@·i]	Solve the following using Linear convolution - Tabular method:
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	x[n] = [10,11,12,13] h[n] = [1,-1,2,2]
	Calculating the length of the signal.
	$l_1 = l(x = 1) = 4$ $l_2 = l(h = 1) = 4$
	Length of the signal,
	33 = 31 + 12 - 1 = 4 + 4 - 1 = 7
	Arranging x [n] and h [n] in tabular format.
	7 En]
	1 10 11 12 13
Sundaram	2 20 22 FORGEDUCARIONAL USE

	y[n] = [10, (-10)+11, 20+(-11)+12, 20+22+(-12)+13,
	22+24+(-13), 24+26, 26]
	y[n] = [10,1,21,43,33,50,26]
	9 21.3 - [10,1, -1145, 55, 50, 26]
2.	x[n] = [-5, -6, -7, -8]
•	h [n] = [-1, -1, 2, -2]
	C 0\6.1-11
	Calculating the length of the signal.
	R = R(xEnJ) = 4
	$\lambda_2 = \lambda(h [n]) = 4$
	Length of the signal,
	13 = 11 + 12 -1 = 4 + 4 - 1
	Arranging x[n] and h[n] in tabular format
	n [n]
	-5 -6 -4 -8
	-1 5 6 7 8
	h[n] -1 -5 - 6 - 7 - 8
	2 -10121416 -
	-2 -1012 - 14 16
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	W. C. J. C.
	Y[n] = [5, 5+6, (-10)+6+4, 10+(-12)+4+8, 12+(-14)+8, $[4+(-16), 16]$
	= [5,11,3,13,6,-2,16]
	y[n] = [5,11,3,13,6,-2,16]
Q.2)	Solve the following using Linear convolution -
-	Sum by column method.
١,	x [n] = [8, 13, 11, 12] $h[n] = [2,1,1,2]$
	calculating the length of the signal
	$R_1 = R(nEnJ) = 4$
	$2 = 2 \left( h \left[ n \right] \right) = 4$
	length of output signal (13) = 1+12-1
	= 4+4-1
	Arranging reEn) and hen) in sum by column
	format
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	8	13	u	12	n	[n]			
		1	1		h				
West File									
		8	13	11	12				
		2	•	1	2				N. Fr
		16	26	22	24				
-			8		1.1	12			
				8	13	1.1	12		
	B				16		22	24	
		16	34	43	64	49	34	24	
	[5] -	T 16	0						
	y [n] =		34,43,	64,49,	34,24]				
2.	x [n] =	[-9	-10 -	11 -127	To les				
	h En 3	= [i	-21	17	MINISTER OF				
	cara	atin	q the	1ength	of the	Signal			
-	Ri = Rl	い[り]	= 4			3			
	R2= 81	mhli	7) = 4						
	0	1000							
	length	of +	he ou	tput sign					
					TANKS TO SEE	= 7	1-1		
						+			
Sundaram				FOR EDI	JCATIONAL US	SE			

1	
	-9 -10 -11 -12
	1 -2 -1 1
	-9 -10 -11 -12
	18 20 22 24
	9 10 11 12
	- 9 -10 -11 -12
	-9 8 18 11 25 1 -12
	y[n] = [-9,8,18,11,25,1,-12]
(3.3)	Solve the following using Circular convolution -
	Mostrix method.
1.	2 [10, 11, 12, 13]
	h[n] = [1, -1, 2, 2]
-	Length of the output signal,
	$f_1 = f_2 = f(y [n]) = 4$
	10 13 12 11   1] = [10+(-13)+24+22]
The state of the s	11 10 13 12 -1 11+(-10)+26+24
	12 11 10 13 2 12+(-11)+20+26
	13 12 11 10 ] [ 2 ] [ 13+(-12)+22+20 ]
	= F 1/0.1
	= 43
	51 : y[n] = [43,51,47,43]
	44
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2.	x [n] = [-5, -6, -7, -8]
	h [n] = [-1, -1, 2, -2]
	Lone W. C. H. C. H
	Length of the output signal,
	$R_1 = R_2 = R[y[n]]$
	:. 8 (y [n])=4
0	
=	[-5 -8 -7 -6][-1]
	-6 -5 -8 -8+ -1
	-7 -6 -5 -8 2
	L-8 -7 -6 -5 ] [-2]
=	[5+8+(-14)+(2] = [11]
	6+5+(-16)+14
	7+6+(-10)+16
0	[8+7+1-12)+10] [13]
	y[n] = [11,9,19,13]
	9 2133 = 211, 4, 14,13]
undaram	FOR EDUCATIONAL USE

Q.4)	Solve the Following using Circular Convolution -
9 "	Sum by column
	$\chi[n] = [8, 13, 11, 12]$ $h[n] = [2, 1, 1, 2]$
	Length of output signal 83,
	$R_1 = R_2 = R(y En 3)$ $\therefore R(y En 3 = 4$
	719013
248	
	x 8 13 11 12 2 1 1 2
	16 26 22 24
	8 13 11 12
	16 26 22 24
	16 34 43 64 49 34 24
	Adding last 3 values with the first 3 values.
	+ 16 3 4 4 3 6 4
	49 34 24
	65 68 67 64
	". y [n] = [65,68,67,64]
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2.	x[n] = [-9, -10, -11, -12]
	h[n] = [1, -2, -1, 1]
	$R_1 = R_2 = R_1 (y En J) = 4$
	-9 -10 -11 -12
	1 -2 -1
	-9 -10 -11 -12
an Evit	18 20 22 24
	9 10 11 12
	- 9 -10 -11 - 12
	-9 8 12 8 11 25 1 -12
100	A -1-11
	Adding last 3 values to the first 3 values.
	Adding last 3 values to the first 3 values.  -9 8 18 11
0	-9 8 18 11
0	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12
	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12 16 9 6 11
	-9 8 18 11 + 25 1 -12 16 9 6 11
Sundaram	-9 8 18 11 + 25 1 -12 16 9 6 11