

Separation of Substances

1M

1. The strainer to strain tea from tea leaves acts as a
(A) Filter(B) Condenser(C) Boiler(D) Churner
2. A mixture of sand and dried leaves can be separated by -
(A) Magnetic separation.(B) Hand picking.(C) Winnowing.(D) Sieving.
3. A mixture of salt and water can be separated by this process
(A) Evaporation(B) Filtration(C) Sedimentation(D) Handpicking
4. When a mixture of sugar in water cannot dissolve more of sugar at room temperature, the solution is called
(A) Saturated solution(B) Unsaturated solution
(C) Super saturated solution(D) None of the above
5. Condensation is a process when
(A) Aliquid changes into its vapours.(B) The vapours change into liquid.
(C) Ice melts to form water.(D) Water freezes to form ice.
6. When muddy water is left undisturbed
(i) The mud settles down.(ii) Some mud particles remain floating in water.
(iii) The water can be decanted and separated.
(iv) The process of filtration can be used to separate mud particles completely.
Which of the above is correct?
(A) (iii) & (iv) (B) (i) Only(C) (i) & (iv) (D) All the above
7. The process used to separate grains from stalk is
(A) Threshing(B) Winnowing(C) Handpicking(D) Sieving
8. Match the following and choose the answer from the code given below.

(A) Separates stones from sand	(i) Filtration
(B) Separates wheat from husk	(ii) Winnowing
(C) Separates tea leaves from tea	(iii) Churning
(D) Separates butter from curd	(iv) Sieving

 (A) A- (ii), B-(iii), C-(i), D-(iv)
 (B) A- (ii), B-(iv), C-(i), D-(iii)
 (C) A- (iii), B-(iv), C-(ii), D-(i)
 (D) A- (iv), B-(i), C-(ii), D-(iii)
9. When salt water in a beaker is boiled, the water..... and is left behind
(A) Boils, sand(B) Evaporates, salt(C) Evaporates, sand(D) Vaporizes, nothing
10. Dust particles when mixed with water settle down at the bottom of the container because
(A) They react with water.(B) They are miscible in water.

- (C) They become heavier when water is poured on them.
 (D) None of the above.

11. We need to separate the components of a mixture because

- (i) Mixtures are useless.
 (ii) Non useful components need to be separated from useful ones.
 (iii) Impurities and harmful substances need to be removed.
 (iv) The components are different and invisible.
 (A) (i) only (B) (ii) & (iii) (C) (iii) & (iv) (D) (iv) only

12. Match the items of column 'A' with the items of column 'B':

Column A	Column B
I. Pulp from fruit juice	(a) Threshing
II. Sieving	(b) Churning
III. Butter from milk	(c) Husk from wheat
IV. Grains from stalks	(d) filtration

- (A) I - b, II- d, III - a, IV - c (B) I - a, II - c, III - b, IV - d
 (C) I - b, II - d, III - c, IV - a (D) I - d, II - c, III - b, IV - a

13. A _____ is used for separating insoluble solid particles from a liquid.

- (A) Piece of muslin cloth. (B) Filter paper. (C) Both (1) and (2). (D) None of these.

14. Salt is obtained from the salt water by the process of-

- (A) Magnetic separation. (B) Decantation. (C) Evaporation. (D) None of these.

15. The property which forms the basis of sieving is -

- (A) Difference in weight. (B) Difference in size.
 (C) Difference in shape. (D) Difference in colour.

16. The process used to separate two immiscible liquids is -

- (A) Sedimentation. (B) Evaporation. (C) Distillation. (D) Decantation process.

17. When a glass containing muddy water is left undisturbed and the mud is allowed to settle down, this method is called

- (A) Decantation (B) Filtration (C) Sedimentation (D) Evaporation

18. Name two materials used as filters.

19. The process of winnowing is based on the principle

- (I) Lighter husk particles are carried away by the wind.
 (II) Heavy grains fall down in a heap.
 (III) Husk and wheat are evincible.
 (IV) Wheat grains are blown away by the wind.

Which of above sentences is/are correct?

(A) I only (B) I and IV (C) I and II (D) II and III

20. The paper used in the process of filtration to separate a mixture of sand and water is

(A) Butter paper (B) Plain paper (C) Tissue paper (D) Filter paper

21. The process of conversion of water vapour into its liquid form on cooling is known as -

(A) Evaporation. (B) Condensation. (C) Distillation. (D) Decantation.

22. The method of handpicking is useful when

(I) The impurities are large in quantity. (II) The impurities are large in size.

(III) The impurities are less in quantity. (IV) The impurities are smaller in size.

(A) I and II are correct. (B) II and IV are correct.

(C) II and III are correct. (D) All are correct.

23. Name the method of separation to obtain clear water from muddy water?

24. The process of is used in the manufacture of salt from sea water.

(A) Condensation (B) Filtration (C) Evaporation (D) Sedimentation

25. When water changes into vapours, the process is called

(A) Condensation (B) Heating (C) Cooling (D) Evaporation

26. What do you understand by a mixture?

27. Process used to separate mud from water is -

(A) Evaporation. (B) Decantation. (C) Sedimentation. (D) Both (2) and (3).

28. Which property of the constituents of a mixture is used in winnowing.

29. Define Filtration.

30. A mixture of rice and stone particles is separated by

(A) Hand picking (B) Sieving (C) Winnowing (D) Churning

31. The method of sieving is used to separate

(A) Components of same size. (B) Components of different size.

(C) Soluble impurities. (D) Liquid impurities.

32. The process of drying the wheat stalks in the sun and then beating them to separate the grains is called

(A) Winnowing (B) Threshing (C) Churning (D) Sieving

33. Which of the following mixtures use filtration as method of separating components?

(i) Salt in water (ii) Tea with tea leaves

(iii) Chalk powder in water (iv) Fruit juice with its pulp

(A) (i), (ii) & (iii) (B) (ii) & (iii)

(C) (ii), (iii) & (iv) (D) (i) only

34. The separation of the constituents of a mixture is done to -

(A) Remove harmful and unwanted constituents. (B) Obtain pure sample of a substance.

(C) Obtain useful constituents. (D) All are correct.

35. What is decantation?

36. Decantation is used for -
(A) Separating two miscible liquids having different boiling points.
(B) Separating two immiscible liquids.
(C) Both (A) and (B). (D) None of these.
37. Which principle is used for separating a mixture of two immiscible liquids.
38. Is it a good practice to sieve flour before consuming it ?
39. Why hand picking method is not used in godowns to remove dirt, stone or husk from the grains of wheat and rice?
40. Filtration is used to separate _____ from a liquid.
41. Why do we need to separate different substances present in a mixture ?
42. Identify the mixtures from the following : Pickle, Chutney, Jam, Sugar, Water, Common salt.
43. What is evaporation?
44. A mixture of corn and husk is separated by -
(A) Handpicking. (B) Winnowing. (C) Sieving. (D) Filtration.
45. Various substances present in a mixture are called-
(A) Elements. (B) Compounds. (C) Atoms. (D) Components.
46. The process of settling down of particles of a solid in a liquid is -
(A) Sublimation. (B) Sedimentation. (C) Decantation. (D) Filtration.
47. A solid substance is dissolved in water. Which of the following method is used for separating it?
(A) Evaporation. (B) Decantation. (C) Filtration. (D) Sedimentation.
48. Find the odd one out -
(A) Chalk powder. (B) Sand. (C) Mud. (D) Sugar.
49. The process of conversion of a liquid into its vapours is called-
(A) Evaporation. (B) Filtration. (C) Sublimation. (D) Condensation.
50. What is condensation?

2M

51. What is a saturated solution? How can you dissolve more substance in it?
52. How will you separate husk or dirt particles from pulses before cooking ?
53. You are given a mixture of sand and water. How will you separate it ?
54. How will you make the muddy water clear ?
55. What is sedimentation? Give example.
56. Name the method of separation, which is used to obtain salt from seawater. Define that method.
57. How will you separate sand and water from their mixture?

3M

58. How do we separate salt and sand from their mixture?
59. Explain the process of filtration. Give at least two examples where it is used in our daily life
60. What is sieving? Where is it used?
61. Why do we need to separate different components of a mixture? Give an example
62. How is salt obtained from sea water?

5M

63. when do we use the following ?
a) Threshing b) hand picking c) filtration d) sieving
e) sedimentation and decantation
64. What is winnowing? Explain. Where is it used?
65. what is winnowing? Where is it used?
66. Is it possible to separate salt from a solution of salt in water ? If yes, how will you do it ?
67. What is the need for separation of substances?
68. How common salt is obtained from sea water?