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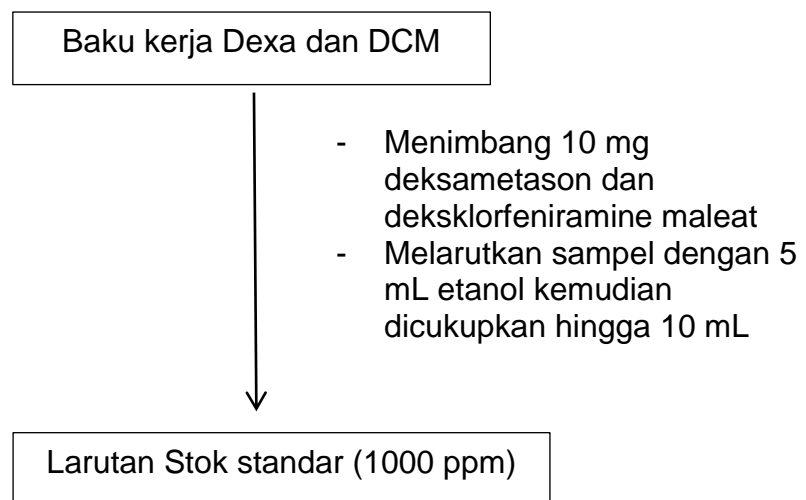
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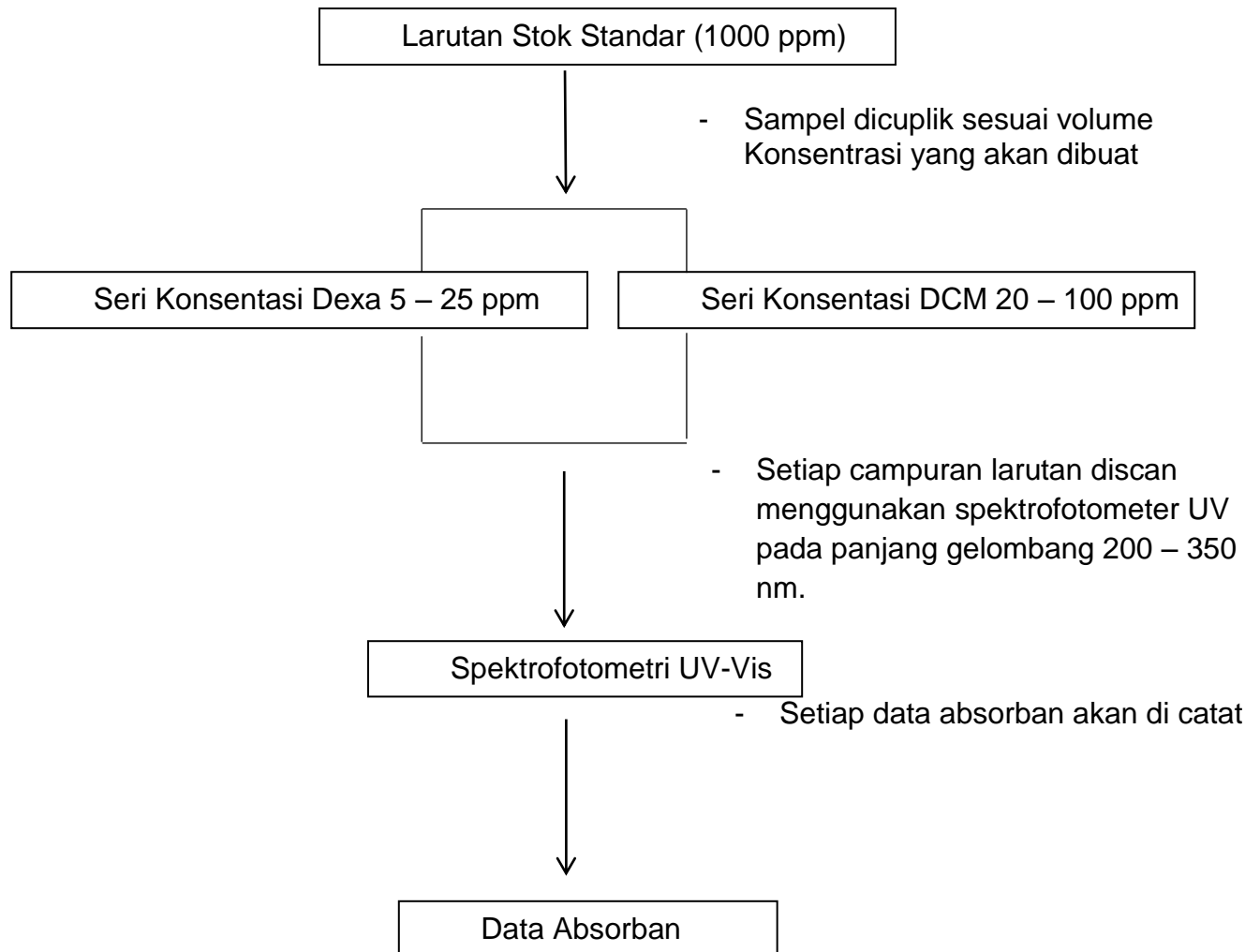
LAMPIRAN

Lampiran 1. Skema kerja

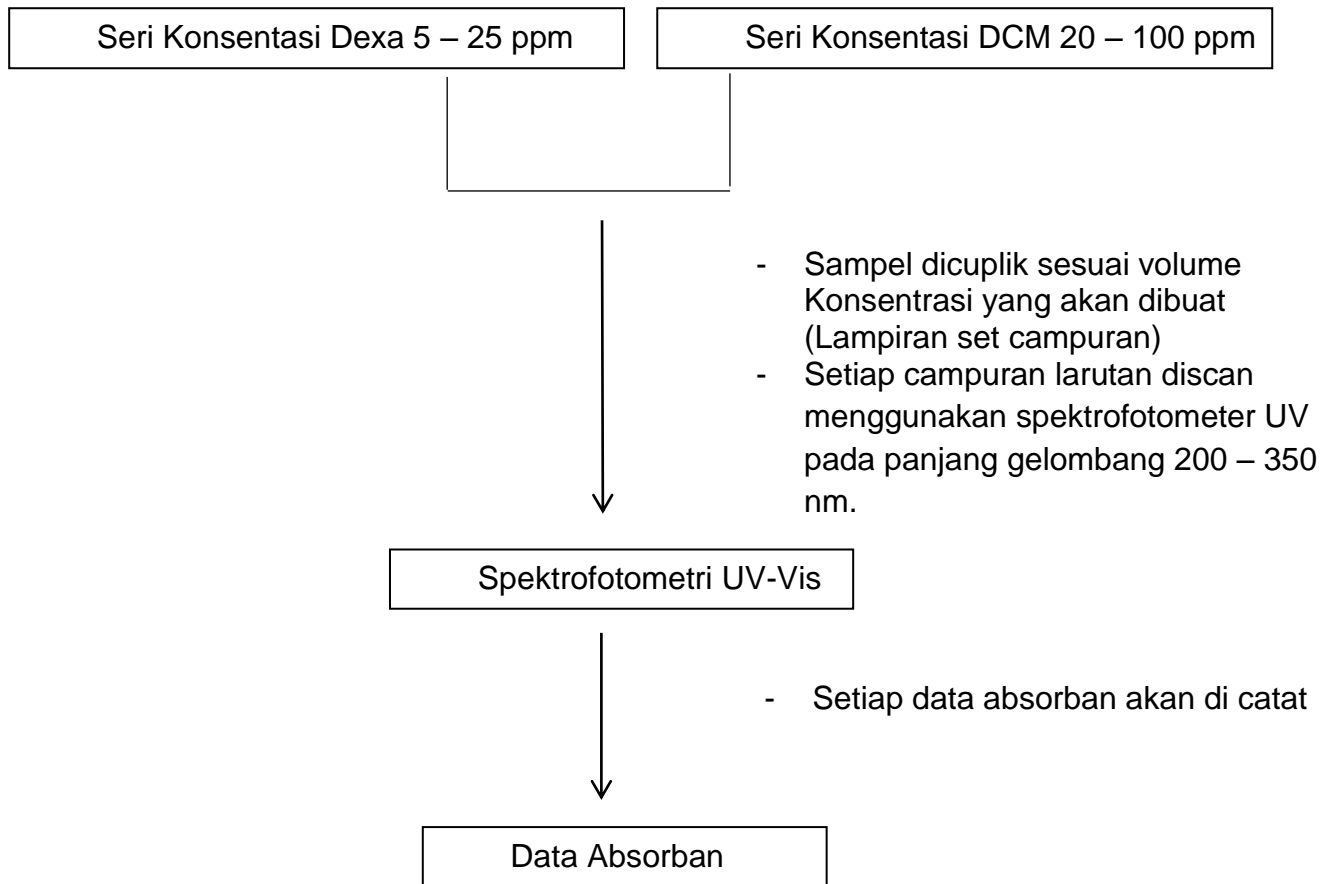
1. Preparasi Larutan Stok Standar Deksametason dan Deksklorfeniramine maleat



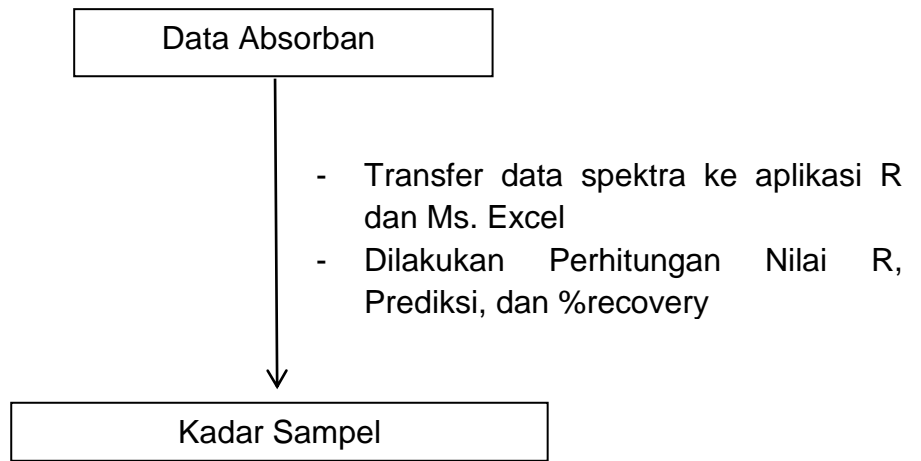
2. Pembuatan Kurva Baku Standar



3. Pembuatan Larutan Metode 1 dan Metode 2



4. Analisis Data Spektra Pada Aplikasi PLSR



Lampiran 2. Data Set Campuran

Tabel 2. *Recovery* dari deksametason dan deksklorfeniramin maleat menggunakan model regresi PLS

Konsentrasi yang aktual ($\mu\text{g/mL}$)		Konsentrasi Dexam yang diprediksi ($\mu\text{g/mL}$)	<i>Recovery</i> (%)	Konsentrasi DCM yang diprediksi ($\mu\text{g/mL}$)	<i>Recovery</i> (%)
Dexa	DCM				
5	20	5,234	104,689	20,052	100,263
10	40	10,384	103,84	40,520	101,301
15	60	15,246	101,64	60,943	101,572
20	80	20,818	104,094	80,776	100,971
25	100	25,502	102,011	100,932	100,932
5	20	5,286	105,737	21,900	109,504
10	40	10,386	103,869	40,556	101,391
15	60	15,253	101,69	60,970	101,618
20	80	20,781	103,909	80,410	100,514
25	100	25,579	102,318	100,754	100,754
5	20	5,219	104,387	20,793	103,966
10	40	10,201	102,01	40,407	101,019
15	60	15,161	101,079	60,497	100,829
20	80	20,680	103,4	80,631	100,79
25	100	25,063	100,252	100,917	100,917
5	20	5,234	104,689	20,622	103,113
5	40	5,460	109,212	40,799	101,999
5	60	5,057	101,147	60,109	100,183
5	80	5,205	104,1	80,886	101,108
5	100	5,074	101,491	100,497	100,497
5	20	5,286	105,737	20,900	104,504
5	40	5,495	109,92	40,271	100,678
5	60	5,135	102,708	60,353	100,59
5	80	5,286	105,724	80,715	100,894
5	100	5,014	100,291	100,383	100,383
5	20	5,219	104,387	20,793	103,966
5	40	5,343	106,861	40,152	100,382
5	60	5,106	102,132	60,112	100,188

Konsentrasi yang aktual ($\mu\text{g/mL}$)		Konsentrasi Dexamethasone yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)	Konsentrasi DCM yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)
Dexamethasone	DCM				
5	80	5,196	103,938	80,097	100,122
5	100	5,028	100,561	100,232	100,232
10	20	10,526	105,266	20,203	101,016
10	40	10,384	103,84	40,520	101,301
10	60	10,303	103,036	60,441	100,735
10	80	10,366	103,666	80,377	100,472
10	100	10,473	104,737	100,421	100,421
10	20	10,499	104,999	20,102	100,511
10	40	10,386	103,869	40,556	101,391
10	60	10,242	102,428	60,361	100,603
10	80	10,412	104,124	80,582	100,729
10	100	10,529	105,294	100,017	100,017
10	20	10,421	104,214	20,162	100,811
10	40	10,201	102,01	40,537	101,344
10	60	10,309	103,095	60,344	100,573
10	80	10,283	102,837	80,777	100,972
10	100	10,736	107,36	100,315	100,315
15	20	15,712	104,752	20,599	102,999
15	40	15,226	101,507	40,542	101,356
15	60	15,246	101,64	60,943	101,572
15	80	15,261	101,741	80,272	100,34
15	100	15,367	102,449	100,082	100,082
15	20	15,706	104,708	20,448	102,241
15	40	15,305	102,038	40,728	101,82
15	60	15,253	101,69	60,970	101,618
15	80	15,417	102,784	80,604	100,756
15	100	15,369	102,463	100,196	100,196
15	20	15,648	104,323	20,439	102,197
15	40	16,125	107,503	40,747	101,868
15	60	15,161	101,079	60,497	100,829

Konsentrasi yang aktual ($\mu\text{g/mL}$)		Konsentrasi Dexamethasone yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)	Konsentrasi DCM yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)
Dexamethasone	DCM				
15	80	15,325	102,167	80,051	100,064
15	100	15,542	103,613	100,743	100,743
20	20	20,546	102,734	20,563	102,817
20	40	20,430	102,151	40,548	101,372
20	60	20,131	100,66	60,311	100,519
20	80	20,818	104,094	80,776	100,971
20	100	20,818	104,095	100,670	100,67
20	20	20,405	102,028	20,219	101,098
20	40	20,397	101,99	40,829	102,073
20	60	20,151	100,758	60,432	100,72
20	80	20,781	103,909	80,410	100,514
20	100	20,310	101,553	100,961	100,961
20	20	20,309	101,549	20,200	101,004
20	40	20,313	101,569	40,417	101,044
20	60	20,114	100,57	60,536	100,895
20	80	20,680	103,4	80,631	100,79
20	100	20,007	100,037	100,281	100,281
25	20	25,314	101,257	20,609	103,046
25	40	25,512	102,048	40,204	100,512
25	60	25,843	103,374	60,365	100,609
25	80	25,981	103,925	80,134	100,168
25	100	25,502	102,011	100,932	100,932
25	20	25,370	101,481	20,961	104,806
25	40	25,407	101,632	40,676	101,692
25	60	25,871	103,486	60,992	101,654
25	80	25,359	101,439	80,473	100,591
25	100	25,579	102,318	100,754	100,754
25	20	25,437	101,75	20,923	104,616
25	40	25,407	101,632	40,676	101,692
25	60	25,868	103,475	60,237	100,396

Konsentrasi yang aktual ($\mu\text{g/mL}$)		Konsentrasi Dexamethasone yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)	Konsentrasi DCM yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)
Dexa	DCM				
25	80	25,426	101,706	80,559	100,7
25	100	25,063	100,252	100,917	100,917
5	20	5,261	105,24	20,373	101,869
10	20	10,244	102,441	20,280	101,404
15	20	15,712	104,752	20,599	102,999
20	20	20,732	103,664	20,378	101,891
25	20	25,314	101,257	20,509	102,546
5	20	5,2623	105,246	20,251	101,257
10	20	10,217	102,175	20,179	100,899
15	20	15,706	104,708	20,448	102,241
20	20	20,527	102,636	20,508	102,541
25	20	25,370	101,481	20,961	104,806
5	20	5,194	103,897	20,143	100,718
10	20	10,139	101,39	20,439	102,199
15	20	15,644	104,323	20,439	102,197
20	20	20,560	102,802	20,941	104,708
25	20	25,437	101,75	20,923	104,616
5	40	5,460	109,212	40,799	101,999
10	40	10,982	109,892	40,000	100,002
15	40	15,081	100,541	40,185	100,463
20	40	20,432	102,151	40,548	101,372
25	40	25,263	101,052	40,905	102,265
5	40	5,499	109,92	40,271	100,678
10	40	10,992	109,92	40,036	100,092
15	40	15,108	101,072	40,370	100,927
20	40	20,379	101,99	40,829	102,073
25	40	25,211	100,844	40,348	100,872
5	40	5,307	106,861	40,152	100,382
10	40	10,832	108,832	40,899	102,248
15	40	15,285	106,19	40,419	101,048

Konsentrasi yang aktual ($\mu\text{g/mL}$)		Konsentrasi Dexamethasone yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)	Konsentrasi DCM yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)
Dexa	DCM				
20	40	20,138	101,569	40,417	101,044
25	40	25,211	100,844	40,348	100,872
5	60	5,735	101,147	60,109	100,183
10	60	10,253	102,53	60,855	101,425
15	60	15,246	101,64	60,943	101,572
20	60	20,319	100,66	60,311	100,519
25	60	25,435	103,374	60,365	100,609
5	60	5,354	102,708	60,453	100,756
10	60	10,483	103,483	60,688	101,147
15	60	15,253	101,69	60,970	101,618
20	60	20,151	100,758	60,432	100,72
25	60	25,871	103,486	60,992	101,654
5	60	5,106	102,132	60,112	100,188
10	60	10,424	104,274	60,625	101,043
15	60	15,169	101,079	60,497	100,829
20	60	20,114	100,57	60,536	100,895
25	60	25,869	103,475	60,237	100,396
5	80	5,205	104,1	80,886	101,108
10	80	10,422	104,242	80,032	100,041
15	80	15,261	101,741	80,272	100,34
20	80	20,818	104,094	80,776	100,971
25	80	25,983	103,925	80,134	100,168
5	80	5,282	105,724	80,715	100,894
10	80	10,470	104,7	80,238	100,297
15	80	15,417	102,784	80,604	100,756
20	80	20,781	103,909	80,410	100,514
25	80	25,359	101,439	80,473	100,591
5	80	5,196	103,938	80,097	100,122
10	80	10,328	103,288	80,477	100,597
15	80	15,321	102,167	80,051	100,064

Konsentrasi yang aktual ($\mu\text{g/mL}$)		Konsentrasi Dexamethasone yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)	Konsentrasi DCM yang diprediksi ($\mu\text{g/mL}$)	Recovery (%)
Dexamethasone	DCM				
20	80	20,681	103,4	80,631	100,79
25	80	25,426	101,706	80,559	100,7
5	100	5,046	100,911	100,39	100,397
10	100	10,524	105,224	100,616	100,613
15	100	15,374	102,449	100,082	100,082
20	100	20,889	104,095	100,670	100,67
25	100	25,528	102,011	100,932	100,932
5	100	5,056	101,111	100,383	100,383
10	100	10,767	104,767	100,224	100,224
15	100	15,215	100,81	100,167	100,167
20	100	20,106	101,553	100,961	100,961
25	100	25,796	102,318	100,754	100,754
5	100	5,267	105,381	100,232	100,232
10	100	10,592	105,792	100,581	100,581
15	100	15,542	103,613	100,743	100,743
20	100	20,073	100,037	100,281	100,281
25	100	25,031	100,252	100,917	100,917
Nilai kadar (%)			100,037		100,002
			109,92		109,504

Contoh perhitungan untuk memperoleh recovery (%)

$$\% \text{ recovery} = \frac{\text{nilai prediksi}}{\text{nilai aktual}} \times 100\%$$

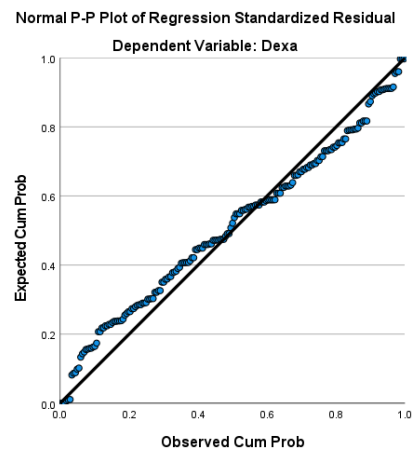
$$\% \text{ recovery} = \frac{5,234}{5} \times 100\%$$

$$= 104,689\%$$

Lampiran 3. Hasil Data Statistik Secara PLSR (*Partial Least Square Regression*)

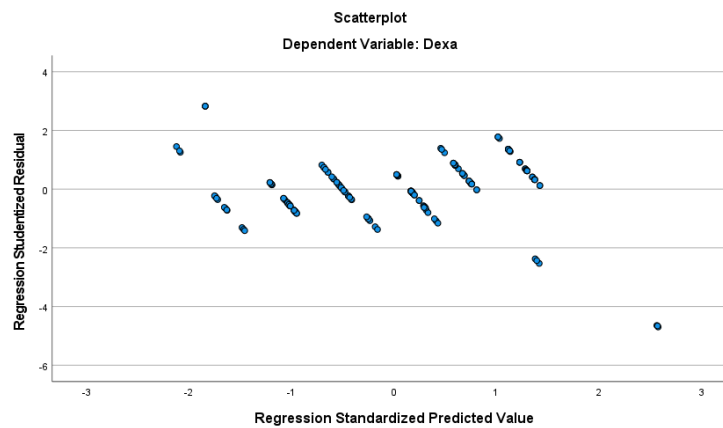
Model Dexa

- Normalitas



Gambar 9. Normalitas Dekسامetason

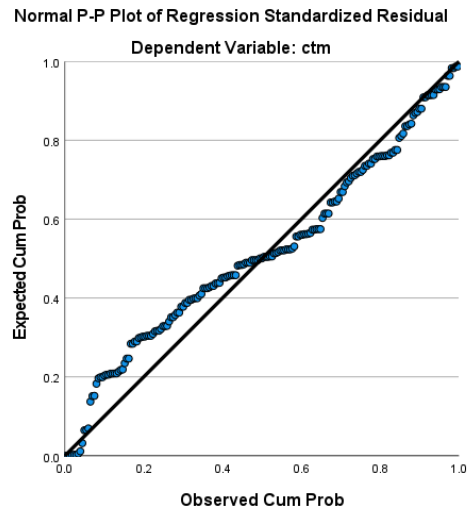
- Homoskedastisitas



Gambar 10. Homoskedastisitas Dekسامetason

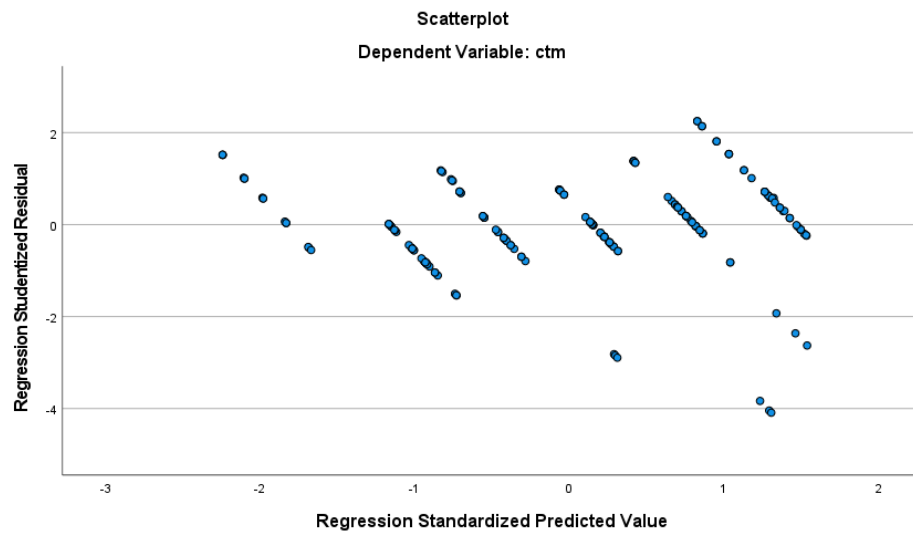
Model DCM

- Normalitas



Gambar 11. Normalitas Deksklorfeniramin Maleat

- Homoskedastisitas

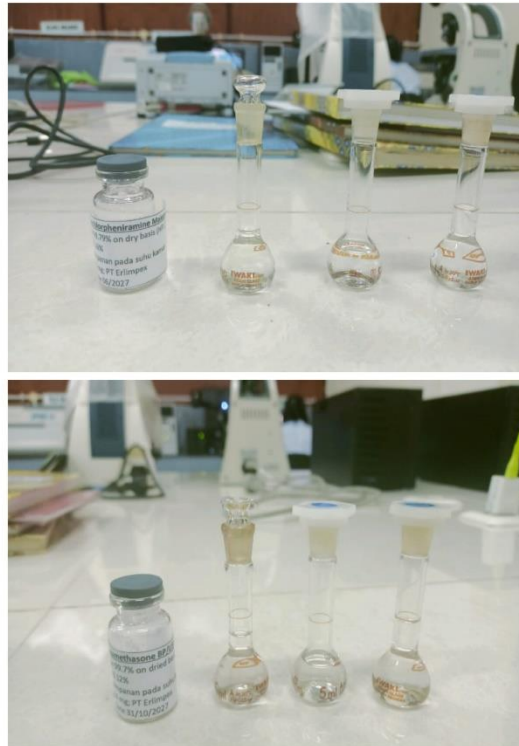


Gambar 12. Homoskedastisitas Deksklorfeniramin Maleat

Tabel 3. Nilai Intersep, R^2 dan MSE dari Evaluasi Model Regresi PLS Keseluruhan

Data	Intersep (a)		R^2		MSE	
	y_1	y_2	y_1	y_2	y_1	y_2
1+2+3	-9.9594	-19.567	0.935	0.925	0,47	0,45
1	-10.0771	-19.723	0.932	0.917	0,48	0,69
2	-10.1615	-17.766	0.937	0.927	0,54	0,68
3	-9.7094	-21.059	0.937	0.934	0,54	0,70
1+2	-10.1101	-18.756	0.934	0.922	0,68	0,45
1+3	-9.8738	-20.543	0.934	0.925	0,55	0,69
2+3	-9.9110	-19.371	0.936	0.930	0,47	0,66

Lampiran 4. Dokumentasi Penelitian



Gambar 13. Sampel dan Larutan stok



Gambar 14. Pembuatan set campuran dan dihomogenkan menggunakan vortex



Gambar 15. Larutan Standar Kurva Baku Sampel