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

**Max Time : 1 hr** **ATOMS & MOLECULES Max Marks : 30**

**Class = 9th Science Test CODE : A**

1. Multiple Choice Type Questions (MCQs): [ 1 x 6 = 6 ]
2. Numerical value of Avogadro’s number is

|  |  |  |  |
| --- | --- | --- | --- |
| a) 6.022 x 1023 | b) 6.022 x 1020 | c) 6.022 x 1015 | d) 6.022 x 10 –23 |

1. The chemical symbol for nitrogen gas is

|  |  |  |  |
| --- | --- | --- | --- |
| a) N | b) Ni | c) N+ | d) N2 |

1. Latin name of iron is

|  |  |  |  |
| --- | --- | --- | --- |
| a) ferrous | b) ferrum | c) ferric | d) none of these |

1. Which of the following is correct symbol of sodium ion ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Na | b) Na+ | c) So | d) So+ |

1. Which of the following is/are diatomic molecules ?

|  |  |
| --- | --- |
| i) Oxygen | ii) Hydrogen |
| iii) Nitrogen | iv) Chlorine |

Select the correct alternatives :

|  |  |
| --- | --- |
| a) (i) and (ii) are true | b) (ii) and (iii) are true |
| c) (i) , (iii) and (iv) are true | d) All are true |

1. Which of the following symbols is incorrect ?

|  |  |
| --- | --- |
| i) Helium (He) | ii) Aluminium (AL) |
| iii) Carbon (c) | iv) Cobalt (CO) |

Select the correct alternatives :

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

1. Give an example of a triatomic molecule of an element [ 1 ]
2. Define Atomicity. [ 1 ]
3. Write the atomicity of the following molecules : (i) Sulphur (ii) Phosphorus [ 1 ]
4. What is an ion ? Give one example. [ 1 ]
5. Give one word of the following : [ 1 ]

(i) A group of atom carrying a charge (ii) Positively charged ion

1. Define Atom ? [ 1 ]
2. Why it is not possible to see an atom with naked eyes ? [ 1 ]
3. Write the cation and anions present (if any) in the following compounds : [ 2 ]

|  |  |  |  |
| --- | --- | --- | --- |
| a) CH3COONa | b) NaCl | c) H2 | d) NH4NO3 |

1. Classify each of the following on the basis of their atomicity : [ 3 ]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a) F2 | b) NO2 | c) | d) C2H6 | e) CO |
| f) H2O2 | g) P4O10 | h) O3 | i) HCl |  |

1. Calculate the molecular masses of : [ 12 ]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a) NH3 | b) CO2 | c) CH3OH | d) HNO3 | e) C12H22O11 |
| f) HCl | g) CuSO4 . 5H2O | h) K2Cr2O7 | i) Ca(OH)2 | j) O3 |
| k) CaCO3 | L) H2SO4 |  |  |  |

[Atomic mass of H = 1u , O = 16u , Cl = 35.5u , C = 12u , N = 14u , Cu = 63.5u , K = 39u , S = 32u , Cr = 52u , Ca = 40u]

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

**Max Time : 1 hr** **ATOMS & MOLECULES Max Marks : 30**

**Class = 9th Science Test CODE : B**

1. Multiple Choice Type Questions (MCQs): [ 1 x 6 = 6 ]
2. Which of the following is/are diatomic molecules ?

|  |  |
| --- | --- |
| i) Oxygen | ii) Hydrogen |
| iii) Nitrogen | iv) Chlorine |

Select the correct alternatives :

|  |  |
| --- | --- |
| a) (i) and (ii) are true | b) (ii) and (iii) are true |
| c) (i) , (iii) and (iv) are true | d) All are true |

1. The chemical symbol for nitrogen gas is

|  |  |  |  |
| --- | --- | --- | --- |
| a) N | b) Ni | c) N+ | d) N2 |

1. Latin name of iron is

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| a) ferrous | b) ferrum | c) ferric | d) none of these |

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| a) 6.022 x 1023 | b) 6.022 x 1020 | c) 6.022 x 1015 | d) 6.022 x 10 –23 |

1. Which of the following is correct symbol of sodium ion ?

|  |  |  |  |
| --- | --- | --- | --- |
| a) Na | b) Na+ | c) So | d) So+ |

1. Which of the following symbols is incorrect ?

|  |  |
| --- | --- |
| i) Helium (He) | ii) Aluminium (AL) |
| iii) Carbon (c) | iv) Cobalt (CO) |

Select the correct alternatives :

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

1. What is an ion ? Give one example. [ 1 ]
2. Write the atomicity of the following molecules : (i) Sulphur (ii) Phosphorus [ 1 ]
3. Give an example of a triatomic molecule of an element [ 1 ]
4. Define Atomicity. [ 1 ]
5. Why it is not possible to see an atom with naked eyes ? [ 1 ]
6. Give one word of the following : [ 1 ]

(i) A group of atom carrying a charge (ii) Positively charged ion

1. Define Atom ? [ 1 ]
2. Write the cation and anions present (if any) in the following compounds : [ 2 ]

|  |  |  |  |
| --- | --- | --- | --- |
| a) CH3COONa | b) NaCl | c) H2 | d) NH4NO3 |

1. Classify each of the following on the basis of their atomicity : [ 3 ]

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| --- | --- | --- | --- | --- |
| a) F2 | b) NO2 | c) | d) C2H6 | e) CO |
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1. Calculate the molecular masses of : [ 12 ]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| a) NH3 | b) CO2 | c) CH3OH | d) HNO3 | e) C12H22O11 |
| f) HCl | g) CuSO4 . 5H2O | h) K2Cr2O7 | i) Ca(OH)2 | j) O3 |
| k) CaCO3 | L) H2SO4 |  |  |  |

[Atomic mass of H = 1u , O = 16u , Cl = 35.5u , C = 12u , N = 14u , Cu = 63.5u , K = 39u , S = 32u , Cr = 52u , Ca = 40u]