**Tarun Arora**  **R.L. Institute M: 9416974837**

**Max Time : 1 hr** **Is Matter Around Us Pure Max Marks : 35**

**CODE : A**

1. Which of the following statements are true for pure substances ?

(i) pure substances contain only one kind of particles

(ii) pure substances may be compound and mixture

(iii) pure substances have the same composition throughout

(iv) pure substances can be exemplified by all elements other than nickel

|  |  |  |  |
| --- | --- | --- | --- |
| a) (i) and (ii) | b) (i) and (iii) | c) (iii) and (iv) | d) (ii) and (iii) |

1. Rusting of an article made up of iron is called ?

a) corrosion and it is a physical as well as chemical change

b) dissolution and it is a physical change

c) corrosion and it is a chemical change

d) dissolution and it is a chemical change

1. A mixture of sulphur and carbon disulphide is

|  |  |
| --- | --- |
| a) heterogeneous and shows Tyndall effect | b) homogeneous and shows Tyndall effect |
| c) heterogeneous and does not show Tyndall effect | d) homogeneous and does not show Tyndall effect |

1. Tincture of iodine has antiseptic properties. This solution is made by dissolving ?

|  |  |
| --- | --- |
| a) Iodine in potassium iodide | b) Iodine in Vaseline |
| c) Iodine in alcohol | d) Iodine in water |

1. Which of the following are homogeneous in nature ?

(i) ice (ii) wood (iii) soil (iv) air

|  |  |  |  |
| --- | --- | --- | --- |
| a) (i) and (iii) | b) (ii) and (iv) | c) (i) and (iv) | d) (iii) and (iv) |

1. Which of the following are the 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) |

1. 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

|  |  |  |  |
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1. Two chemical species X and Y combine together to form a product P which contains both X and Y ; X + Y → P ; X and Y can be broken down into simpler substances by simple chemical reactions. Which of the following concerning the species X , Y and P are correct ?

(i) P is a compound (ii) X and Y are compounds

(iii) X and Y are elements (iv) P has a fixed composition

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| a) (i) , (ii) and (iii) | b) (i) , (ii) and (iv) | c) (ii) , (iii) and (iv) | d) (i) , (iii) and (iv) |

1. Which of the following is a pure substance ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Kerosene oil | b) steel | c) sodium chloride | d) vulcanized rubber |

1. Which of the following is not a pure substance ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Desi ghee | b) Urea | c) Acetone | d) Sugar |

1. Which of the following is a impure substance ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Mercury | b) Lemonade | c) Sugar | d) Silicon |

1. Which of the following is a homogeneous mixture ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Smoke | b) Alcohol-water mixture | c) Gun powder | d) Milk |

1. Which of the following is a heterogeneous mixture ?

a) Iodized salt

b) Aqueous solution of sugar

c) Air free from dust particles and suspended impurities

d) Brass

1. Which of the following solution show Tyndall effect ?

|  |  |
| --- | --- |
| a) Sugar dissolved in carbon sulphide | b) Sugar dissolved in water |
| c) Iodine dissolved in alcohol | d) Milk |

1. Brownian motion is observed when

a) pollen grains are suspended in water and seen under a microscope

b) alum is added to muddy water

c) light is passed through an aqueous solution of common salt

d) sulphur dissolves in carbon disulphide

1. Which of the following sols contain only positively charged dispersed phase ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Starch | b) Haemoglobin | c) Arsenic sulphide | d) Mud |

1. Blood can be best coagulated by

|  |  |  |  |
| --- | --- | --- | --- |
| a) Barium chloride | b) Alcohol | c) Sodium chloride | d) Alum |

1. Which of the following elements are solid non-metals ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) F2 , I2 | b) I2 , S | c) O2 , I2 | d) O2 , diamond |

1. Which of the following is a liquid non-metal ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Br2 | b) Fr | c) Hg | d) I2 |

1. Milk is a ………………… solution but vinegar is a ……………….. solution.
2. Steel is a ………………………. mixture of iron and carbon.
3. Iodised salt is a ………………… mixture of sodium chloride and potassium iodide.
4. Two liquids which are …………………….. can be separated by a separating funnel.
5. A saturated solution on heating becomes ………………………. .
6. The solubility of CO2 in water increases on increasing the …...................... .
7. A mixture of oil in water can be separated by …………………….. .

**True / False Statements**

1. All metals are solids at room temperature.
2. A colloidal solution is a homogeneous mixture.
3. When 7 g of Fe and 4 g of S are heated strongly in a china dish, the product formed is a compound.
4. Cheese is a colloidal solution in which liquid is the dispersed phase and solid is the dispersion medium.
5. Dust particle is air show Tyndall effect and Brownian movement.
6. A 50% mass by volume solution of NaOH can be prepared by dissolving 50 g of NaOH in 100 ml of water (density = 1 g/ml).
7. A mixture of iron fillings and sulphur powder can be separated by shaking with carbon disulphide.
8. Change in colour of the black tea by adding lemon juice, is a chemical change.
9. Coagulation of blood particles occurs when alum is applied to the blood coming out from a cut.

**Tarun Arora**  **R.L. Institute M: 9416974837**

**Max Time : 1 hr** **Is Matter Around Us Pure Max Marks : 35**

**CODE : B**

1. Rusting of an article made up of iron is called ?

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**True / False Statements**

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**Answers**

**Is Matter Around Us Pure [CLASS = 9th ]**

|  |  |
| --- | --- |
| **CODE : A** | **CODE : B** |
| 1. b | 1. c |
| 2. c | 2. c |
| 3. d | 3. a |
| 4. d | 4. a |
| 5. c | 5. a |
| 6. c | 6. b |
| 7. a | 7. d |
| 8. d | 8. a |
| 9. c | 9. b |
| 10. a | 10. b |
| 11. b | 11. d |
| 12. b | 12. d |
| 13. a | 13. d |
| 14. d | 14. c |
| 15. a | 15. b |
| 16. b | 16. b |
| 17. d | 17. c |
| 18. b | 18. a |
| 19. a | 19. d |
| 20. colloidal ,true | 20. pressure |
| 21. homogeneous | 21. separating funnel |
| 22. heterogeneous | 22. colloidal , true |
| 23. immiscible | 23. heterogeneous |
| 24. unsaturated | 24. homogeneous |
| 25. pressure | 25. immiscible |
| 26. separating funnel | 26. unsaturated |
| 27. False | 27. True |
| 28. False | 28. True |
| 29. True | 29. True |
| 30. True | 30. False |
| 31. True | 31. False |
| 32. False | 32. True |
| 33. True | 33. True |
| 34. True | 34. True |
| 35. True | 35. False |