

## Lampiran A

## REGRESI LINIER

No	x	y	(xi-x̄)	(xi-x̄) <sup>2</sup>	(yi-ȳ)	(xi-x̄) (yi-ȳ)
1	0,0	0,000	-2	4	-0,141	0,282
2	0,5	0,038	-1,5	2,25	-0,103	0,1545
3	1,0	0,071	-1	1	-0,070	0,0700
4	1,5	0,108	-0,5	0,25	-0,033	0,0165
5	2,0	0,143	0	0	0,002	0
6	2,5	0,175	0,5	0,25	0,034	0,0170
7	3,0	0,212	1,0	1	0,071	0,0710
8	3,5	0,244	1,5	2,25	0,103	0,1545
9	4,0	0,279	2,0	4	0,138	0,2760
Σ	18	1,270		15		1,0415

$$\bar{x} = \frac{18}{9} = 2$$

$$\bar{y} = \frac{1,270}{9} = 0,141$$

$$y = mx + c$$

$$m = \frac{S_{xy}}{S_{xx}} = \frac{\sum (xi-\bar{x}) (yi-\bar{y})}{\sum (xi-\bar{x})^2}$$

$$m = \frac{1,0415}{15} = 0,0694$$

$$c = \bar{y} - m\bar{x}$$

$$c = 0,141 - 0,0694 \cdot 2$$

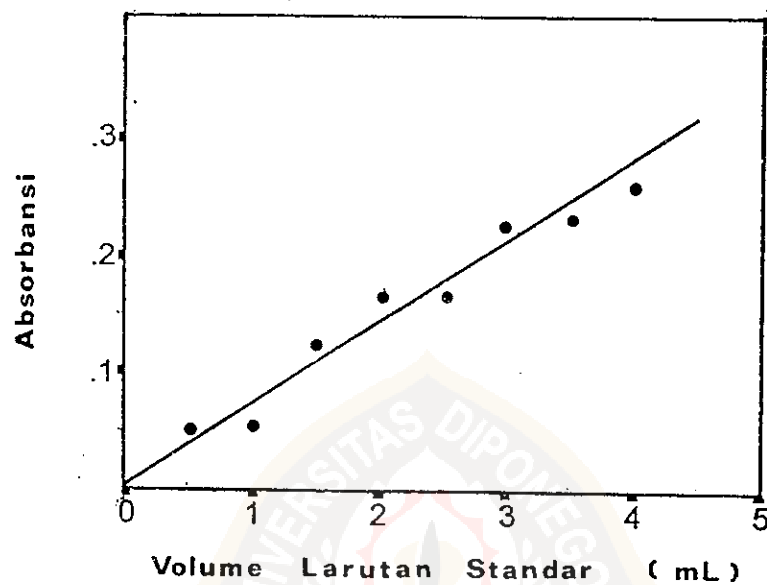
$$c = 0,141 - 0,1388 = 0,0022$$

Persamaan garis kurva kalibrasi :

$$y = 0,0694 x + 0,0022$$

y = Absorbansi

x = ml larutan standar



Gambar : Grafik hubungan absorbansi dengan volume Larutan Standar (mL)

\*\*\*\* MULTIPLE REGRESSION \*\*\*\*

Equation Number 1 Dependent Variable.. ABSORBAN Absorbansi

Casewise Plot of Standardized Residual

\*: Selected M: Missing

Case #	O:.....:O	ABSORBAN	*PRED	*RESID
1	*	.000	2.2444E-03	-2.2444E-03
2	*	.038	.0370	1.0389E-03
3	*	.071	.0717	-6.7778E-04
4	*	.108	.1064	1.6056E-03
5	*	.143	.1411	1.8889E-03
6	*	.175	.1758	-8.2778E-04
7	*	.212	.2105	1.4556E-03
8	*	.244	.2453	-1.2611E-03
9	*	.279	.2800	-9.7778E-04

Case #	O:.....:O	ABSORBAN	*PRED	*RESID

## Lampiran B

## Perhitungan Sampel

I. Urin Normal

## 1. Sampel I

$$\text{Absorbansi} = 0,207$$

$$0,207 = 0,0694 x + 0,0022$$

$$0,0694 x = 0,207 - 0,0022$$

$$x = \frac{0,207 - 0,0022}{0,0694}$$

$$x = \frac{0,2048}{0,0694} = 2,951$$

$$* 1 \text{ ml Standar} = 12,2 \mu\text{g NH}_3$$

$$* \text{Sampel I} = 2,951 \times 12,2 \mu\text{g NH}_3$$

$$= 36,0022 \mu\text{g NH}_3$$

$$* \text{dalam 10 ml Urin} = 36,0022 \mu\text{g NH}_3 \times 250$$

$$= 9000,55 \mu\text{g NH}_3$$

$$* \text{dalam 1 ml Urin} = \underline{900,055 \text{ ppm}}$$

## 2. Sampel II

$$\text{Absorbansi} = 0,204$$

$$0,204 = 0,0694 x + 0,0022$$

$$x = \frac{0,204 - 0,0022}{0,0694} = \frac{0,2018}{0,0694}$$

$$x = 2,9078$$

- \* 1 mL Standar =  $12,2 \mu\text{g NH}_3$
- \* Sampel II =  $2,9078 \times 12,2 \mu\text{g NH}_3$   
=  $35,4752 \mu\text{g NH}_3$
- \* dalam 10 mL Urin =  $35,475 \mu\text{g NH}_3 \times 250$   
=  $8868,75 \mu\text{g NH}_3$
- \* dalam 1 mL Urin =  $886,875 \text{ ppm}$

### 3. Sampel III

$$\begin{aligned} \text{Absorbansi} &= 0,206 \\ 0,206 &= 0,0694 x + 0,0022 \\ 0,0694 x &= 0,206 - 0,0022 \\ x &= \frac{0,206 - 0,0022}{0,0694} \\ x &= \frac{0,2038}{0,0694} \\ x &= 2,9366 \end{aligned}$$

- \* 1 mL Standar =  $12,2 \mu\text{g NH}_3$
- \* Sampel III =  $2,9366 \times 12,2 \mu\text{g NH}_3$   
=  $35,8265 \mu\text{g NH}_3$
- \* dalam 10 mL Urin =  $35,8265 \mu\text{g NH}_3 \times 250$   
=  $8956,625 \mu\text{g NH}_3$
- \* dalam 1 mL Urin =  $895,6625 \mu\text{g NH}_3$   
=  $895,662 \text{ ppm}$

## II. Urin Diabetes Mellitus

### 1. Sampel I

$$\begin{aligned} \text{Absorbansi} &= 0,141 \\ 0,141 &= 0,0694 x + 0,0022 \\ 0,0694 x &= 0,141 - 0,0022 \end{aligned}$$

$$x = \frac{0,141 - 0,0022}{0,0694}$$

$$x = \frac{0,1388}{0,0694}$$

$$x = 2$$

\* 1 mL Standar =  $12,2 \mu\text{g NH}_3$

\* Sampel I =  $2 \times 12,2 \mu\text{g NH}_3$   
 =  $24,4 \mu\text{g NH}_3$

\* dalam 10 mL Urin =  $24,4 \mu\text{g NH}_3 \times 1250$   
 =  $30500 \mu\text{g NH}_3$

\* dalam 1 mL Urin =  $3050 \mu\text{g NH}_3$   
 =  $3050 \text{ ppm}$

## 2. Sampel II

Absorbansi = 0,157

0,157 =  $0,0694 x + 0,0022$

0,0694 x =  $0,157 - 0,0022$

$$x = \frac{0,157 - 0,0022}{0,0694}$$

$$x = \frac{0,2018}{0,0694}$$

$$x = 2,2305$$

\* 1 mL Standar =  $12,2 \mu\text{g NH}_3$

\* Sampel II =  $2,2305 \times 12,2 \mu\text{g NH}_3$   
 =  $27,2121 \mu\text{g NH}_3$

\* dalam 10 mL Urin =  $27,2121 \mu\text{g NH}_3 \times 1250$   
 =  $34015,125 \mu\text{g NH}_3$

\* dalam 1 mL Urin =  $3401,5125 \mu\text{g NH}_3$   
 =  $3401,5125 \text{ ppm}$