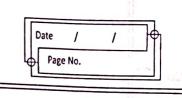
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22 Mar, 22		Ψ
2210100 /	ASSIGNMENT 1	Name: Ananya Prasas Reg No: 2DBCE10093
1	P(A speaks truth) = 3/5	REGIW. ZUBLE10093
المحداء ماده	P(Aspeaks lie) = 1-3 = 2	Eroniul III / III
- 1	P(B speaks truth) = 5 8	
	P(B speaks lie) = 3	
	: Identicae issue = P[Aspeabstrufn]. P[B	speakes lie) + P(Alies). P(Btrue
	$= \frac{3 \times 3 + \frac{2}{5} \times 5}{5 \times 8}$	દ - (૧૯ ફેલ્સ) કે
	= 9 + 10 = 19	20 min 19
	Peruntage = 19 x10\$ = 47.5%	1 P( 2119 16) 2 4  1
2	GR 3B	
	P(1 <sup>s+</sup> ball red) = 6	The state of the s
	: um = 5R, AB	6 + 5 = 71/4
	9	
	$P(Cos(1) = 6 \times 5 = 30 = 10$ 9 9 81 27	
		A i
	P(1 <sup>st</sup> ball Blue) = 3 = 1	0 11 12 12 12 12 12 12 12 12 12 12 12 12
	:. um = 72 92 B	
	: P(Red ball) = 7	
Coperation of the	: P ( Case II) = 1 x 7 = 17	
4	(St.) 3 9 2.7	(里)



Conditional P = 10/27 + 7/27 = 17/27r ( pessible configuration ) = 1 = 1
25 32

excluding Place = girls) and Place = boys) from favourable. cases

= P = 30

2 q., 3W

P(King 52) = 4.

P( king 16) = 4

 $P(G \text{ and } k) = \frac{2}{5} \times \frac{4}{5} = \frac{2}{65}$ 

 $P(wandk) = 3 \times k = 3$ 

 $\frac{P(k) = 2 + 3 = 4+}{65 20 260}$ 

 $P(N/K) = \frac{3}{20} = \frac{.3931}{47}$ 

47

260

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	SS = { HHH, HHT, HTH, THH, HTT, THT, TTH, TTT}	
<b>≠</b> ca		
	8	
<i>(b)</i>	P ( 1 Head ) = 3	
C	8	
( c)	P (atleast 1 Head) = 7	
	8	
	P(accest 2 heads) = 4/8	
	P(14/2H) = 4 x 8 = 4	
	8 7 7	

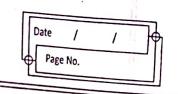
$$\frac{P(AUZ) = 2}{3} = \frac{P(A) + P(C) - P(Anc)}{3}$$

$$= \frac{3}{4} = \frac{P(B) + P(C) - P(BDC)}{4}$$

$$\frac{1}{12} - \frac{1}{3} - \frac{1}{4} = \frac{1}{2}$$

$$P(A) + T - P(A) = 2$$

$$P(A) = 2$$



4 = Regular coin, c2 = Inoheaded coin.

P(H/C1) = 0.5

P(H(C2) = 1

(a) Total Probability = 1(H) = P(H/c1)P(C1) + P(H/c2) P(C2)

$$\frac{2}{2} \frac{1}{3} \times \frac{1}{3} + \frac{1}{3} \times \frac{1}{3$$

P(C2/H) = 1.113 = 1 (67

P(Not dyective) = 95 (10)

P(one good item) = 94
99

P(trivid good item) = 93

: P(A1 NA2 NA3)= P(A1) P(A2/A1) P(A3/A2, A1)

$$= \frac{95 \times 94 \times 73}{100 \ 99} = 0.857$$