any one of the following questions:-**1 x 7 = 7**

12. Explain the factors affecting solubility.
13. Write notes on (i) Saturated solutions (ii) super saturated solutions (iii) unsaturated solutions.