**Lab sheet #8**

**-Determination of plasma amylase –**

**-Objectives:**

* To estimate the concentration of amylase in serum.

**-Method:**

1. In a clean test tube add:

|  |  |
| --- | --- |
| **Chemical** | **Sample** |
| **Amylase substrate** | 1.0 ml |
| Pre-warm at 37oC for 5 minutes and add: |
| **Sample1** | 0.025 ml / 25µl |

1. Mix and incubate at **37°C for 90 seconds** and read the absorbance at **405 nm** against distilled water.
2. Continue readings every **30 seconds for 2 minutes** and determine **ΔA/min.**

🡺 The rate of **increase** in Ab is measured at 405nm and is proportional to the amylase activity in the sample.

**-Results:**

|  |  |
| --- | --- |
| Time (Seconds) | Absorbance at 405 nm |
| 0  |  |
| 30  |  |
|  60  |  |
|  90  |  |
|  120  |  |

Calculations:

**Amylase Activity in TEST (U/L)= ΔA/min x 4824**

1. Δ **A/Min** = (ΔA1+ ΔA2) / 2 :

**Δ A1=** (A60s – A30s) + (A30s – A0s) = ……………………………………………………

**Δ A2=** (A120s – A90s) + (A90s – A60s) = …………………………………………………

🡺 **Δ A/Min** = ………………………..

1. **Amylase Activity in TEST (U/L)= ……………………………………**