

Arithmetic Shift

4 BITS.

A B C D

LEFT

RIGHT

0 0 0 0

0 0 0 0

0 0 0 0

0 0 0 1

0 0 1 0

0 0 0 0

0 0 1 0

0 1 0 0

0 0 0 1

0 0 1 1

0 1 1 0

0 0 0 1

0 1 0 0

1 0 0 0

0 0 1 0

0 1 0 1

1 0 1 0

0 0 1 0

0 1 1 0

1 1 0 0

0 0 1 1

0 1 1 1

1 1 1 0

0 0 1 1

1 0 0 0

0 0 0 0

1 1 0 0

1 0 0 1

0 0 1 0

1 0 0 0

1 0 1 0

0 1 0 0

1 0 0 1

1 0 1 1

0 0 1 1

1 1 0 1

1 1 0 0

1 0 0 0

1 1 1 0

1 1 0 1

1 0 1 0

1 1 1 0

1 1 1 0

1 1 0 0

1 1 1 1

1 1 1 1

1 1 1 0

1 1 1 1

LOGICAL SHIFT.

4 BITS.

LEFT

RIGHT

A B C D

A B C D

A B C D

0 0 0 0

0 0 0 0

0 0 0 0

0 0 0 1

0 0 1 0

0 0 0 0

0 0 1 0

0 1 0 0

0 0 0 1

0 0 1 1

0 1 1 0

0 0 0 1

0 1 0 0

1 0 0 0

0 0 1 0

0 1 0 1

0 1 0 1

0 0 1 0

0 1 1 0

1 1 0 0

0 0 1 1

0 1 1 1

1 1 1 0

0 0 1 1

1 0 0 0

0 0 0 0

0 1 0 0

1 0 0 1

0 0 1 0

0 1 0 0

1 0 1 0

0 1 0 0

0 1 0 1

1 0 1 1

0 0 1 1

0 1 0 1

1 1 0 0

1 0 0 0

0 1 1 0

1 1 0 1

1 0 1 0

0 1 1 0

1 1 1 0

1 1 0 0

0 1 1 1

1 1 1 1

1 1 1 0

0 1 1 1

CIRCULAR SHIFT

4 BITS.

LEFT

RIGHT

A B C D

A B C D

A B C D

0 0 0 0

0 0 0 0

0 0 0 0

0 0 0 1

0 0 1 0

0 0 0 1

0 0 1 0

0 1 0 0

0 0 1 0

0 0 1 1

0 1 1 0

0 0 1 1

0 1 0 0

1 0 0 0

0 1 0 0

0 1 0 1

0 1 0 1

1 0 1 0

0 1 1 0

1 1 0 0

0 1 1 0

0 1 1 1

1 1 1 0

0 1 1 1

1 0 0 0

0 0 0 1

1 0 0 0

1 0 0 1

0 0 1 1

1 0 0 1

1 0 1 0

0 1 0 1

1 0 1 0

1 0 1 1

0 1 1 1

1 0 1 1

1 1 0 0

1 0 0 1

1 1 0 0

1 1 0 1

1 0 1 1

1 1 0 1

1 1 1 0

1 1 0 1

1 1 1 0

1 1 1 1

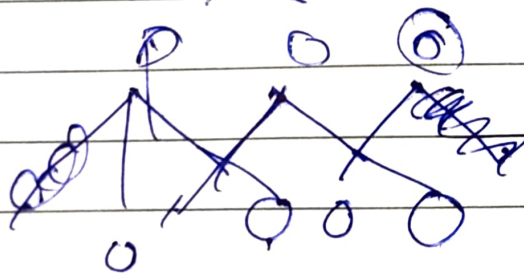
1 1 1 1

1 1 1 1

	A	B	C	LOGICAL			ARITHMETIC				C L R GULAR			
				① Left		① Right	Left		Right		Left		Right	
				a	b		g	h			m	n		
(0)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(1)	0	0	1	0	1	0	0	1	0	0	0	1	0	0
(2)	0	1	0	1	0	0	0	0	0	0	1	0	0	1
(3)	0	1	1	1	0	0	0	1	0	0	1	1	0	1
(4)	1	0	0	0	0	0	0	0	1	1	0	0	0	1
(5)	1	0	1	0	0	0	0	1	1	1	0	0	1	1
(6)	1	1	0	1	0	0	1	0	1	1	1	0	1	1
(7)	1	1	1	1	1	0	1	1	1	1	1	1	1	1

L.L.

	I ₀	I ₁	I ₂	I ₃
A'	0	①	2	③
A ⁰	4	⑤	6	⑦
	0	1	0	1



	LL	LR	AL	AR	CL	CR
	1101	1010	0110	1010	1110	1011
						0110

L/R
R/L



2/26/0