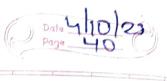




= Expanding Banomal welficient, P(x)= n(n-1).(n-2)... (n-x+1).(1)x (1-2)n-x In (1-2) = e now 2 = e-t = 1-(1-1)(1-2).-(1-x+1).2°. (-h as n -> . C/n=0 = 1.7.7. e-1 · 1 P(x)= e-7. 7x Probability Mass Function for poisson distrabution;

PMF-PIXT= 2-1. 7* whole 7-ng

- - F



ExAMPLE: For the case of the then coffer were suppose that the number of flaws follows a Poisson distribution with a mean of 2.5 flaws per millimeter.
Determine the probability of exactly 2
flaws of millimeter of wire. => for 2 mm, 2-2-3 for 2 mm; 7=2x2-2=4.6 P(n=27= e-1, 27 = e-4.6. Q(4.60 21 204.6. (21.16)

= e-4.6x10.58

= PCD= 1.117 0.10635