**Lab sheet #6**

**-Estimation of Serum Urea -**

**-Objective:**

* Estimation of blood urea nitrogen (BUN).

**-Method:**1- Pipette to clean tubes:

|  |  |  |
| --- | --- | --- |
| Chemicals | **Standard** | **Serum** |
| **Reconstituted Reagent** | 1ml | 1ml |
| Pre-warm at 37ᵒC for 3 min. and add: | | |
| **Standard** | 0.01ml / 10µl | - |
| **Serum “test”** | - | 0.01ml / 10µl |

2- After **exactly 30 seconds**, read and record absorbance **A1** against distilled water at 340nm.

3- At exactly 60 seconds after A1, record the absorbance **A2** and determine ∆A (A1-A2).

**-Results:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Time (seconds) | Absorbance at 340 nm | |
| Standard | 30 (A1) |  | |
| 90 (A2) |  | |
| ∆A (A1- A2) = | | |
| Serum | 30 (A1) | |  |
| 90 (A2) | |  |
| ∆A (A1- A2) = | | |

-Calculations:

Serum BUN (mg/dl) = ∆A sample x 30

∆A standard

- BUN concentration =\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\*Normal Range: **blood urea nitrogen (5-23 mg/dl).**