**Reg. NO:**

**TIME:**

**DATE: 17.4.20**

**REDOX REACTIONS -PRACTICE SHEET-01 TOTAL MARKS: 180**

**SUBJECT: CHEMISTRY**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **1.** | **Which among the following shows maximum oxidation state?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| **2.** | **A substance, that by its sharp colour change indicates the completion of reaction is known as :** | | | | | | | |
|  | a) | Acid | b) | Base | c) | Indicator | d) | None of these |
| **3.** | **In the reaction, , the number of electrons that must be added to the right is:** | | | | | | | |
|  | a) | 4 | b) | 3 | c) | 2 | d) | 1 |
| **4.** | **A solution of is reduced to The normality of solution is 0.6. The molarity is:** | | | | | | | |
|  | a) | 1.8 | b) | 0.6 | c) | 0.1 | d) | 0.2 |
| **5.** | **In the reaction of and the later acts as :O3+H2O2H2O+2O2** | | | | | | | |
|  | a) | Oxidising agent | | | | | | |
|  | b) | Reducing agent | | | | | | |
|  | c) | Bleaching agent | | | | | | |
|  | d) | Both oxidising and bleaching agent | | | | | | |
| **6.** | **Of the following reactions, only one is a redox reaction. Identify this reaction**. | | | | | | | |
|  | a) |  | | | b) |  | | |
|  | c) |  | | | d) |  | | |
| **7.** | **Reductants are substances which :** | | | | | | | |
|  | a) | Show an increase in their oxidation number during a change | | | | | | |
|  | b) | Lose electrons during a change | | | | | | |
|  | c) | Reduce others and oxidise themselves | | | | | | |
|  | d) | All of the above | | | | | | |
| **8.** | **In the equation, The equivalent weight of stannous chloride (molecular weight = 190) will be :** | | | | | | | |
|  | a) | 190 | b) | 95 | c) | 47.5 | d) | 154.5 |
| **9.** | **The oxoacid which acts both as oxidising and reducing agent is :** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| **10.** | Oxidation state of oxygen is −1 in the compound : | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| **11.** | **When sulphur dioxide is passed in an acidified solution, the oxidation state of sulphur is changed from** | | | | | | | |
|  | a) | 4 to 0 | b) | 4 to 2 | c) | 4 to 6 | d) | 6 to 4 |
| **12.** | **Reduction is a process which involves :** | | | | | | | |
|  | a) | Electronation | | | | | | |
|  | b) | Addition of hydrogen or removal of oxygen | | | | | | |
|  | c) | Addition of metal or removal of non-metal | | | | | | |
|  | d) | All of the above | | | | | | |
| **13.** | **The number of electrons lost or gained during the change is** | | | | | | | |
|  | a) | 2 | b) | 4 | c) | 6 | d) | 8 |
| **14.** | **A group of methods of quantitative chemical analysis involving the measurement of volume of reacting substance is known as :** | | | | | | | |
|  | a) | Gravimetric analysis | b) | Volumetric analysis | c) | Both (a) and (b) | d) | None of the above |
| **15.** | **Which one of the following reaction is possible at anode?** | | | | | | | |
|  | a) |  | | | b) |  | | |
|  | c) |  | | | d) |  | | |
| **16.** | **The anion nitrate is converted into ammonium ion. The equivalent mass of nitrate ion in the reaction would be:** | | | | | | | |
|  | a) | 6.20 | b) | 7.75 | c) | 10.5 | d) | 21.0 |
| **17.** | **Which acts as a reducing agent?** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| **18.** | **What weight of is needed to convert 5 g into +H2O** | | | | | | | |
|  | a) | 12.4 g | b) | 24.8 g | c) | 6.2 g | d) | 10.2 g |
| **19.** | **When is passed in acidified potassium dichromate solution, the oxidation state of S is changed from :** | | | | | | | |
|  | a) | + 4 to 0 | b) | +4 to +2 | c) | +4 to +6 | d) | +6 to +4 |
| **20.** | **Among the properties given below, the set of properties shown by ion towards metal species is :**  **1. Reducing; 2. Oxidising ; 3. Complexation** | | | | | | | |
|  | a) | 1, 3 | b) | 1, 2, 3 | c) | 1, 2 | d) | 2, 3 |
| **21.** | **Solution of sodium metal in liquid is strongly reducing due to the presence of :** | | | | | | | |
|  | a) | Sodium atoms | b) | Solvated electrons | c) |  | d) | Sodium amide |
| **22.** | **Oxidation numbers of Fe in are :** | | | | | | | |
|  | a) | +2 and +3 | b) | +1 and +2 | c) | +1 and +3 | d) | None of these |
| **23.** | **It is found that V forms a double salt isomorphous with Mohr’s salt. The oxidation number of V in this compound is :** | | | | | | | |
|  | a) | + 3 | b) | + 2 | c) | + 4 | d) | −4 |
| **24.** | **is a good oxidising agent in different medium changing to**  **Changes in oxidation number respectively are** | | | | | | | |
|  | a) | 1,3,4,5 | b) | 5,4,3,2 | c) | 5,1,3,4 | d) | 2,6,4,3 |
| **25.** | **The oxidation number of Ba in barium peroxide is :** | | | | | | | |
|  | a) | +2 | b) | −1 | c) | +4 | d) | +6 |
| **26.** | **Strongest reducing agent among the following is :** | | | | | | | |
|  | a) |  | b) |  | c) |  | d) |  |
| **27.** | **The eq. wt. of as reductant, in the reaction,** | | | | | | | |
|  | a) |  | b) | (Mol. wt.)/2 | c) | (Mol. wt.)/6 | d) | (Mol. wt.)/8 |
| **28.** | **When Fe metal is rusted then Fe is :** | | | | | | | |
|  | a) | Oxidised | b) | Reduced | c) | Hydrolysed | d) | Precipitated |
| **29.** | **The value of in is** | | | | | | | |
|  | a) | 5 | b) | 4 | c) | 2 | d) | 3 |
| **30.** | **In nitric oxide (NO), the oxidation state of nitrogen is :** | | | | | | | |
|  | a) | −2 | b) | +1 | c) | −1 | d) | +2 |