(PART I)

LECTURER: MR. ADEJUWON, SAMUEL OLUWASEUN

NAME: STEPHEN JETHRO E. DATE: 3rd APRIL 2020

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Group A

CI	f	mid-class x	fx	$(x-\bar{x})^2$	$f(x-\bar{x})^2$
1-5	0	3	0	219.9289	0
6-10	7	8	56	96.6289	676.4023
11-15	10	15	130	23.3289	233.289
16-20	2	18	36	0.0289	0.0578
21-25	1	23	23	26.7289	26.7289
26-30	5	28	140	103.4289	517.1445
31-35	4	33	132	230.1289	920.5156
	29		517		2374.1381

$$\text{Mean for Group A} = \frac{\Sigma fx}{\Sigma f} = \frac{517}{29} = 17.83$$

Since it was restricted to age group less than 40, it is a sample of the total population of those with Yellow fever

$$\text{S.D of Group A} = \sqrt{\frac{\Sigma f(x-\bar{x})^2}{\Sigma f - 1}} = \sqrt{\frac{2374.1381}{28}} = 9.208$$

$$\text{Coefficient of variation} = \frac{\text{Standard Deviation}}{\text{mean}} \times 100$$

$$= \frac{9.208}{17.83} \times 100 = 51.64\%$$

(PART 2)

Group B

C.I	f	mid-class x	fx	$(x-\bar{x})^2$	$f(x-\bar{x})^2$
1-5	2	3	6	293.8874	587.7649
6-10	4	8	32	147.4574	589.8098
11-15	7	13	91	51.0124	357.0871
16-20	20	18	360	4.5924	91.84898
21-25	16	23	368	8.1624	130.5992
26-30	10	28	280	61.7324	617.3244
31-35	4	33	132		616.2098
	63		1269		2990.644

For Group B

$$\text{Mean} = \frac{\Sigma fx}{\Sigma f} = \frac{1269}{63} = 20.143$$

$$S.D = \sqrt{\frac{\Sigma f(x-\bar{x})^2}{\Sigma f - 1}} = \sqrt{\frac{2990.644}{62}} = 6.945$$

$$C.V = \frac{S.D}{\text{mean}} \times 100$$

$$= \frac{6.945}{20.143} \times 100$$

$$= 34.48\%$$

The group with the lower C.V has less variable, therefore

Group B hass less variable and more Uniform