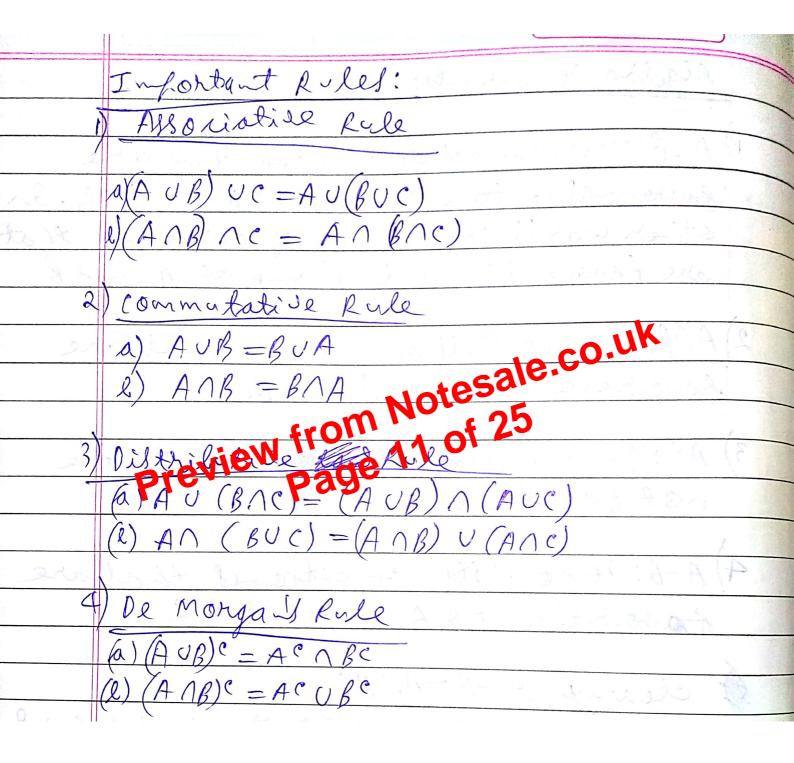
	Page No Date
9	Edually likely outrombs:
	orthonel are laid to be equally likely if
	none of them say le expected in preferance
	to the other Syn performing the handon
	enferiment under voulideration.
	In experiments like tolling of a coin
	nolling of a die etc., if the outcomes may
	le considered to be egrally likely, then the
	foint on the die il said to be fair, symmetric,
	classical definition respectively (due to to splace) from \$25 Sefevier page 8 of 25 The sample space 2 white a given grandom experiment is finite. (Let N le the total number of motivally encline and
	ole co.u.
10/	classical definition of 59 abability (due to
/	Laplace) from 25
	preview page o
	1) The sample space of w.h.t. a given
	random experiment is finite. Let Wie the
	enhantine outcomes in 2]
	2) All the ortrones are equally likely.
AY	$\frac{1}{2}$
	riser en event A, let or (A) le the number
,] (of outcomes favorbable to A. Then by
	dallical definition, the probability of A
	classical definition, the probability of A it givenly $f(A) = h(A)$
	/ V

Prime Merit



	combinatorial Analysis Page No
	Zet us first consider the following problemi
	Soffole a comminication system consists
	of a antennal which are tolk arranged
	in a linear fashion. The lystem homains
	functional as long as no two
1 - 1	consecutive antennal are defective.
1	If m out of a antennal she
	defective, went is the probability that
	the System will remain functional?
	Let ustake n=4, m=2. De Malkdenote ey 1' are non-defectives aleterna and ly 'o' a defective mono. The sollible avanguents may 20 be listed as shown lelow. agent of be listed as
	of 12 about of defective all the
	(a) de la fill monor la falle
	hard of le listed as
	Dreview Dade
	1/00
	1010-
	1001
	0011
	20101-122
	110 -
,	
	Thus, there are in all six fossible
	attangements of which for three
-	arrangements the system remains functional

Prime Merit

no of ways in which a committee of r members may be formed out of nmembers is co. Again a chairferson may be selected out of these r wembers in en ways. Hence the total no. of 10 mmittees consisting of a members may be formed is no ca, conservently, the total no- of committees consisting of atleast One member that can be formed is = 1. x (2) = = 2 x (2) Again, o-t of the nembers of of white the locality, a chairfetess may be selected in n ways stoom for good of the other way belong to a officers there are two officers — he she may belong to a officers there way belong to a officers there was the same two committee of not. Thus the total no. of ways in which the other -1 members may belong to a committee no. of committees may le formed is 1 2 2 -1 2 -1 2 -1 2 -1