



KINETICS

We Nurture The Future

IIT-JEE | Medical | Foundations

Is Matter Around Us Pure

Question 1.

What is the boiling point of acetone?

- (a) 196°C
- (b) 186°C
- (c) 78.3°C
- (d) 183°C

▼ [Answer](#)

Answer: (c) 78.3°C

Question 2.

Who was the first scientist to use the term 'element' in 1661?

- (a) Robert Boyle
- (b) Charles
- (c) Antonie Lorent
- (d) None of them

▼ [Answer](#)

Answer: (a) Robert Boyle

Question 3.

Boron, silicon, germanium, etc., are:

- (a) Metals
- (b) Non-metals
- (c) Metalloids
- (d) None of them

▼ [Answer](#)

Answer: (c) Metalloids

Question 4.

The major component of a solution is called:

- (a) solute
- (b) insoluble
- (c) solvent
- (d) solution

▼ [Answer](#)

Answer: (c) solvent

Question 5.

Which of the following will show the "Tyndall effect"?

- (a) Salt solution
- (b) Milk and starch solution
- (c) Copper sulphate solution
- (d) None of them

▼ [Answer](#)

Answer: (b) Milk and starch solution

Question 6.

The size of colloidal particles are:

- (a) $10^{-4} - 10^{-8}$ m
- (b) $10^{-10} - 10^{-12}$ m
- (c) $10^{-2} - 10^{-4}$ m
- (d) $10^{-10} - 10^{-8}$ m

▼ [Answer](#)

Answer: (d) $10^{-10} - 10^{-8}$ m

Question 7.

Which of the following are physical changes?

- (i) Melting of iron metal
 - (ii) Rusting of iron
 - (iii) Bending of an iron rod
 - (iv) Drawing a wire of iron metal
- (a) (i), (ii) and (iii)
 - (b) (i), (ii) and (iv)
 - (c) (i), (iii) and (iv)
 - (d) (ii), (iii) and (iv)

▼ [Answer](#)

Answer: (c) (i), (iii) and (iv)

Question 8.

Which of the following are chemical changes?

- (i) Decaying of wood
 - (ii) Burning of wood
 - (iii) Sawing of wood
 - (iv) Hammering of a nail into a piece of wood
- (a) (i) and (ii)
 - (b) (ii) and (iii)
 - (c) (iii) and (iv)
 - (d) (i) and (iv)

▼ Answer

Answer: (a) (i) and (ii)

Question 9.

Which of the following are homogeneous in nature?

- (i) Ice
- (ii) Wood
- (iii) Soil
- (iv) Air
- (a) (i) and (ii)
- (b) (ii) and (iv)
- (c) (i) and (iv)
- (d) (iii) and (iv)

▼ Answer

Answer: (c) (i) and (iv)

Fill in the Blanks.

Question 10.

Pure substances can be elements or _____

▼ Answer

Answer: compounds

Question 11.

Metals are good _____ of heat and electricity.

▼ Answer

Answer: conductor

Question 12.

To separate a mixture of two or more miscible liquids for which the difference in boiling points is less than _____ fractional distillation method is used.

▼ Answer

Answer: 25K

Question 13.

The diameter of suspension particles is bigger than _____

▼ Answer

Answer: 10^{-5} m

Question 14.

_____ effect originates due to optical properties of a colloidal solution.

▼ [Answer](#)

Answer: Tyndall

True/False.

Question 15.

The concentration of a solution is the amount of solute present per unit volume or per unit mass of the solution/solvent.

▼ [Answer](#)

Answer: True

Question 16.

Colloids are homogeneous mixtures.

▼ [Answer](#)

Answer: False

Question 17.

The solution is a homogeneous mixture.

▼ [Answer](#)

Answer: True

Question 18.

The characteristic features of a particular substance obtained from different sources will be different.

▼ [Answer](#)

Answer: False

Question 19.

A mixture has a fixed melting point.

▼ [Answer](#)

Answer: False

Question 20.

The particles of a suspension can not be filtered out by using filter paper.

▼ [Answer](#)

Answer: True

[Match the Column.](#)

Question 21.

A	B
1. Aerosol	(i) Shaving cream
2. Foam	(ii) Coloured gemstone, milky glass
3. Emulsion	(iii) Milk of magnesia, mud
4. Sol	(iv) Milk, face cream
5. Gel	(v) Fog, clouds, mist
6. Solid sol	(vi) Jelly, cheese, butter

▼ [Answer](#)

Answer:

A	B
1. Aerosol	(v) Fog, clouds, mist
2. Foam	(i) Shaving cream
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6. Solid sol	(ii) Coloured gemstone, milky glass

[Answer in one Word/Sentence.](#)

Question 22.

What is known as 'tincture iodine'?

▼ [Answer](#)

Answer: Solution of iodine and alcohol

Question 23.

Which technique is used to separate two immiscible liquids?

▼ [Answer](#)

Answer: By the use of separating funnel

Question 24.

What is a substance composed of two or more elements, chemically combined with one another in a fixed proportion known as?

▼ [Answer](#)

Answer: Compound

Question 25.

Name a metallic element found in a liquid state at room temperature.

▼ [Answer](#)

Answer: Mercury

Question 26.

How would you separate common salt and iodine from their mixture?

▼ [Answer](#)

Answer: By sublimation
