( Ca) with paragral Section B Test of hypothesis: S mikerilisen, Question A181)4- bracket Contingency table 2. -General test of hypothesis 11 3. -- Application Contingency table:  $r \geqslant \frac{2^{(j)}}{c}$   $c \geqslant \frac{2^{(j)}}{A} \cdot (rA) \cdot ... \cdot (rA) \cdot ... \cdot (rA) \cdot (rA)$ heading. मान भा भारतान, कर्ता हरी, row, collumn now and column larce mutually exclusive. + 40M CEPTURE ST STALL STALL OF ALLIES Ho = Row and column are trobornationt

manifold classification?

	Al sisAstorial Air Ar	Anna Por i Fo
B <sub>1</sub>	(A1B1)	(B) marginal
BL	observed	(BL)
•	Snequency	
Bi.		(Bi)
,	713	Py Rouseus
B		(B)
	(A1) (A2) (AP)	No So

to row, collamn hading. The sit allower of (Ai) = (Bi) = N (grand total)

\* row, column वक काश्य जाक्य काश्य (क कर्मि रहित)

Ho = Row and column are independent

"如果也以为(对以及)、大大大人。 et statistic Contingency table a 12 test 1731 attribute (1654) gu " Expected frequency tax 1.40200, (10 X 8) STONJAO 1  $E_{II} := \frac{(A)(B_I)}{N} \times b (201)$  $= \frac{120 \times 150}{1500}$ S(Ai Bi) - (Ai Bi) of (Ai Bi).

Acceptance region

f (x) 1223 = 1011 botongx 1

J J(2r) d 22r = 1/4) (A) (1) [1]

Holerd of significance:

0.05 × 100 = 50%

d + theoratical.

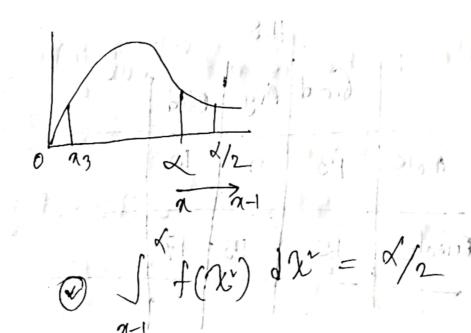
**CS** CamScanner

 $D.F \rightarrow (P-1)(S-1)$ 

level of significance - X

Cal (x) Taibulated (x) (p-1)(s-1), d

ENT 1824 1834 1834 18 11



f(x) dx = d/2

**CS** CamScanner

Yates' correction : - samplings to loval

2×2 Hable-2 2a, b, c, d 27 AMAT

12006 5 107 160 24, 60 24, 60 20 2×2 92

TELAT ON AT 1

SX.			H. S	· :	
		srood	Avg	Bad	
brenders	nale	13	95	0 100	CAN C
· ·	ale	12	15	17	

# 6. Do you think health status is N=76

Haveit in dependent of genden?

d = 0.05

5010 : (15 A) (17 A) (17 A) (17 A) (17 A) (17 A) (17 A)

Misself we have sel the up this for jour theory

Nah.	Grood	Avg	Bad	11/1/2	212011
Male	11.13	19gh	10	32	re el mollo :
Fen	12	15	17	14911	imitro fait !!
	25	24	27	76	layor to

Hypothesis:

Ho: There is no trelation ship between

health status and Grender

He. There is a relationship between health status and Gender

glatistic:

**CS** CamScanner

To Soln: Question -2:

At first we have set to up the following hypothesis

Ho: There is no relation ship between recommendation and types

vs. He issuffor is mother thrule is smill : dt

The Hest statistic:

Test statistic:

Herre,

 $E_{11} =$ 

THE MAR PI TON Accept pull to MOP PONE WITHIN = B promp fix EW | Hill = 1-13

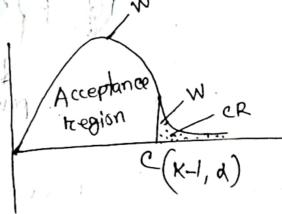
15 AND THE BERTHON INC.

## Decision:

	Reject Ho	Accept Ho	·
Ho true	Type I eppor	Right Decision	-, )
True statement to false	Right Decision	Type II erron	1 191
Type I errorand	Type Il empor:	1 1 / Ha	

Rejecting Ho when Ho is x W/Ho true, is called type I error.

And Accept Ho when Hy is now Acceptance region true, is called type 1 eppon.



The probability of typ-1 epror is called the size of the test. It is also called the level of significance and is denoted ✓. Mathematically ean write, Pfxew/Hol =2 Ho false 1 = 996 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 | 1800 P{new/HIG=B Postering the when the Mark War of Postering of Part War is called Type I (errore) what has power. I sale bolloons sunt

What is privadue?

P {x ∈ W /Ho} = [ d(x) dn = 1

cal-value tabular

Now, compare between p >> X

Frank J. Jelevinoko if, PCX then we reject to

Parling on biorry Batterry service, 4000h

6,2,2,2,3,3,5,4,3,2,1

 $\frac{7}{x} = \frac{37}{n=12} = 3.1$ 

Test statistics

moon dost a

2 TI to test

1) If sample 812e > 30 ->

pop<sup>n</sup> variance known -

Otherwise, t. test.

sample size 130, but, comple variance know, ~ 2-test.

L. ?' = 51 - 7

100 6 = 1 (100 m) 26 201 201 1 200 1 200 1.

Sample size (30")
and popularie unknown

4 = test

, 5, 5, 12, 2, 0, 15, 16 - 18, 5, 16 -

at off motion the topical X = X E NIHO Herre, BPX=ACN 2.51 Month of 1.64 2.51 Month of 1.64 1 Month of 2.64 1.96[cal. 2] = 2.51 [cal. 2] = 2.51 | archar F. 8-L = | H | W > R: X | 9 or muticular point six stall + POWER route fundation. A Kornge Ad Hard

Practice class:

## Reject Ho when Ho is true

X = x E W/HO W/Ac Rejection 田 Pf X=x EW/Hol BP X= REW/Hol=1-d Accept Ho when H, is false 30.1 X:xe W/H, P{X: x Ew [Hi] = B PX: nEW |HI = 1-B -> POWER

\* Panticutar point 12 577 - Power function

\* All Renge A3 577 -

Single mean \_ fest \frac{7}{2}

Equality of means \_ fest \frac{1}{2}

Sevenal means \_ fest \frac{1}{2} : Warn 1 & Villam Math: Poly Product so histing rater? days. Hot 13/ 45 630 onetail? TRAN FIRST STORY (1) + -> DEM: two tail variance) (and) variance un known.

Equality of mean: इसि (कामानित अनेता : Battery. X = 660 dys + 1 225m (0 yillow) 82 = 7120 days product as lifetime alor? Ho: M1 = M2 H.: M. LM2 lest tail प्रतिक जन्मिन किसा ? / 100 100 HBUT 9片二次二十 H,: M, 7 M2 - 2tail 2) right fail Variance

n 130 and yonionce unknown.

mean 12 the power ance mais of the strong and the varione of equality, sevenal question 2001

## Test for connelation coefficient:

1. Zero - connelation -> + test

2. Correlation/Single corn. -> t test

3. Equality of corp. -> 20 test

4. Several cor. coefficient -> 25

a Describe the test procedure to test.

the following hypothesis.

single 1. Ho: 1 = 0 vs H,: 1 = 0

Equality ii) Ho:  $i = \sigma_2$  vs  $H_1: \sigma_1 > \sigma_2$  several iii) Ho:  $P_1 = P_2 = \cdots = P_k$  vs  $H_1$ : Ho is not true

H1: At least one of the equalities does not hold.

. The state maintained with the 1. Zero - cornelation - t test 2. Correlation / Single corp. -> & test 3. Equality of corp. - 29 test 4. Eenercust con coefficient -> 25 नेट हैं वर्ग क्षेत्राकेट्यां कुछ की की कार्य istanting ispering 6+4 : H 2V 0 = 4 : OH il ;