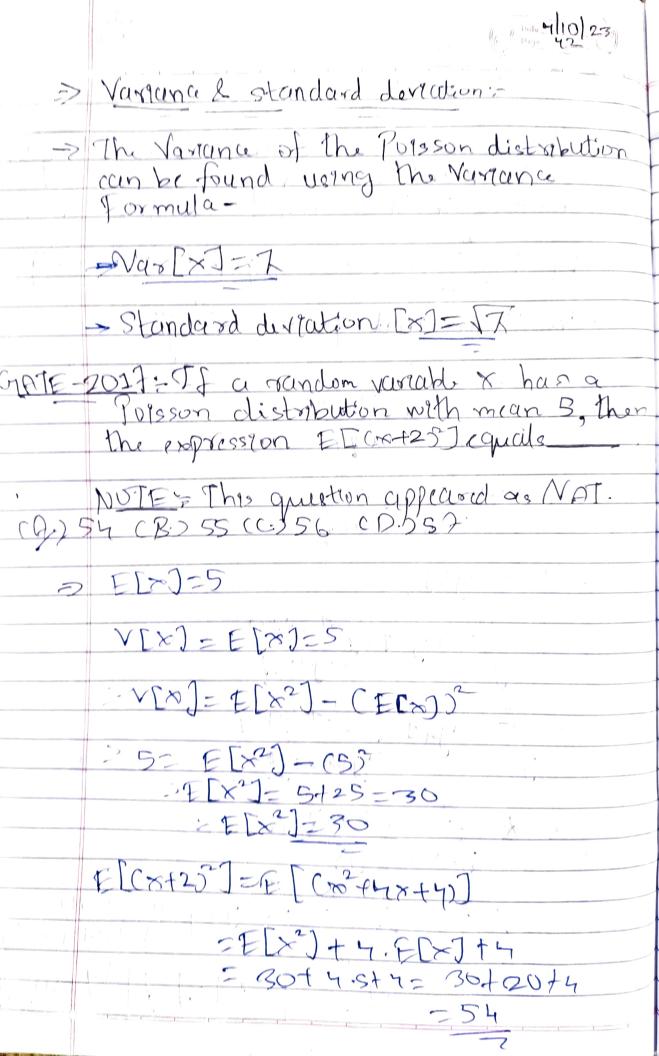
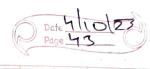
## Page 710 23 1.2.7 Expectation of Porsson distributions -> The expected value of the Posson distribution can be found by summing up products of Value with their respective propabilities. =[x]= 2 x. ]x.(x) [20[20= P(x=x)] > We know that polon= e-7-7x ~1 = 12 x e - 2 x x=1 x=1-> Let x=yf]; = Z (yf1) e 7 7 yf1, y=0 (yf1) [ = Z (yft), e-7,77.7 y=0 (yft), y! = 7. Z e-2.77 5=0 9! ZOROP = 7. Z Py(y) | Sum of all Lprobability 157] = 1 = 1 = 1 | F-np |





TSRO(3-2009: If the pdf of a Poisson distribution is given by  $f(x) = \frac{e^{-2} - 2^{x}}{2!}$  then the mian is (A) 2x . (B) 2 (C) -2 (D.) 7 > Comparing it with femore of 72 7-2 ....... Cyate -2013 - Syppose 12 is the number of cars ger minute passing through a certain and p'han a Potsson distribution with mean 3. what to the probability of observing ferrer than 3 cars during any gaven manute in this interval? (A.) 8 (2e3) (B.) 9/(2e3). (2,) 19/(2e3) From question, maan El > JEZ=3 To find P(X<3)= P(XXXX)+P(XXX)
= e? 3° + e? 3' + e? 3'
01, 11 21 = 1 [1+3+9] = 1 [8+9] 203