22

Assignment - 1 NOVEMBER 2018 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

19 20 21 22 23 24 25 26 27 28 29 30

90 010 000	THURSDAY - NOVEMBER	M T W T F S S M T W T F S S M T W T F S S
Ho-> Preferred reading & gender are no convellated in a group H ₁ > Preferred reading & gender are correlated in a grp Given frequence el1 = {count (male) × count (friction)} } / W el1 = 20	WK-47 · 326-039 2619120058	Saza Sheth Appointments
Given ferequencies $e_{11} = e_{11} =$		E gender are no
Given faequencies $e_{11} = e_{11} = $	M, > Preferred deading	y a gender are correlated
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	in a grp	12
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Given frequencie	12
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	en = [count (male) x	court (friction)] /4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	£11 = 20	001= 210
$\frac{\sqrt{2}}{\sqrt{2}} = \frac{2 \left(\text{observed} - \text{expected} \right)}{\left(\text{Gxpecked} \right)} = \frac{250 - 90}{4} + \frac{200 - 360}{4} + \frac{200 - 360}{360} + \frac{200 - 360}{300} + \frac{200 - 300}{300} + \frac{200 - 300}{30$	e12 = 360	£22-840
$\frac{\sqrt{2}}{\sqrt{2}} = \frac{2 \left(\text{observel} - \text{expected} \right)}{\left(\text{Gxpecked} \right)} = \frac{250 - 90}{4} + \frac{200 - 360}{4} + \frac{200 - 360}{360} + \frac{2000 - 360}{300} + \frac{2000 - 360}{300} + \frac{2000 - 360}{300} + \frac{2000 - 360}{300} + \frac{2000 - 300}{300} + 20$	Compute x 2	4
$= (250-90)^{2} + (50-210)^{2} + (200-360)^{2} + (1000-8)^{2}$ 90 210 360 360	y2= 2 Conservel - CExpected	expected) 5
v ² = 507.93		210)2+ (200-360)2+ (1000-81
A S S S S S S S S S S S S S S S S S S S	x² = 507-93	8

FOR 2X2 table degree of freedom = (2-1) (2-1)-1 For I degree of forcedom X² value nelded to reject the hypothusis at 0.001 significant level is 10.828 We observe that the compared value is greater therefore we suject the null hypothesis i e Rueferred reading & gender are not correlated in a group Conclusion - Preferred ereading and gender ave correlated in the group 2/1 41/0 1/2

Appointments Pl Class = On time) = 14/20 P(class = 1 + 2/20 3/20 P Cclass= very loute) = PCClass= cancelled = 1/20 Ontine 1/2 3/3 9/14 Weekday 0/3 1/2 2/14 nolidary 0/3 2/14 0/2 Saturday 25 Sunday 1/14 0/2 0/3 SUNDAY 329-036 II) steason Ontime 0/3 4/14 0/2 Sonny 0/3 6/14 0/2 Summer 2/3 2/14 2/2 Winter 1/3 0/2 2/14 Autumn

II) Fog on time late Cancelled V. late High Normal 4/14 1/3 1/2 1/1 5/14 1/2 2/3 0/1 None 0/2 0/1 0/3 D) Rain Ontine late Cancelled verylate None 1/3 6/14 1/2 Slight 0/3 1/2 6/14 0/1 2/3 1/1 2/14 0/2 < Day = Weekday, Season = winter, Fog = Migh, Revin = None VN13 = argmax P(vj) si; (aivj)

V'j & Syes, no?

V continu) = 14 x 9 x 2 x 4 x 6 - 0.0078

14 14 14 VChale) = 2 × 2 × 2 × 2 × 2 = 0.0125 V (very late) = 3 × 3× 2× 1× 1 = 0.0111 & V ccancelled) = to x + x 0 = 9

Since Uns (late) is greatest
The instance will be cartegorised under late