

Appendix- H
Calculation of Reliability of coefficient- B. Ed. College, Patan.

Class Intervals	256-260	261-275	276- 290	291-305	306-320	321-335	336-350	351-365	366-380	381-395	f	y'	fy'	fy' ²	ΣXY
395-409										30 2 60	2	6	12	72	60
380-394											0	5	0	0	0
365-379								12 1 12 16	16 1 16		2	4	8	32	28
350-364								9 2 18			2	3	6	18	18
335-349						2 7 14	4 1 4	6 1 6			9	2	18	36	24
320 -334					0 2 0	1 8 8	2 1 2				11	1	11	11	10
305 -319				0 3 0	0 12 0	0 1 0					16	0	0	0	0
390- 304			2 2 4	1 7 7	0 2 0						11	-1	-11	11	11
275 - 289		6 2 12 36	4 9 36								11	-2	-22	44	48
260 - 274	12 2 24	9 4 36									6	-3	-18	54	60
F	2	6	11	10	16	16	2	4	1	2	70			278	259
X'	-4	-3	-2	-1	0	1	2	3	4	5					
fX'	-8	-18	-22	-10	0	16	4	12	4	10	-12				
fX' ²	32	54	44	10	0	16	8	36	16	50	266				
ΣX'Y'	24	48	40	7	0	22	6	36	16	60	259				

$$r = \frac{\sum x' y' - C_x C_y}{\sigma_x \cdot \sigma_y}$$

1) Find out the values of C_x and C_y

$$C_x = \frac{\sum fx'}{N} = -0.1714$$

$$C_y = \frac{\sum fy'}{N} = 0.05714$$

2) Find out the values of σ_x and σ_y

$$\sigma_x = \sqrt{\frac{\sum fx'^2}{N} - C_x^2} = 1.9418$$

$$\sigma_y = \sqrt{\frac{\sum fy'^2}{N} - C_y^2} = 1.9920$$

3) Find out the value of

$$\frac{\sum x' y'}{N} = 3.70$$

$$r = \frac{3.70 - (-0.1714) \times (0.05714)}{(1.9418 \times 1.9920)} = 0.95$$