

## APPENDIX -VIII

The formula selected to compute chi-square values through the test of independence in contingency table.

The differences between the scores on educational interests of men-in general as observed results and these expected on normal distribution was calculated to establish the predictive validity of the test by using the formula given by Garette (1961., p 253-84)

"The equation for chi-square ( $x^2$ ) stated as follows :

$$x^2 = \frac{(fo - fe)^2}{fe}$$

Chi-square formula for testing agreement between observed and expected results) in which

fo = frequency of occurrence of observed or experimentally determined facts.

fe = expected frequency of occurrence on hypothesis.

The differences between observed and expected frequencies are squared and divided by the expected number in each case, and the sum of these quotients is  $x^2$ . the more closely the observed results approximate to the expected. The smaller the chi-square and the closer the agreement between the observed

data and the hypothesis being tested.

The relationship between the interest on education scales of men-in-general group on majority of the items by  $\chi^2$  test indicated a significant differences.

Item : Agriculture officer on Agriculture Education Scale.

obs. (fo)	17.2	39.0	43.8	
Exp. (fe)	33.3	33.3	33.3	
Fo-Fe	= -16.1	+5.7	+10.5	
(Fo-Fe) <sup>2</sup>	= 259.21	32.49	110.25	
(Fo-Fe) <sup>2</sup>	= <u>259.21</u>	<u>32.49</u>	<u>110.25</u>	
Fe	33.3	33.3	33.3	
	7.78	+ 0.97	+ 3.3	12.05

$$\underline{X = 12.0^{**}}$$

Tablevalue -

Significant at 0.05 = 5.991\*

0.01 = 9.210\*\*