## PARSHVANATH CHARITABLE TRUST'S

## A.P. SHAH INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Data Science

Semester :	Subject :OSG	<u>TU-</u>	Academic Year: 2022-2023
Inclusion - Exclusion principle Theorem 1 -			
on (A), n(B) denote the no. of elements in			
A and B then, n(AUB) = n(A) + n(B) - n(ADB)			
A B suppose, no A&B are 2 se			
(n) (k)	n <sub>2</sub> ) n(A), element	n(B) are	the no. of A & B then,
$n(AUB) = n(A) + n(B) - n(A \cap B).$			
If we !	have 3 sets	•	AB
	1C) = 2CA) + O	(0)	C
$\frac{n(AUBUC) = n(A) + n(B) + n(C) - h(A \cap B) - n(A \cap C) - n(B \cap C) + n(A \cap B \cap C)}{n(A \cap C) - n(B \cap C) + n(A \cap B \cap C)}$			
If we then,	have y get	314 11 11	A
n (AUBUCI	)-n(A)+n(A) )-n(A)B)-n(A		B
m(AND)_n(	$(B \cap C) - O(B \cap O) - O(B \cap O) + O(B \cap O) +$	-n(cno)	
	+ n(B) (n D) - r		
Subject Incharge :	Page No	Department o	f CSE-Data Science   APSIT