		_
Lec 5		
*	9 Anjulie Regionse of Digital Signal 1-	
		_
	n(n) structure y(n)	_
	Expul- les: Dividal Filler out fut	
	f(v)	
	Iryulse Iryulse Republic Signal of the Syster.	
	Signal of the Syster.	-
1		
→	Impulse Signal gives the h(n) as Output.	
#	When h(n) is given:	į.
-1.	(A , A = (2,1),	
	$\chi(n)$ $\chi(n) = \chi(n) \# \chi(n)$	
	Wild conditions that the conditions are a second to the condition of the conditions are a second to the conditions are a sec	
	theer convolution	
7	h(n) is refereseration of signal.	
*	Linear Convolution:	
	y(n)= 2 x(m) h(n-m) IMf M=-00	
	M=-00	
>	thear convolution application is to find the output of a filter.	
7		
	MAIL	

#	Tyles of Filter:	tole Little Company
	TIP &:- Disidu Filter 0/P	
	D/1 (8. 2/30/2/0-0/)	CALVILLION 2 SUDD
		D- 115
	IIR Fliller	FIR Filter
	(A	MANA - CO
- ty	$\frac{1-h(\eta)=(0.5)^{\eta}\gamma(\eta)}{2}$	eg: h(n) = 256,73
	2 répulse Lesponse	Fulte
	her one	Grynbe Regnosse.
	Sycorise	La
		1
Co:-	lymen h(n)= d 5, 6, 73 Flood	the Presponse of filler to
	the 2(n) input = 21, 2, 3, 5].	
	319.52 Y	La barra de la constante
Ans.	To fird response: - 019:- (500)	
	x(n) [h(n) 1 y(n)	
	210 4000	
5(-1		
	200 Table 1	
i		

Step 1:

Flod yen) for n >0

y(n) = & x(m) h(n-m)

1=0; y(0)= 2x(n)h(-n)
y(1)= 2x(mh(1-n)
y(2)= 2x(n)h(2-n)

x(m)=x(n)= 2 1, 2, 3, 43

h(M) = 15 6 15

 $h(-n) = \{7, 6, 53\}$

h(1-h) = d_ 7,6,53

	A Constitution of the Cons				
se(m)	1	12	3	14	
L(-11)7 R(1-11)	6	5			2000 A CHETTER
R. (1-11)	7	6	2		J. John Marine
13 (2m)		7.	6	5	
h (3-m)			* 7	6	
h(4-m)				77	

Step 2'-

Find gen for 1 co

$$\frac{-1}{2} = \frac{1}{2} (M) (h(-1-1))$$

$$\frac{1}{2} (-2) = \frac{1}{2} (M) (h(-1-1))$$

1C(M)= x(n)= 21 23,63

			1000	State of the state					
						(1)-	Himbers &		(chr)
2(h)		1	1	2	3	4	1 101 13		(Ja
h(0-11)		0	6	5	5	M-3	4(0)=3	5	CAPE.
h(-1-m)		7	69	ا ک		7	y(-1) =	,	
h(2-n)	7	6	54						
			100000000					11/10/2019	out of the contribution

1	and the second	have no				* 40-1	一直	- 4
	X(M)	115	OLA PERSONAL PROPERTY OF THE PERSONAL PROPERTY	1	2	3	4	
	h(-h)	1 82	17	6	5		5 (o) z	16
	h(-1-m)	4	7 6	5	appropriate the second		5(7)=	5
	h(-2-M)	1	6 5	and the second		Colored private last	19(-2)=	20
	and the second section	100	A12 20 10 10 10 10 10 10 10 10 10 10 10 10 10					

-	y(n) =	25	16,3	4, 52	45	28)	-
		7	1		Ĩ. 2. "		*

(2)- lyinem h(n)= 25,6,73. Firel the negrouse of the filter to the input value x(n)=21,2,3,53

#10 x(n) [h(n)] 5(n)

TIP [h(n)] 0/P

Hers it

y(n)= Ex(n) h(n-m)

MEDD

 $y(0) = E \times (M) h(-M)$ $y(1) = E \times (M) h(1-M)$ $y(2) = E \times (M) h(2-M)$

X(M) hl-m) 7, 6 y(0) = 5 h(1-m) 7 9(1) = 16 h(2-M) 9(2)=39 6 h(3-M) 6 2 1 y(3) = 52 h(4-M) 5 9(4)= 45 7 6 h(s-M) 7 <u> 5</u> y(s) 2 28

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For 120

y(-1) = x(M) h(-1-M) y(-2) = x(M) h(-2-M)

X(M)	1	1	3	4	
h(-m)7,1	5				y(0)=5
h(-1-m) 7,65					4(-1)=0
711 110 /10			_	-	y(-2)20
7 1				3	:
				3	

ig(n)= d5, 16, 34, 52, 45, 283

OK NOTE :-

Thereth of their convolution = length of 1st signal + keight of 2 nd signal - 1.