

Very Short Answer Type Questions [1 Mark]

1. Write one property of colloids.
2. Name the process used for obtaining pure Copper sulphate from an impure sample.
3. Which one amongst the following will show Tyndall effect?
(i) Common salt solution (ii) Copper sulphate solution (iii) Milk
4. How do we test purity of substance?
5. How can we separate particles of colloidal solution? Name the process.
6. When blue ink is heated, what do you think has got evaporated from the watch glass?
7. What will be the residue left on the watch glass on heating blue ink in it?
8. Is ink a pure substance or mixture? Give reason.
9. Does blue ink consist of single colour or more than one colour?
10. How is pure sugar obtained from sugar solution?
11. What do you observe in the china dish during crystallization?
12. Do the crystals look pure?
13. How will you separate the crystals from the liquid in china dish?
14. What is the need to heat solution?
15. Which method is mostly used for purification of solids?
16. Why is sodium a metal whereas carbon non-metal?
17. What are metalloids?
18. What is meant by man-made elements?
19. Name one non-metal which is liquid.
20. Name a metal which is liquid.
21. What is difference between the smell of H_2S gas and H_2 gas?





Short Answer Type Questions [I] [2 Marks]

22. Give one example of each of the following:
- (a) Aerosol
 - (b) Solution
23. Give the names of the elements present in the following compounds:
- (a) Quick lime
 - (b) Hydrogen bromide
 - (c) Baking powder
 - (d) Potassium sulphate.
24. 10 ml of H_2SO_4 is dissolved in 90 ml of water. Calculate mass by volume percentage of solution.
25. How are emulsions different from Gels? Give one example of each.

Short Answer Type Questions [II] [3 Marks]

26. You are provided with soda water, milk and muddy water. How can you differentiate between them in terms of (i) Homogeneity (ii) Filtration (iii) Tyndall effect ?
27. Which separation techniques will you apply for the separation of the following ?
- (a) The different pigments from an extract of flower petals
 - (b) Butter from curd
 - (c) Oil from water
 - (d) Tea leaves from tea
 - (e) Iron pins from sand
 - (f) Wheat grains from husk
 - (g) Fine mud particles floating in water.

Long Answer Type Questions [5 Marks]

28. (a) Give any one point of difference between true solution, colloidal solution and suspension.
(b) 20 g of sodium chloride is dissolved in 100 mL of water. How will you test whether the given solution is saturated or unsaturated at the given temperature ?
(c) Suggest any one method by which we can increase the solubility of saturated solutions.
29. (a) List any three characteristic of colloid.
(b) Name the two components of a colloid.
(c) Identify colloid from the following mixtures :
Muddy water, sugar in water, ink, blood, soda water, foam
30. (a) Enumerate any two differences between simple distillation and fractional distillation.
(b) Draw a labelled diagram showing the process of fractional distillation.
31. (a) Calculate the mass of potassium sulphate required to prepare its 10% solution in 100 g of water.
(b) Differentiate between physical and chemical change. Give one example of each. Give one example where both physical and chemical change is taking place.
32. (a) What volume of ethyl alcohol and water must be mixed together to prepare 250 ml of 60% volume by volume solution of alcohol in water.
(b) Mention any two differences between compounds and mixtures.
(c) Which separation technique will you apply for separating the following mixtures :
(i) Butter from curd.
(ii) Different pigments from an extract of flower petals.