**King Saud University, Collage of Applied Medical Sciences**

**Department of Clinical Laboratory Sciences**

**CLS 331 BiochemistryII, Final Practical Exam**

**1431/1432**

**Name:**

**Student Number:**

**Unknown type:**

**Quantitative determination of Protein by Biuret Method**

Estimate the protein concentration of your unknown solution using a standard calibration curve (Biuret Method).

**Procedure:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Unknown** | **Std.5** | **Std.4** | **Std.3** | **Std.2** | **Std.1** | **Blank**  **(H2O)** |
| Protein standard 5 mg / ml | | | | | | |
| x | 2 ml | 1.2 ml | 0.9 ml | 0.8 ml | 0.6 ml | X |
| H2O | | | | | | |
| x | x | 0.8 ml | 1.1 ml | 1.2 ml | 1.4 ml | 2 ml |
| Unknown | | | | | | |
| 2 ml | x | x | X | X | x | X |
| Biuret Reagent | | | | | | |
| 3ml | 3ml | 3ml | 3ml | 3ml | 3ml | 3ml |

Mix the tubes; incubate all the tubes at 37**° c** for **10 minutes**. Read absorbance of standards and unknown at **wavelength 540** **nm** against the blank using the spectrophotometer. Write down the principle of this experiment and plot the standard curve and from the standard curve find out the concentration of protein in the unknown**. Good luck,,,,**