**Lab sheet #8**

**Name:**……………………………………………………………………………… **ID:** ………………………………………………………………………………

**Material and Method**:

**Material**:

You are provided by:

1. Standard solution (Stock solution) of **Copper Sulfate with**  0.1 M [known concentration].
2. Solution with Unknown concentration "A".
3. Solution with Unknown concentration "B".

**Method**:

1. Set up 8 test tubes, as following table:

|  |  |  |  |
| --- | --- | --- | --- |
| **Tube** | **0.1 M Copper Sulfate Standard Solution.** | **d. H2O** | **Solutions with unknown conc.** |
| Blank | **-** | 10 ml | - |
| A | 2ml | 8ml | - |
| B | 4ml | 6ml | - |
| C | 6ml | 4ml | - |
| D | 8ml | 2ml | - |
| E | 10ml | - | - |
| Solution "A" | - | - | 10 ml |
| Solution "B" | - | - | 10 ml |

1. Mix the contents using the vortex.
2. measure the absorbance of each tube at 600 nm against the blank[………………..….].
3. record the result in the table "next page":

|  |  |  |
| --- | --- | --- |
| **Tube** | **Absorbance at 600nm** | **Concentration M** |
| A |  |  |
| B |  |  |
| C |  |  |
| D |  |  |
| E |  |  |
| Solution "A" |  | From the curve= |
| Solution "B" |  | From the curve= |

1. Calculate the concentrations of the series of known standard solutions.
2. Draw the standard curve.
3. determine the concentration of Solution "A" and "B".