LAMPIRAN

Tabel Larutan Standar Glukosa Pada Panjang Gelombang 620nm

Sampel	Konsentrasi (ppm)	Absorbansi	Absorptivitas
1	100	0,0016	0,016
2	200	0,003	0,015
3	300	0,0045	0,015
4	400	0,006	0,015
5	500	0,007	0,014

Tabel Larutan Sampel Variabel Berubah F/S Pada Suhu 100^{o}C

Sampel	Suhu (^{o}C)	Absorbansi (620nm)	Konsentrasi Glukosa (mg/l)	Kadar Glukosa (ppm)
1 (1:1)	100	1,740	116	1.242,64
2 (1:2)	100	1,650	110	1.178,35
3 (1:3)	100	1,486	99,06	1.061,21
4 (1:4)	100	1,418	94,53	1.012,64
5 (1:5)	100	1,401	93,4	1.000,5

Tabel Larutan Sampel Variabel Berubah Suhu Pada F/S 1:1

Sampel	Suhu (^{o}C)	Absorbansi (620nm)	Konsentrasi Glukosa (mg/l)	Kadar Glukosa (ppm)
1 (1:1)	60	0,892	59,64	636,92
2 (1:1)	70	1,038	69,2	741,21
3 (1:1)	80	1,130	75,3	806,92
4 (1:1)	90	1,580	105,33	1.128,35
5 (1:1)	100	1,740	116	1.242,64

- **Perhitungan Absorptivitas**

  A = a x b x c. Diketahui tebal kuvet = 1cm

- Sampel 1

  0,0016 = a x 1cm x 0.1mg/l

  a = 0,016 l/mg.cm

- Sampel 2

  0,003 = a x 1cm x 0,2mg/l

  a = 0,015 l/mg.cm

- Sampel 3

  0,0045 = a x 1cm x 0,3mg/l

  a = 0,015 l/mg.cm
- Sampel 4

  0,006 = a x 1cm x 0,4mg/l

  a = 0,015 l/mg.cm
- Sampel 5

  0,007 = a x 1cm x 0,5mg/l

  a = 0,014 l/mg.cm

➢ **Perhitungan Konsentrasi Glukosa pada Larutan Sampel**

A = a x b x c. Diketahui tebal kuvet = 1cm, Absorptivitas = 0,015 l/mg.cm

1. Variabel 1
   - Perbandingan F/S 1:1 , suhu 100^{o}C

   1,740 = 0,015 l/mg.cm x 1cm x c

   c = 116 mg/l
   - Perbandingan F/S 1:2 , suhu 100^{o}C

   1,650 = 0,015 l/mg.cm x 1cm x c

   c = 110 mg/l
   - Perbandingan F/S 1:3 , suhu 100^{o}C

   1,486 = 0,015 l/mg.cm x 1cm x c

   c = 99,06 mg/l
   - Perbandingan F/S 1:4 , suhu 100^{o}C

   1,418 = 0,015 l/mg.cm x 1cm x c

   c = 94,53
   - Perbandingan F/S 1:5 , suhu 100^{o}C

   1,401 = 0,015 l/mg.cm x 1cm x c

   c = 93,4
2. Variabel 2
   - Suhu 60 ^{o}C, Perbandingan F/S 1:1

   0,892 = 0,015 l/mg.cm x 1cm x c

   c = 59,64 mg/l

- Suhu 70 ^{o}C, Perbandingan F/S 1:1

1,038 = 0,015 l/mg.cm x 1cm x c

c = 69,2 mg/l

- Suhu 80 ^{o}C Perbandingan F/S 1:1

1,130 = 0,015 l/mg.cm x 1cm x c

c = 75,33 mg/l

- Suhu 90 ^{o}C Perbandingan F/S 1:1

1,580 = 0,015 l/mg.cm x 1cm x c

c = 105,33 mg/l

- Suhu 100 ^{o}C Perbandingan F/S 1:1

1,740 = 0,015 l/mg.cm x 1cm x c

c = 116 mg/l

➢ **Perhitungan Kadar Glukosa pada Larutan Sampel**

y = ax + b

y = 0,0014x + 0,0003

1. Variabel 1

- Perbandingan F/S 1:1 , suhu 100^{o}C

1,740 = 0,0014x + 0,0003

x = 1.242,64

- Perbandingan F/S 1:2 , suhu 100^{o}C

1,650 = 0,0014x + 0,0003

x = 1.178,35

- Perbandingan F/S 1:3 , suhu 100^{o}C

1,486 = 0,0014x + 0,0003

x = 1.061,21

- Perbandingan F/S 1:4 , suhu 100^{o}C

1,418 = 0,0014x + 0,0003

x = 1.012,64

- Perbandingan F/S 1:5 , suhu 100^{o}C

1,401 = 0,0014x + 0,0003

x = 1.000,5

2. Variabel 2
   - Suhu 60 ^{o}C, Perbandingan F/S 1:1

   0,892 = 0,0014x + 0,0003

   x = 636,92
   - Suhu 70 ^{o}C, Perbandingan F/S 1:1

   1,038 = 0,0014x + 0,0003

   x = 741,21
   - Suhu 80 ^{o}C Perbandingan F/S 1:1

   1,130 = 0,0014x + 0,0003

   x = 806,92
   - Suhu 90 ^{o}C Perbandingan F/S 1:1

   1,580 = 0,0014x + 0,0003

   x = 1.128,35
   - Suhu 100 ^{o}C Perbandingan F/S 1:1

   1,740 = 0,0014x + 0,0003

   x = 1.242,64

➢ **Perhitungan %Kesalahan**

1. Variabel 1

   y = 0.0091x + 1.026
   - Sampel 1

     y = 0.0091 . 116 + 1.026

     y = 2,08

     %Kesalahan = ((2,08 – 1,74) / 2,08) x 100 % = 16,3%
   - Sampel 2

     y = 0.0091 . 110 + 1.026

     y = 2,02

     %Kesalahan = ((2,02 – 1,65) / 2,02) x 100 % = 18,3%
   - Sampel 3

     y = 0.0091 . 99,06 + 1.026

     y = 1,9

     %Kesalahan = ((1,9 – 1,486) / 1,9) x 100 % = 21%
   - Sampel 4

y = 0.0091 . 94,53 + 1.026

y = 1,81

%Kesalahan = ((1,81 – 1,418) / 1,81) x 100 % = 21%

- Sampel 5

y = 0.0091 . 93,4 + 1.026

y = 1,8

%Kesalahan = ((1,8 – 1,401) / 1,8) x 100 % = 22%

% Kesalahan rata-rata = (16,3% + 18,3% + 21% + 21% + 22%) / 5

= 19,72%

2. Variabel 2

y = 0.0028x + 1.606

- Sampel 1

y = 0.0028 . 59,64 + 1.606

y = 1,77

%Kesalahan = ((1,77 – 0,892) / 1,77) x 100 % = 49%

- Sampel 2

y = 0.0028 . 69,2 + 1.606

y = 1,79

%Kesalahan = ((1,79 – 1,038) / 1,79) x 100 % = 42,5%

- Sampel 3

y = 0.0028 . 75,3 + 1.606

y = 1,8

%Kesalahan = ((1,8 – 1,13) / 1,8) x 100 % = 37%

- Sampel 4

y = 0.0028 . 105,33 + 1.606

y = 1,9

%Kesalahan = ((1,9 – 1,58) / 1,9) x 100 % = 16%

- Sampel 5

y = 0.0028 . 116 + 1.606

y = 1,93

%Kesalahan = ((1,93 – 1,74) / 1,93) x 100 % = 9,8%

% Kesalahan rata-rata = (49% + 42,5% + 37% + 16% + 9,8%) / 5

= 30,8%

Lampiran Gambar

Keterangan	Daftar Gambar
Larutan Standar Glukosa konsentrasi 100-500 ppm	
Larutan Sampel yang diamati	
Larutan Blanko	
Gambar Spektrofotometer visibel