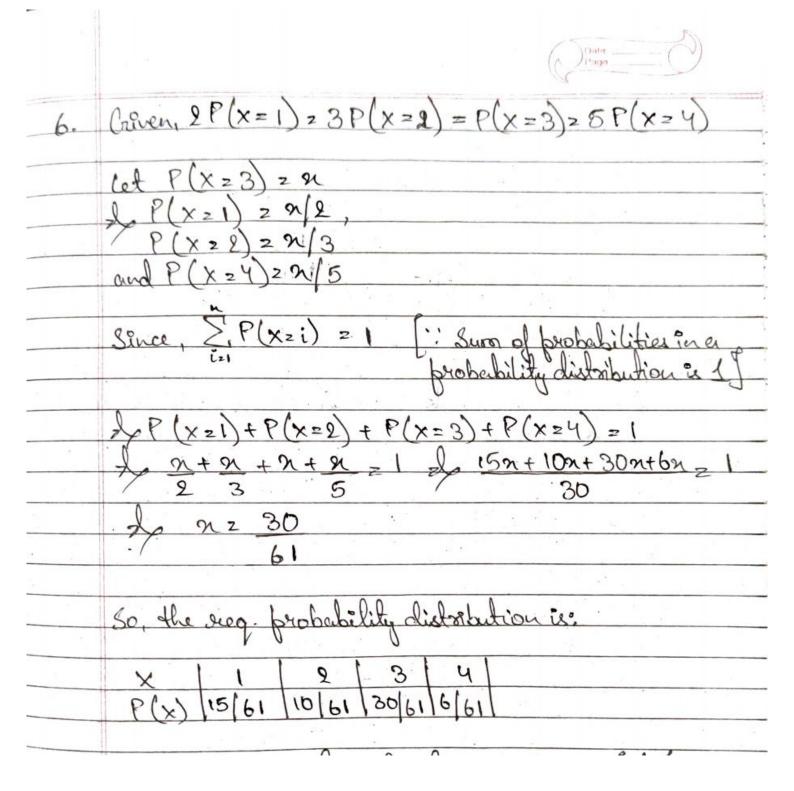
1. X represents the no. of heads when a coin is tossed
there trans
\$ For X=0, 8=\$TTT}
P(x) 2 1/8
1) for X=1, 8= 2 HTT, THT, TTHY
$P(x) = \frac{1}{8} + \frac{1}{8} + \frac{1}{8} = \frac{3}{8}$
111) FOR X= 2 8= EHHT, HTH, THHE
888
(v) for x = 3 . 8 = { HHHy
$P(x) \ge 1$
Reg. Poobability distribution table
rug. consisting autobation tenble,
x 0 1 2 3
16(x)/1/8/3/8/1/8
2 41 - 1 1 - 1 1 - 1 4 - 2
2. No. of bad apples 24 No. of good apples 2 16
No. of good apples = 16 Total no of apples = 20
1 of x subsecent up, of bad able of
two apples

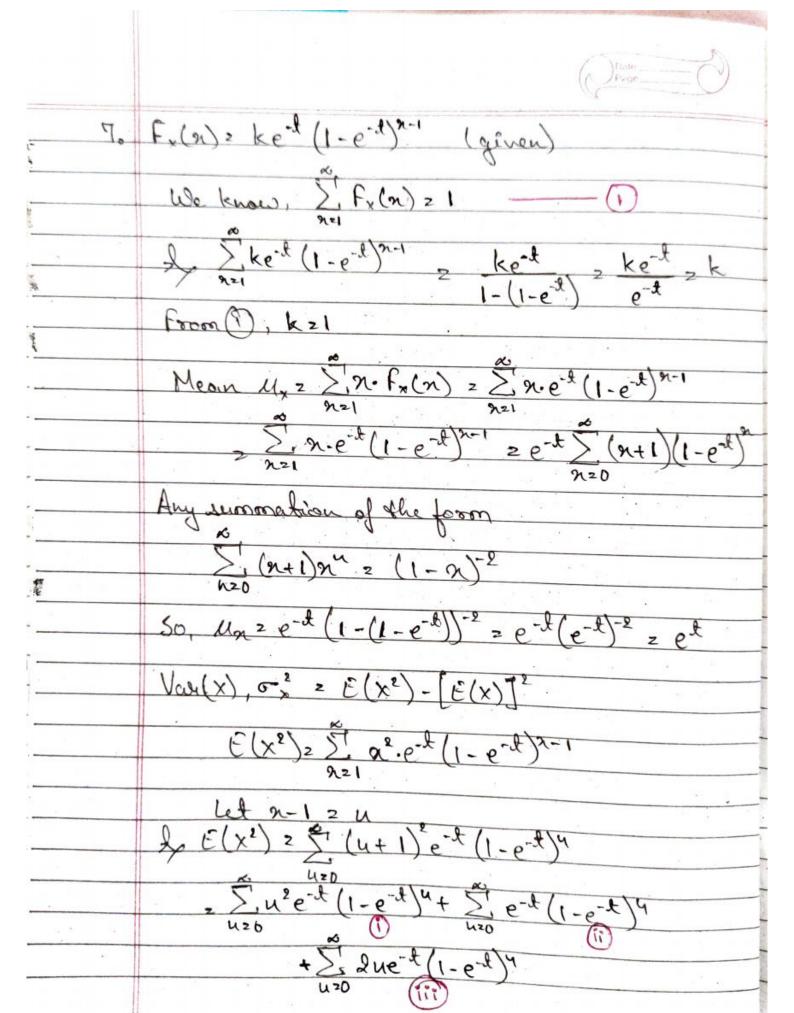


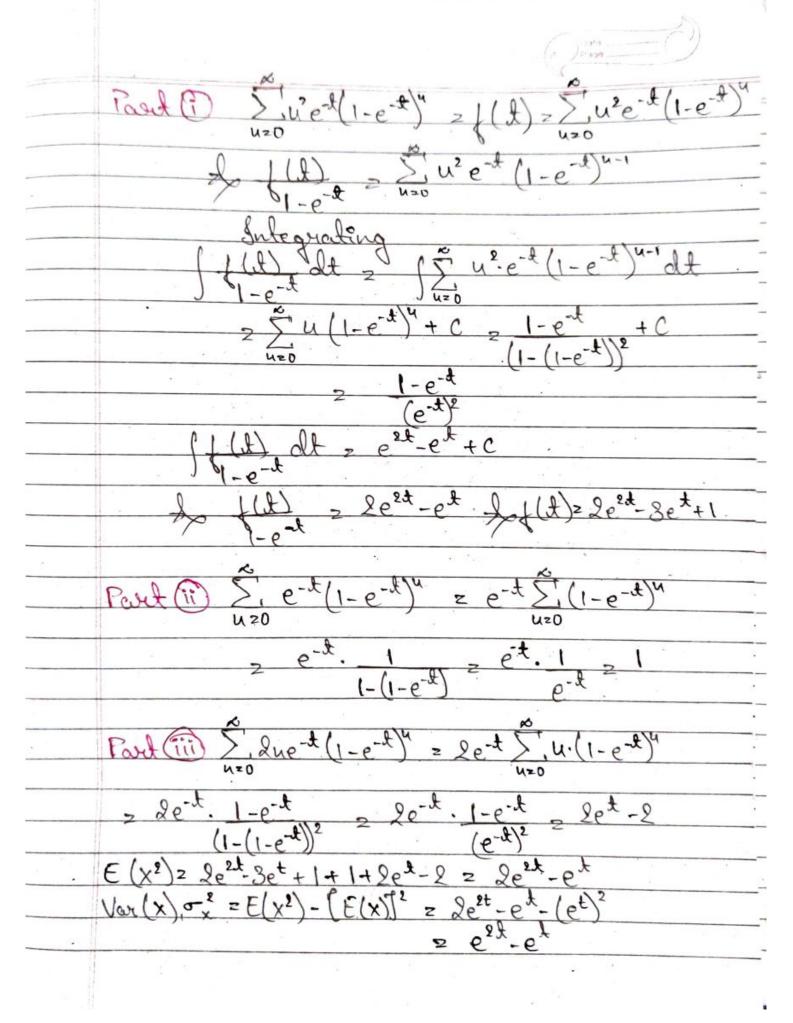
/2	1 1 - D A I AI all la des and abbles
-1)	for X = 0, de both apples drawn are good apples L P(X=0) = 16 x 15 x 21 = 12 20 C, 21, 20 x 19
	200 21 20×19 19
10:	For X = 1 Disc of la drawn is good while the other
(1)	Die de chad abble.
	1. P(x=1) = 16C, x C, 16 , 4 , 21 32
	For X=1, one apples drown is good while the other One & a bad apple. P(X=1) = 16C, × C, = 16, 4 , 2! 32 20C, 11, 11, 20×19 95
111	Fox X=2, both apples drawn are bad apples of P(X=2) > 102 - 4x3 x 21 - 3 200, 21, 20×19 95
	P(X=2) 7 1C2 2 4X3 x 26 2 30
	2, 20×19 95
-	5 1 1 1 -0-0 0 1 1 -0 0 0 0 0 0 0 0 0 0 0
	Reg. probability distribution ?s.
	1 x 1 0 1 1 2 1
-	$ \times 0 1 2 $ $ P(x) ^{12} 13 3^{2} 35 3 35 $
3.	P(n)=(n, n=1,2,3,4,5
	15 otherwise
	, , ,
a	$P(X^{2} ov X = 2) = \frac{1}{15} + \frac{1}{15} = \frac{3}{15} = \frac{1}{5}$
,\	P(1/2 <x< -="" 2)="P(5/2)" 2)<="" 5="" p(1="" th=""></x<>
- p)	1-P(xx1)
	= 5/80 - 1/30 = 2/15 1
	1-1/15 14/15 7
	,

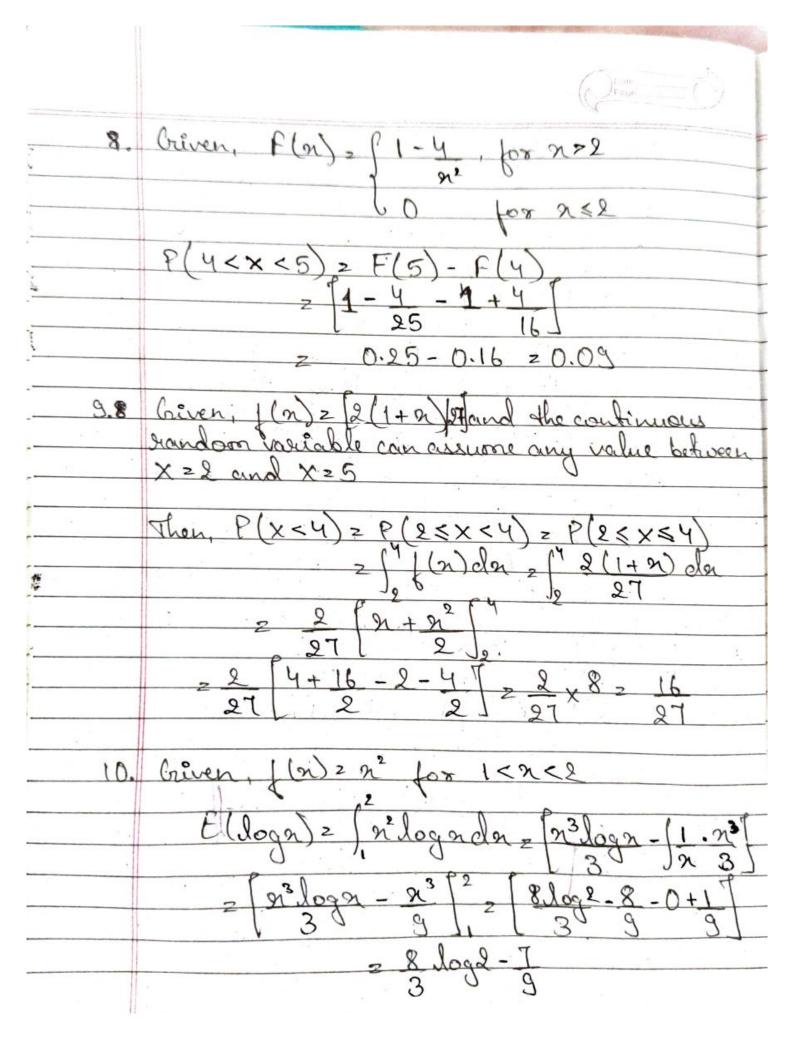


٧.	Creven f(n) 2 3 n2; 0 < x < 1
	$P(x \leq \alpha) = P(x > \alpha)$ $P(x \leq \alpha) = 1 - P(x \leq \alpha)$ $QP(x \leq \alpha) = 1$
	2 2 (n)da=1 2 2 3 n2 dn 21
	$\frac{1}{3} \int_{0}^{3} \frac{1}{2} \int_$
ii	P(x>b) = 0.05 $1 - P(x \le b) = 0.05$ $0.95 = P(x \le b)$
Ÿ	$\int_{0}^{5} 3n^{2} dn = \frac{19}{20} \int_{0}^{2} \left[3 \left(\frac{n^{3}}{3} \right) \right]_{0}^{5} = \frac{19}{20}$
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
5.	Moment Crenerating Runction Milt= E [ela] 2 netala = [2 fetala-[3d(n). fetala]] 2 neta- fetal2 = [2 reta-eta] 2 letala = [2 letala - ela] 3 letala = [2 letala - ela] 4 letala = [2 letala - ela] 5 letala = [2 letala - ela] 6 letala = [2 letala - ela] 6 letala = [2 letala - ela] 7 letala = [2 letala - ela] 8 letala = [2 letala - ela] 8 letala = [2 letala - ela] 9 letala = [2 letal
	$= \frac{2e^{2k} - e^{2k} - 0 + 1}{2k^2} = \frac{1}{2k^2} \left(1 + 2ke^{2k} - e^{2k}\right)$











lice is tossed 2i) = 1 po i 21, 2, 3, 4, 5, 6 MGF, Mx(d) = Si etn P(x=i 21) eln 21 (et+e2+e3+e4+e5+ 2 d Mx(d) = 1 (e+10+3e+4e+

e+2e+3e+4e+

e+2e+3e+4e+5e+6e+1+=0 1+2+3+4+5+6) = 21 = 7) z d 2 Mx(f) d E(x) =0 dt 4 4 e2 + 9 e 3 + 16 e 4 + 25 e 5 + 36 e 6] t 1 = 91 - 49 L 4 winne, Var (x)) = 1 and Then E(x2)-124 of = E(x2)=5

