manay\_ 17 Assignment 5 Q.2. since p is very small so we use poisson's distribution X= mean= 2000 x 0.001 = 2 PCX)= e-2 (2)2 P(exactly 3) = P(x=3) = e<sup>-2</sup>(2)<sup>2</sup> PCX=3] = 0.18 PCmorethan 2] = P(X>2] =1-P(x52] 2. = 1-( e-2 + 2e-2+ 2e-2) = 1-5 N 62 00 HIM & MORDAR AV 99400 1-PCX>27= 0.323 since sample is small 8.8 For asla 0.43, Z= 1.48, since 35 is less than 41, 7=-1.48 and for adeg 0,39 721-23 : (35-U) = -1.48 -. 0) A  $(63-u) = (.23 - ... \bigcirc)$ or solveng we get 6=10.33 and 4= 50.2884. FOR EDUCATIONAL USE (Sundaram)

	(2)
	manay 17
03.16	0220
-3	$n_1 = 9$
	$n^2=7$
	Since both the sample size is less than 20, so it
	is small sample
	1 sample
	$\overline{\alpha}_1 = 196.42$
	x2 = 188.85
	~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~
	$2(x_1-x_1)^2 = 26.94$
	$\frac{2(x_2-x_2)^2}{(8.73)^2}$
	-CL2-11)
	Ho! Mi Duz
	H,: M, ZM2
	(1, 1 M) + 3012
	Degree of freedom = NI+N2 -2=14.
	(office) value t > 2.145
	(0) p.cg1 0 g(0) ( 2 2 (0)
	Since Sample is small
The said	Since squipe is sixth
	$50 - \frac{15(x_1 - x_1)^2}{5} + \frac{5(x_2 - x_2)^2}{5}$
	$S_{p} = \frac{\sum (x_1 - x_1)^2 + \sum (x_2 - \overline{x_2})^2}{1 + 2 + 2}$
	Sp = 1.8061 (0) (0)
	of (oct)
	3E = SP 1 = 1.806 10 +1
	3E = SP 1 + 1 = 1.806 1 + 1
	"
	SF= 0.9102
(Sundaram)	FOR EDUCATIONAL USE

となっている。

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(3)

0.16

tx=xi-x2 = 196.42-198.82 = -2.6368

Since It x1 >t , to is reflected

!: The sample cannot be considered to have been drawn from the same population.

**O**6/8

Ho = There is relationship blu sex and colons
HI=There is relationship blu sex and colons

	601000	male	Female	70191	
	Red	(10×50 = 28	22	20	
		200			
	white	110×100 = 55	US	100	
		200			
	Goeen	110-28-55-27	23	50	
		The state of the s			
-	10491	110	90	200	
Ť	PROPERTY AND DESCRIPTION OF THE PARTY OF THE			The state of the s	-

(arculation of 10-E)2

manau M.

005.	Exp.	(O-E)2	x2-(0-E)2	1/1-
Foeq (0)	Folg. (E)			
10	28	324	11.5714	
40	22	324	14.7273	
70	55	225	4.0909	
30	45	225	2	
30	00 27 0000	9 9 1	0.3333	
20	23	9.	0.3913	
		Total	x2236.1142	10
		A Charles of the better terms of the Australian Charles of the Charles	THE PARTY OF THE P	AND STREET

xa2 = 5.991 ginthogolol skun 21 2011

: There is telationship blu sex and colour

9.20

_				
	0	919297	(O-E)2	
	15	22	49	16
	20	22	4.	
	25	22	91000	2.
	IS	22	49.	
	29	22	2249	0.99
	28	22	36	
		70191	196	
				and the same

Ho = Die is unbiased H1 = DIR is not unbiased On hypothesis that die is worbiased we should expect frequency of each number as 13/2/6=22

$$2^{2}_{\text{cal}} = \underbrace{5(0-E)^{2}}_{\text{E}} = \underbrace{198}_{22} = \underbrace{9.91}_{22}$$

manay 17.

(5)

Degree of freedom = n-1 = 6-1=5

(xx)=11.0705

since x ca 1 cxx= , Ho is accepted

:The die is un biased

(Sundaram)

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