Anolo Daniel Ifeanyichukwu

STA 132

19/ENG05/011

Class	class mark (x)	Group A	Group B	xA	xB
1-5	3	0	2	0	6
6-10	8	7	4	56	32
11-15	13	10	7	130	91
16-20	18	2	20	36	360
21-25	23	1	16	23	368
26-30	28	5	10	140	280
31-35	33	4	4	132	132

$$\text{Mean (A)} = \frac{\Sigma xA}{\Sigma A} = \frac{517}{29} = 17.827 = 17.83_{//}$$

$$\text{Mean (B)} = \frac{\Sigma xB}{\Sigma B} = \frac{1269}{63} = 20.14$$

$(x-\bar{x})$ Group A	$(x-\bar{x})$ Group B	$(x-\bar{x})^2$ Group A	$(x-\bar{x})^2$ Group B	$f_A(x-\bar{x})^2$	$f_B(x-\bar{x})^2$
-14.83	-17.14	219.9	293.8	0	587.60
-9.83	-12.14	96.6	147.4	676.2	589.60
-4.83	-7.14	23.3	50.98	233.0	356.36
0.17	-2.14	0.03	4.6	0.06	92.00
5.17	2.86	26.7	8.2	26.7	131.20
10.17	7.86	103.4	61.8	517.0	1034.00
15.17	12.86	230.1	165.4	920.4	661.60

$$S.D(A) = \sqrt{\frac{\Sigma f_A(x-\bar{x})^2}{\Sigma f_A}} = \sqrt{\frac{2373.36}{29}} = \sqrt{81.84} = 9.05$$

$$S.D(B) = \sqrt{\frac{\Sigma f_B(x-\bar{x})^2}{\Sigma f_B}} = \sqrt{\frac{3452.36}{63}} = \sqrt{54.799} = 7.40_{//}$$

Co-efficient of Variation (A) $= \frac{S.D(A)}{\text{mean}(A)}$

$= \frac{9.05}{17.83} = 0.508$

Co-efficient of Variation (B) $= \frac{S.D(B)}{\text{mean}(B)}$

$= \frac{7.40}{20.14} = 0.367$