**BCH 302 practical**

**Lab Sheet #3**

**Proteins-II**

1-Set up 7 tubes as follows:

|  |  |  |  |
| --- | --- | --- | --- |
| **Tube** | **Water** | **Casein Standard**  **Concentration**  **[100mg/dl]** | **Milk sample**  **[unknown casein concentration]** |
| **Blank** | 1 ml | - | - |
| **A** | 0.8 ml | 0.2 ml | - |
| **B** | 0.6 ml | 0.4 ml | - |
| **C** | 0.4 ml | 0.6 lm | - |
| **D** | 0.2 ml | 0.8 ml | - |
| **E** | - | 1.0 ml | - |
| **F** | - | - | 1.0 ml |

2-Add 3 ml of Reagent C to all tubes. Mix and let the tubes stand at room temperature for 15 min.

3- Add 0.3 ml of Folin-Ciocalteu reagent.

Note: (Add this reagent to one tube at a time and immediately after adding it mix well).

4- Let the tubes stand at room temperature for 45 min.

5- Read absorbance at 660 nm against the blank.

**-Results:**

|  |  |  |
| --- | --- | --- |
| **Tube** | **Casein std. concentration (mg/dl)**  **[X- axis]** | **Absorbance at 660nm**  **[Y-axis]** |
| **A** | **20** |  |
| **B** | **40** |  |
| **C** | **60** |  |
| **D** | **80** |  |
| **E** | **100** |  |
| **F** | ?.................... |  |

6-Plot a standard curve for absorbance at 660 nm against casein std. concentration (mg/dl).

7- From the standard curve find out the unknown concentration of Casein in milk sample.