



CHEMISTRY

BOOKS - MTG IIT JEE FOUNDATION

MATTER : ELEMENTS COMPOUNDS AND MIXTURES

Illustrations

1. Which of the following substances are elements?

Air, sodium, silicon, coal, tin, sugar



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2. Name a metal which is soft and a non-metal which is very hard.



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3. Name two solid , two liquid and two gaseous elements at the room temperature .



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4. Is steam an element or compound?



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5. Which of the following are compounds according to scientific meaning?

Sugar, soil, soft drink, brick, hydrochloric acid



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6. Write the elements present in the following compounds.

Sugar, common salt



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7. State one property in which a solution of sugar in water resembles a mixture of sugar and sand and one property in which it differs from it.



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8. Write the symbol of any one element based on the name of planet.



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9. What is the qualitative significance of symbol?



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10. Write the symbol of element mercury.



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11. Give the formula of carbonate ion. Tell whether it is a cation or an anion.



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12. What is the valency of gold?



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13. Name one polyatomic ion which is trivalent.



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14. The formula of the chloride of a metal is MCl_2 . What will be the formula of its sulphate.



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15. Write the formula of potassium sulphate.



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16. An element Z has a valency of 3. What is the formula of its oxide?



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Solved Examples

1. Why is water called universal solvent?



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2. Give two examples of solution.



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3. Why is mixture called impure substance?



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4. Hydrogen is a combustible gas and oxygen is a supporter of combustion. Water contains both hydrogen and oxygen but it is used to extinguish fire. Explain.



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5. When we heat iron filings and sulphur till red hot, do we get compound or mixture?



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6. Which of the following matter falls in the category of mixtures? Ice, milk, brass, iron, air, petrol, mercury, calcium oxide.



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7. How would you confirm that a colourless liquid given to you is pure water ?



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8. What is 'tincture of iodine'?



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9. What are alloys?



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10. Name the components of solution.



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11. Write the formulae of sodium oxide



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12. Write the formulae of aluminium chloride



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13. Write the formulae of sodium sulphide



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14. Write the formulae of magnesium hydroxide



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15. Give the name of elements present in the following compounds.

Quick lime



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16. Give the name of elements present in the following compounds.

Hydrogen bromide



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17. Give the name of elements present in the following compounds.

Baking powder



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18. Give the name of elements present in the following compounds.

Potassium sulphate



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19. An element E is trivalent. Write the formula of its (i) chloride (ii) oxide.



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20. What do you understand by variable valency? Give two examples of metals and two examples of non-metals showing variable valency.



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21. Give the names of any three elements whose names have been derived from Latin. Give their Latin names and symbols.



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22. One molecule of any halide contains only one atom of the metal, but they contain different number of halogen atoms. Justify.



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23. The charges on two elements A and B are given below:

Element

Charge

A

1

B

2

what is the formula of sulphate of A?



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24. What is the valency of Cu in CuO and Cu_2O ?



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25. Write the symbol of an element, based on the country Argentina.



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26. Give name of two bivalent anions.



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Exercise Multiple Choice Questions

1. Among the following which one is homogeneous?

A. Colloid

B. Compound

C. Suspension

D. Mixture

Answer: B



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2. Which of the following is not a compound?

A. Common salt

B. Water

C. Helium

D. Copper sulphate

Answer: C



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3. Which of the following is not a mixture?

A. Soil

B. Air

C. Steam

D. Milk

Answer: C



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4. A liquid metal is

A. copper

B. bromine

C. silver

D. mercury

Answer: D



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5. A heterogeneous mixture is

A. blood

B. air

C. vinegar

D. brass

Answer: A



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6. A non-metal which is gas at room temperature

A. carbon

B. silicon

C. hydrogen

D. phosphorus

Answer: C



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7. A mixture having uniform properties is known as

A. colloids

B. suspension

C. heterogeneous

D. homogeneous

Answer: D



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8. Atomicity of an element is

A. number of electrons in a molecule

B. number of ions in a molecule

C. number of atoms in a molecule

D. number of neutrons in a metal.

Answer: C



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9. Cheese is a

A. element

B. compound

C. mixture

D. suspension

Answer: C



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10. Atomicity of phosphorus is

A. 3

B. 2

C. 4

D. 5

Answer: C



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11. The elements present in methane are

A. C,H

B. C,O

C. H,O

D. O,P

Answer: A



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12. The method of separating a mixture depends on

A. mass of its constituents

B. quantity of its constituents

C. nature of its constituents

D. arrangement of its constituents

Answer: C



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13. The mixture in which particles of solute does not dissolve is

A. suspension

B. gel

C. jelly

D. colloids

Answer: A



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14. Naphthalene and iron filings can be separated by

- A. solvent extraction
- B. sublimation
- C. magnetic separation
- D. both (b) and (c).

Answer: D



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15. Which of the following element is a bad conductor of electricity?

A. Bi

B. Na

C. K

D. He

Answer: D



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16. A sample contains two substances and has uniform properties. The sample is

- A. a compound
- B. a heterogeneous mixture
- C. an element
- D. a homogeneous mixture.

Answer: D



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17. Which of the following statements is correct?

A. A pure substance must contain only one type of atom.

B. A mixture containing two compounds must be heterogeneous.

C. A heterogeneous mixture must contain at least three elements.

D. A homogeneous mixture must be uniform.

Answer: D



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18. Which of the following is not true for mixtures?

A. Mixtures can be homogeneous or heterogeneous.

B. Components in a mixture are present in a fixed ratio.

C. Properties of a mixture are the average of its components.

D. Components of a mixture can be separated easily by simple physical methods.

Answer: B



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19. Which of the following is not true for a compound?

A. Compound contains different elements in a fixed ratio.

B. It is heterogeneous in nature.

C. Properties of a compound are entirely different from those of the elements present in it.

D. Constituents of a compound cannot be separated by simple physical methods.

Answer: B



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20. The substances A and B when brought together form a substance C with the evolution of heat. The substance C is

A. a compound

B. an element

C. a mixture

D. none of these

Answer: A



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**21. Water can be broken into its constituents
by**

A. passing electric current

B. evaporation

C. separating funnel

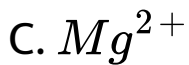
D. melting point

Answer: A



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22. Which of the following is a polyatomic ion?



Answer: B



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23. The chemical symbol P stands for

A. phosphorus

B. potassium

C. polonium

D. promethium

Answer: A



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24. The element has a symbol having two letters is

A. tin

B. uranium

C. carbon

D. boron

Answer: A



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25. Which of the following is not a monovalent?

A. Sodium

B. Aluminium

C. Potassium

D. Caesium

Answer: B



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26. The valency of gold in AuCl is

A. 1

B. 2

C. 3

D. 4

Answer: A



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27. The polyatomic ion is

A. sulphide

B. chloride

C. sulphate

D. nitride

Answer: C



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28. Which of the following ions is not univalent?

A. ammonium

B. nitrite

C. bicarbonate

D. sulphite

Answer: D



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29. The name of the compound $(NH_4)_2SO_4$ is

A. ammonium sulphate

B. ammonium sulphide

C. ammonium sulphite

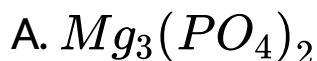
D. ammonia sulphate.

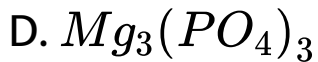
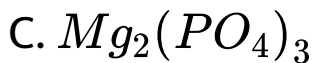
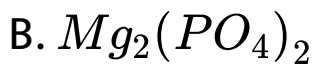
Answer: A



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30. The ions Mg^{2+} and PO_4^{3-} combines to form





Answer: A



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31. Bicarbonate ion is





Answer: C



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32. Valency of inert gases is

A. zero

B. one

C. three

D. two

Answer: A



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33. Which of the following is not a correct formula?



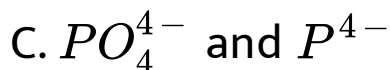
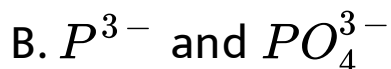
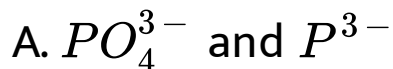
D. CaCl

Answer: D



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34. Phosphide and phosphate ions respectively are



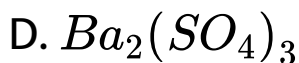
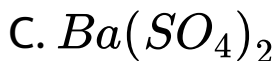
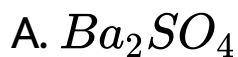
D. P^{4-} and PO_4^{4-}

Answer: B



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35. The formula of barium sulphate is

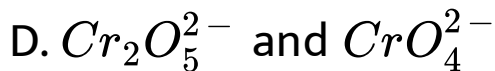
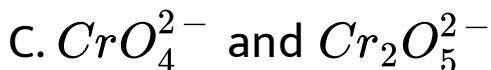
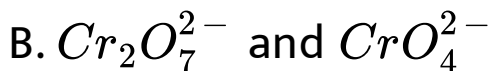
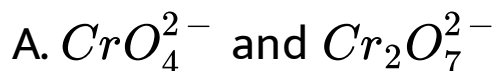


Answer: B



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36. Chromate and dichromate ions respectively are

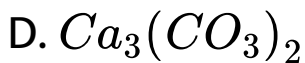
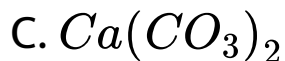
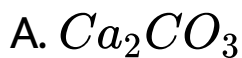


Answer: A



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37. The formula formed when calcium ion reacts with carbonate ion is



Answer: B



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38. Which one will not show variable valencies?

A. Cu

B. Hg

C. Au

D. Ba

Answer: D



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39. The valency of carbonate radical is similar to

A. chloride

B. phosphate

C. hydride

D. sulphide

Answer: D



40. Which of the following is triatomic?

A. Carbon dioxide

B. Ammonia

C. Methane

D. Helium

Answer: A



41. The charge on iron in ferrous sulphate is

A. +1

B. +2

C. -1

D. -2

Answer: B



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42. Identify the correct statement(s).

A. Mixtures which have a uniform composition throughout are called homogeneous mixtures or solutions.

B. A homogeneous mixture can have a variable composition.

C. Heterogeneous mixtures have non-uniform compositions.

D. All of these

Answer: D



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43. In 'tincture of iodine', a solute is _____ and a solvent is _____

A. alcohol, iodine

B. iodine, tin

C. iodine, alcohol

D. tin, iodine

Answer: C



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44. Identify the incorrect statement.

A. Mixtures are constituted by more than one kind of pure form of matter.

B. Dissolved sodium chloride cannot be separated from water by the physical process of evaporation.

C. Sodium chloride cannot be separated by physical process into its chemical constituents.

D. Sugar contains only one kind of pure matter and its composition is the same throughout.

Answer: B



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45. What type of mixtures are separated by crystallisation?

A. A mixture in which one component is soluble in a solvent.

B. A mixture in which impurities are soluble in a solvent.

C. A mixture in which both the components are soluble in a solvent

D. A mixture in which both the components are insoluble in water.

Answer: A



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46. State True (T) or False (F) for the given statements.

(i) A mixture of two miscible liquids can be separated by using a separating funnel.

(ii) Filtration is used for separating insoluble

substances from a liquid.

(iii) A mixture of alcohol and water can be separated by using separating funnel.

A. (i)-F, (ii)-T, (iii)-F

B. (i)-T,(ii)-F, (iii)-F

C. (i)-F,(ii)-F,(iii)-T

D. (i)-T,(ii)-T,(iii)-T

Answer: A



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47. Which of the following statements is incorrect?

A. When compounds are formed, heat is often given off.

B. Unlike elements, compounds and mixtures are both impure substances.

C. Unlike compounds, mixtures can be separated into its components by physical means.

D. Compounds and mixtures are both made of elements

Answer: B



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48. Which of the following are metalloids?

(i) Boron

(ii) Sodium

(iii) Silicon

(iv) Chlorine

(v) Germanium

A. (ii) and (iv)

B. (i) and (iv)

C. (iii) and (v)

D. (i),(iii) and (v)

Answer: D



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49. Three students Ankit, Dinesh and Manoj were given three unknown substances X, Y and Z respectively during the lab activity.

Substance	Property	
	Boiling point (°C)	Solubility in water
X	56	Soluble
Y	45	Insoluble
Z	90	Soluble

On the basis of these properties, which student has chosen the correct separation technique, to separate a substance from the substance-water mixture?

A. Ankit - Separating funnel

B. Dinesh-Distillation

C. Manoj – Fractional distillation

D. All are correct

Answer: C



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50. How many atoms of each type of element is present in the chemical formula $(CH_3)_3CCH_2CO_2H$?

A. Carbon -4 , Hydrogen - 3 , Oxygen - 1

B. Carbon -4 , Hydrogen - 6 , Oxygen - 1

C. Carbon -6 , Hydrogen - 9 , Oxygen - 2

D. Carbon -6 , Hydrogen - 12 , Oxygen - 2

Answer: D



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Exercise Match The Following

1. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is correct.

List-I	List-II
(P) He	1. Mixture
(Q) H ₂ O	2. Compound
(R) Brass	3. Colloid
(S) Fog	4. Element

A. P-4, Q-1, R-3, S-2

B. P-2, Q-3, R-1, S-4

C. P-4, Q-2, R-1, S-3

D. P-1, Q-4, R-3, S-2

Answer: C



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2. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is correct.

List-I

- (P) Bromine
- (Q) Marbel
- (R) Calcium
- (S) Antimony

List-II

- 1. Metal
- 2. Metalloid
- 3. Compound
- 4. Non-metal

A. P-2,Q-1,R-3,S-4

B. P-4,Q-3,R-1,S-2

C. P-1,Q-2,R-3,S-4

D. P-4,Q-1,R-2,S-3

Answer: B



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3. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is

correct.

List-I		List-II
(P) Magnesium carbonate	1.	Suspension
(Q) Silicon	2.	Compound
(R) Sodium chloride solution	3.	Element
(S) Slaked lime	4.	Mixture

A. P-2,Q-3,R-4,S-1

B. P-1,Q-3,R-2,S-4

C. P-2,Q-1,R-4,S-3

D. P-3,Q-2,R-3,S-4

Answer: A



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4. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is correct.

List-I	List-II
(P) Magnetisation	1. Separation of salt and water
(Q) Evaporation	2. Separation of oil and water
(R) Separating funnel	3. Separation of iron filings and sulphur
(S) Sublimation	4. Separation of naphthalene and sand

A. P-3,Q-2,R-1,S-4

B. P-3,Q-1,R-2,S-4

C. P-1,Q-2,R-4,S-3

D. P-4,Q-3,R-1,S-2

Answer: B



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5. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is

correct.

List-I

- (P) Gas in gas
- (Q) Solid in solid
- (R) Solid in liquid
- (S) Gas in liquid

List-II

- 1. Alloy
- 2. Sugar solution
- 3. Aerated water
- 4. Air

A. P-1,Q-2,R-4,S-3

B. P-2,Q-1,R-3,S-4

C. P-4,Q-3,R-1,S-2

D. P-4,Q-1,R-2,S-3

Answer: D



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6. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is correct.

List-I	List-II
(P) Copper nitrate	1. $(\text{NH}_4)_2\text{SO}_4$
(Q) Ammonium sulphate	2. $\text{Ca}(\text{OH})_2$
(R) Calcium hydroxide	3. BaCl_2
(S) Barium chloride	4. $\text{Cu}(\text{NO}_3)_2$

A. P-4,Q-1,R-2,S-3

B. P-3,Q-2,R-4,S-1

C. P-4,Q-1,R-3,S-2

D. P-2,Q-3,R-1,S-4

Answer: A



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7. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is

correct.

List-I		List-II
(P) Sodium	1.	-1
(Q) Magnesium	2.	+1
(R) Chloride	3.	-3
(S) Phosphate	4.	+2

A. P-4,Q-2,R-3,S-1

B. P-2,Q-1,R-3,S-4

C. P-2,Q-4,R-1,S-3

D. P-3,Q-1,R-2,S-4

Answer: C



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8. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is correct.

List-I	List-II
(P) Sulphate	1. HS^-
(Q) Sulphite	2. SO_4^{2-}
(R) Sulphide	3. S^-
(S) Bisulphide	4. SO_3^{2-}

A. P-1,Q-3,R-2,S-4

B. P-2,Q-4,R-3,S-1

C. P-2,Q-3,R-4,S-2

D. P-3,Q-2,R-1,S-4

Answer: B



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9. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is

correct.

List-I

- (P) Monovalent
- (Q) Bivalent
- (R) Trivalent
- (S) Tetravalent

List-II

- 1. Borate
- 2. Cuprous
- 3. Carbide
- 4. Ferrous

A. P-1,Q-3,R-2,S-4

B. P-2,Q-1,R-4,S-3

C. P-3,Q-2,R-4,S-1

D. P-2,Q-4,R-1,S-3

Answer: D



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10. Choices for the correct combination of elements from List-I and List-II are given as options (a), (b), (c) and (d) out of which one is correct.

List-I

(P) Sodium

(Q) Silver

(R) Tin

(S) Lead

List-II

1. Plumbum

2. Stannum

3. Argentum

4. Natrium

A. P-2,Q-1,R-3,S-4

B. P-1,Q-3,R-4,S-2

C. P-4,Q-3,R-2,S-1

D. P-3,Q-2,R-1,S-4

Answer: C



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Exercise Assertion Reason

1. Assertion : All homogeneous substances are pure.

Reason : Alloys are homogeneous mixtures of liquids.

- A. If both assertion and reason are true and reason is the correct explanation
- B. If both assertion and reason are true but reason is not the correct explanation of assertion.
- C. If assertion is true but reason is false.
- D. If both assertion and reason are false.

Answer: D



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2. Assertion : A mixture is homogeneous in nature.

Reason : Mixtures show fixed composition.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: D



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3. Assertion : A mixture of naphthalene and sulphur can be separated using sublimation.

Reason : Sublimation is process of conversion of solid to gas directly.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: A



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4. Assertion : Hydrogen, oxygen, silicon, sodium are elements.

Reason : Elements cannot be split up into two or more simpler substances.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: A



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5. Assertion : Metals are good conductors of electricity.

Reason : Bromine is the only liquid metal.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: C



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6. Assertion : Oxygen is a diatomic element.

Reason : The elements each of whose molecules contain two atoms is called diatomic element.

- A. If both assertion and reason are true and reason is the correct explanation
- B. If both assertion and reason are true but reason is not the correct explanation of assertion.
- C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: A



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7. Assertion : Colloidal solution is a heterogeneous mixture.

Reason : Colloidal particles are electrically charged

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: B



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8. Assertion : No energy is released or absorbed during mixture formation.

Reason : The constituents of mixture do not bind with each other with chemical bond.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: A



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9. Assertion : A compound has fixed melting and boiling point.

Reason : The formation of a compound occurs because of a chemical reaction.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: B



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10. Assertion : Mixtures are homogeneous or heterogenous in nature.

Reason : Mixtures are a result of physical change.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: B



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11. Assertion : Valency of ferrous is +2.

Reason : Valency is the combining capacity of an element.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: B



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12. Assertion : Formula of calcium oxide is CaO .

Reason : Symbol of calcium is Ca and its charge is $+2$ and charge on oxide is -2 .

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: A



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13. Assertion : Chloride ion is monovalent anion.

Reason : Chlorine gains an electron to carry one negative charge.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: A



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14. Assertion : The formula of sodium carbonate is Na_2CO_3 .

Reason : Na is divalent, CO_3 is monovalent.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: C



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15. Assertion : Symbol represents one atom of an element.

Reason : Symbol of barium is B.

A. If both assertion and reason are true and reason is the correct explanation

B. If both assertion and reason are true but reason is not the correct explanation of

assertion.

C. If assertion is true but reason is false.

D. If both assertion and reason are false.

Answer: C



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Exercise Comprehension

1. Mixtures are formed when two or more substances mix together in any proportion.

Mixtures can be uniform (homogeneous) or non-uniform (heterogeneous). They possess the property of their constituents and can be separated by physical means.

Milk is a

A. homogeneous mixture and can be separated by physical means.

B. homogeneous mixture and cannot be separated by physical means

C. heterogeneous mixture and can be separated by physical means.

D. heterogeneous mixture and cannot be separated by physical means.

Answer: C



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2. Mixtures are formed when two or more substances mix together in any proportion. Mixtures can be uniform (homogeneous) or non-uniform (heterogeneous). They possess the property of their constituents and can be

separated by physical means.

The substance used for mixture formation is

- A. compound
- B. element
- C. both (a) and (b)
- D. none of these.

Answer: C



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3. Mixtures are formed when two or more substances mix together in any proportion.

Mixtures can be uniform (homogeneous) or non-uniform (heterogeneous). They possess the property of their constituents and can be separated by physical means.

A. metal and metal

B. metal and non metal

C. metal and metalloids

D. both (a) and (b).

Answer: D



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4. A solution is a homogeneous mixture of two or more substances. The substances making up the solution are called components of the solution. A component which is present in large amount is called solvent while the one present in lesser amount is called solute.

Sugar in water is a

A. solution

B. homogeneous mixture

C. heterogeneous mixture

D. both (a) and (b)

Answer: D



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5. A solution is a homogeneous mixture of two or more substances. The substances making up the solution are called components of the

solution. A component which is present in large amount is called solvent while the one present in lesser amount is called solute.

The solute present in soda water is

A. CO

B. H_2O

C. CO_2

D. H_2CO_3

Answer: C



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6. A solution is a homogeneous mixture of two or more substances. The substances making up the solution are called components of the solution. A component which is present in large amount is called solvent while the one present in lesser amount is called solute.

'Tincture of iodine' is a solution. Solvent present in it is

A. iodine

B. ethyl alcohol

C. iodine-ethyl alcohol solution

D. tincture

Answer: B



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7. Symbol means a short method of representing the full name of an element.

Most of the elements are symbolized by their first name while name of some elements are in small letter along with the initial letter written

in capital. Some symbols of elements are derived from Latin name, scientist name, name of planet, etc.

The symbol for carbon is

A. C

B. Ca

C. Co

D. CO

Answer: A



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8. Symbol means a short method of representing the full name of an element.

Most of the elements are symbolized by their first name while name of some elements are in small letter along with the initial letter written in capital. Some symbols of elements are derived from Latin name, scientist name, name of planet, etc.

The symbol B represents

A. barium

B. boron

C. bismuth

D. beryllium

Answer: B



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9. Symbol means a short method of representing the full name of an element.

Most of the elements are symbolized by their first name while name of some elements are in

small letter along with the initial letter written in capital. Some symbols of elements are derived from Latin name, scientist name, name of planet, etc.

The name of element uranium is derived from

- A. name of country
- B. name of scientist
- C. name of planet
- D. Latin name.

Answer: C



10. Chemical formula of a molecular compound represents the actual number of atoms of different elements present in one molecule of the compound. With the help of symbols and valencies or charges, a formula can be made. First write the symbol such as positive ion to the left and negative ion to the right and then criss cross the valencies or charges . Thus in this way we can write a chemical formula.

The charge on Cl in $FeCl_3$ is

A. + 1

B. - 1

C. + 3

D. - 3

Answer: B



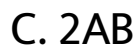
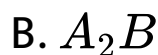
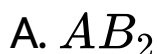
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11. Chemical formula of a molecular compound represents the actual number of atoms of different elements present in one molecule of

the compound. With the help of symbols and valencies or charges, a formula can be made.

First write the symbol such as positive ion to the left and negative ion to the right and then criss cross the valencies or charges . Thus in this way we can write a chemical formula.

The valency of A is 2 and B is 1, a chemical formula formed by both of them will be



D. 2BA

Answer: A



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12. Chemical formula of a molecular compound represents the actual number of atoms of different elements present in one molecule of the compound. With the help of symbols and valencies or charges, a formula can be made. First write the symbol such as positive ion to

the left and negative ion to the right and then criss cross the valencies or charges . Thus in this way we can write a chemical formula.

The symbols needed to form barium chloride are

A. B, Cl

B. Ba, Cl

C. Be, Cl

D. none of these

Answer: B



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Exercise Integer Numerical Value

1. The number of components present in a solution are



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2. Among the following, number of pure substances are : Diamond, Brass, Alcohol,

Germanium, Air, zinc sulphate, Milk, Steel,
Distilled water, Gasoline.



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3. The atomicity of oxygen is



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4. Valency of Mg in magnesium sulphate is



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5. The charge present on phosphate anion is



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