

Class	f	x	fx	(x - \bar{x})	(x - \bar{x}) ²	f(x - \bar{x}) ²
1-5	0	3	0	-17.05	290.7025	0
6-10	7	8	56	-12.05	145.2025	1016.4175
11-15	10	13	130	-7.05	49.7025	497.028
16-20	2	18	36	-2.05	4.2025	8.405
21-25	1	23	23	2.95	8.7025	8.7028
26-30	5	28	140	7.95	63.2025	316.0125
31-35	9	33	297	12.95	167.7025	1509.3225
						<u>3355.885</u>

$$i \text{ Mean} = \frac{\sum fx}{\sum f} = \frac{682}{34} = 20.05$$

$$ii \text{ Standard Deviation} = \sqrt{\frac{\sum f(x - \bar{x})^2}{\sum f}} = \sqrt{\frac{3355.885}{34}} = \sqrt{98.7028} = 9.9349$$

$$iii \text{ Coefficient of Variation} = \frac{S.D \times 100}{\text{Mean}} = \frac{\cancel{20.05} \times 100}{20.05} = 49.55$$

C	F	x	fx	$(x - \bar{x})$	$(x - \bar{x})^2$	$f(x - \bar{x})^2$
1-5	2	3	6	-14	196	293.7796
6-10	4	8	32	-12	144	147.3796
11-15	7	13	91	-7	49	50.9796
16-20	20	18	360	-2	4	4.5796
21-25	16	23	368	2	4	8.1796
26-30	10	28	280	7	49	61.7796
31-35	4	33	132	12	144	165.3796
	<u>63</u>		<u>1269</u>			<u>3055.748</u>

$$\text{Mean} = \frac{1269}{63} = 20.14$$

$$\begin{aligned} \text{Standard Deviation} &= \sqrt{\frac{\sum f(x - \bar{x})^2}{\sum f}} \\ &= \sqrt{\frac{3055.748}{63}} \\ &= \sqrt{48.1859} \\ &= 6.94 \end{aligned}$$

$$\text{Coefficient of Variation} = \frac{\text{S.D.}}{\text{Mean}} \times 100 = \frac{6.94}{20.14} \times 100$$

} Group B has a less variable distribution = 34.46