

PARSHYANATH CHARITABLE TRUSTS

A.P. SHAH INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering Data Science

Semester:	Academic Year: 20 22- 20 23
Abelian group - or commutative	group -
A group (cr, *) is said to	be abelian if
(a*b) = (b*a)	
→ a,b ∈ G.	
Appropriate Authorities and the	
ex. () (z,+)	2
$Z = \{, -3, -2, -1, 0, 1, 2, 3, $	9
a = 10	
b = 7	
a+b=10+7=17 EZ.	
it is algebraic structure	
a+(b+c) = (a+b)+c	
10+(7+2) = (10+7)+2	
19 = 19	
it is semigroup	
iii)	MANAGEMENT OF THE PARTY OF THE
a + e = e + a = a	
3+0=0+3=3	
it is monoid	
iv)	
a+b=b+a=e	
3+(-3)=(-3)+3=.0	
it is group	



Subject Incharge :___

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v)的 al	polian a	Two it as	Commi	utative group?
	a+	b = b + 0		a+b=b+a
		2 = 2+5	5 ((-2)+3=3+(-2)
	BUILDING TO BE THE REAL PROPERTY.	= 7		1 =1
j	t is o	commut	arine	group.
x · (2)				
(N.	.)			
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