|  |  |
| --- | --- |
| **Figure** | **Type of Glassware** |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

**write and draw glassware that presented to you.**

**How to use a pH meter??**

How to calibrate the device and read the pH value for required solution?

**1-** …………………………………………………………………………………………………………………………………………………………………………….

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**2-** …………………………………………………………………………………………………………………………………………………………………………….

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**3-** …………………………………………………………………………………………………………………………………………………………………………….

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**4-** …………………………………………………………………………………………………………………………………………………………………………….

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**5-** …………………………………………………………………………………………………………………………………………………………………………….

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**6-** …………………………………………………………………………………………………………………………………………………………………………….

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**7-** …………………………………………………………………………………………………………………………………………………………………………….

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**8-** …………………………………………………………………………………………………………………………………………………………………………….

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**Method:**

1-standarize the PH meter by placing the electrode in a solution of known PH(PH 4 , 7 ) .

2-Wash the electrode with distilled water and dry by tissue then put it into sample solution A & B , read PH .

Note: After use the electrode you should storage it in distilled water and never be allowed to dry out .IF the electrode get dry it will required reactivation.

|  |  |
| --- | --- |
| **PH Value** | **Solution** |
|  | **Standard 4** |
|  | **Standard 7** |
|  | **A** |
|  | **B** |

**Spectrophotometer**:

**Method**

- Adjust the spectrophotometer to zero using blank solution in the cuvette and read the absorbance of standard solution and the solution of unknown concentration at 280 nm.

- Read your result in the table below:

|  |  |  |
| --- | --- | --- |
| **Absorbance** | **Solution** | **NO.** |
|  | **Standard solution**  **(0.5 gm/100 ml of BSA)** | **1** |
|  | **Solution of Unknown concentration** | **2** |