

BOARD OF INTERMEDIATE & SECONDARY EDUCATION, SAHRAWAL

P-13/112

SUBJECT: Statistics EXAM Inter 2nd A/2022 CLASS: 2nd year

GROUP: DATE: 05-12-22

(16)

GENERAL INSTRUCTIONS FOR MARKING KEY

Q. No. 9 (a)

	B	Total
A	110	290
α_1	90	510
Total	200	800

(02 marks)

Observed $AB = 110$, OR $Q = \frac{(AB)(\alpha\beta) - (A\beta)(\alpha B)}{(AB)(\alpha\beta) - (A\beta)(\alpha B)}$ $= \frac{(110)(510) - (290)(90)}{(110)(510) - (290)(90)}$

Expected freq. of $AB = \frac{(A)(B)}{n} \Rightarrow \frac{(400)(202)}{1000} = 80$

Since $(AB) > (A)(B)$, the attributes

A and B are positively associated. (02 marks)

Q. No. 9 (b)

Year	Prod.	3-Year moving total	3-Year moving Average
1970	170.6		
1971	154.8	481.3	160.43
1972	156.5	470.2	156.73
1973	158.9	455.7	151.90
1974	140.3	453.4	151.13
1975	154.2	455.2	151.73
1976	160.7	493.2	164.40
1977	178.3		

(02 marks)

PREPARED BY

Sr.#	Name	Desig.	Institution	Mobile No.	Signature
1	FIATZ BASHIR	A.P	SIAC, Karachi	0345-7544771	M. An
2	M. Hanif Rana	A-8	Govt. Graduate College Sahawal	03336304975	M. Hanif

RE-CHECKED BY

Sr.#	Name	Desig.	Institution	Mobile No.	Signature
1	Rana Usman Haidar A.P		SIAC SWL	0333-698410	
2	Riaz Ahmad Khan AP		" "	0333-239417	