

VIVEK TUTORIALS

Chemistry
Practice Test
Max Marks: 60

Date : 07/Apr/2019

Grade: 8th (ICSE)
Elements Compounds & Mixtures

Time: 1Hr

Choose the correct alternative:

1. The metal which does not react with dilute H_2SO_4 1
(a) Mg (b) Zn (c) Al (d) Hg
2. _____ is used as an electrode in dry cell. 1
(a) Zinc (b) Iron (c) Mercury (d) Aluminium
3. In the blast furnace iron oxide is reduced by 1
(a) Lime stone (b) Calcium silicate
(c) Carbon monoxide (d) Carbon dioxide
4. Silver articles become black on prolonged exposure to air. This is due to the formation of 1
(a) AgCN (b) Ag_2O (c) Ag_2S (d) Ag_2S and AgCN
5. Which of the following methods is suitable for preventing an iron frying pan from rusting? 1
(a) Applying grease (b) Applying paint
(c) Applying a coating of zinc (d) All the above

Fill in the blanks:

6. Dust in air is an example of _____ mixture. 1
7. The reactive element from the two monoatomic elements is _____. 1
8. An example of a monoatomic molecule is _____. 1
9. A non-metal which is good conductor of electricity is _____. 1
10. Collector used in froth floatation process is _____. 1

Name the following:

11. Name two metals which are found in nature in free state. 1
12. Name the metal whose foils are used for packing of food materials. 1
13. Name two metals which cannot displace hydrogen from dilute acids. 1
14. Name an acid with which iron is rendered passive. 1
15. Name two metals which do not corrode easily. 1

Answer the following in one or two sentences:

16. 'Non-metals are good oxidising agents': Justify this statement. 1
17. Why non-metals are electronegative? 1
18. Arrange the following metals in order of their decreasing reactivity: Fe, Zn, Ca, Mg, Cu, Ag. 1
19. An element reacts with oxygen to form an oxide which dissolves in dilute hydrochloric acid. The oxide formed also turns moist red litmus blue. Is the element a metal or a non-metal? 1
20. In the extraction of iron, a mixture of limestone, coke and iron is added to the blast furnace. In this context, give the equation for the reduction of iron ore. 1

Attempt the following:

21. Give reasons: Components in a mixture can be separated by physical methods only. 2
22. Give reasons: Centrifugation can be used for separating an insoluble heavier solid, present in an - insoluble solid-liquid mixture. 2
23. Give reasons: Brass & bronze are examples of mixtures, while copper sulphate & lead nitrate are examples of compounds. 2
24. 'An atom is the basic unit of an element'. Draw a diagram of an atom - divisible as seen today. 2
25. You are given a hammer, a battery, a bulb, wires and a switch: 2
- (a) How could you use them to distinguish between the samples of metals and non-metals?
 - (b) Assess the usefulness of these tests to distinguish between metals and non-metals?

Attempt the following:

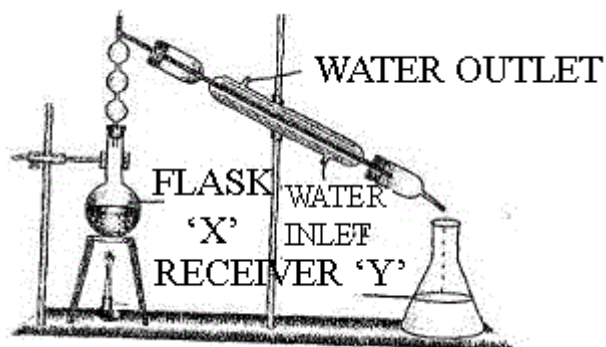
26. Define the terms elements, compounds & mixtures with a view to show their basic difference. 3
27. Explain the term 'mixture'. Differentiate between homogenous & heterogeneous mixtures. State why brass is considered as a homogenous mixture while a mixture of iron & sulphur - heterogeneous. Give an example of two liquids which form (a) homogenous (b) heterogeneous -mixtures. 3
28. State any one method to separate the following mixtures- 3
- (a) Two solid mixtures one of which directly changes into vapour on heating.
 - (b) Two solid mixtures one of which dissolves in a particular solvent and other does not.
 - (c) A solid-liquid mixture containing an insoluble solid in the liquid component.
29. State any one method to separate the following mixtures- 3
- (a) A liquid-gas mixture containing a gas dissolved in a liquid component.
 - (b) A gas-gas mixture containing two gases with different densities.
 - (c) A mixture of different solid constituents in a liquid constituent.

Attempt the following:

30. 'The modern periodic table consists of elements arranged according to their increasing atomic numbers'. With reference to elements with atomic numbers 1 to 20 only in the periodic table - differentiate them into - metallic elements, metalloids, non-metals & noble gases. 4
31. Define the term 'compound'. 4
- In the compound carbon dioxide-the elements carbon & oxygen are combined in a fixed ratio. Explain.

Attempt the following:

32. The diagram represents fractional distillation for separation of mixtures. Answer the following: 5



1. Can two immiscible liquids be separated by this process?
2. Separation of liquids by this process is based on which physical property?
3. If methyl alcohol & water are to be separated, which liquid would remain in flask 'X' after condensation?
4. Give a reason for the above answer.
5. State the purpose of the fractionating column in the apparatus.

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33. Match the items given in Column 'A' with those given in Column 'B'

5

Column-A

Column-B

- | | |
|---|----------------------|
| 1. Alloy used in making machine parts. | (a) Bauxite |
| 2. Deficiency of non-metal causes goitre. | (b) Steel |
| 3. Non-metal used in manufacture of DDT. | (c) Iodine |
| 4. Ore of copper. | (d) Copper pyrites |
| 5. Alloy of mercury. | (e) Duralumin |
| 6. Ore of iron. | (f) White phosphorus |
| 7. Alloy of iron with carbon. | (g) Chlorine |
| 8. Alloy used in aeroplane parts. | (h) Amalgam |
| 9. Ore of aluminium. | (i) Haematite |
| 10. Rat poison. | (j) Magnesium |

----- All the Best -----