PARSHVANATH CHARITABLE TRUST'S

A.P. SHAH INSTITUTE OF TECHNOLOGY

Department of Computer Science and Engineering
Data Science

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Semester	_111	Subject : _	0597	Acade	mic Year: 20 22 20 23	
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I All	the ent	ries in	the c	omposition to	able are	
elem	ents of	the se	et G.	a de la calif		
Hence G is closed to the operation; tot i.e.						
we can say that a is closed toith						
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			N The		31/31	
ii b The	00000	cition	table	is associ	ative IF	
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a,b,		three (-		THEN	
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Subject Incharg	e:	Page No		Department of CS	E-Data Science APSIT	
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Subject Incharge :_

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Semester:
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- 1+65 = 3+63 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
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hence to is an associative operation
by ideas any element of G, then
by identity property.
by identity property. a * e = e * a = a.
2 +60 = 0+62 = 2
like 4+60=0+64=4
hence o is an identity element.
iv) by inverse property, $a*b=e$ $0+60=0$ $3+63=0$ $4+2=0$ $2+64=0$ $5+61=0$
0+60=0
TF 1+ 5=0 4+2=0
2+64=0 5+61=0
e is an identity element
here o is an identity element
hence 0,1,2,3,4,5 having their
inverses as 0,5,4,3,2,1 Sespectively
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V) The composition table is commutative.
as the corresponding nows and columns
n the position are identical.
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Semester:	Subject: DSGT	Academic Year: 2022-2023
here,	3 = 3 4 + 62 = 2 + 6 0 = 0 1 + 15 commutation	<u> </u>
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written	ication modulo	re a and b
		· r < ip
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