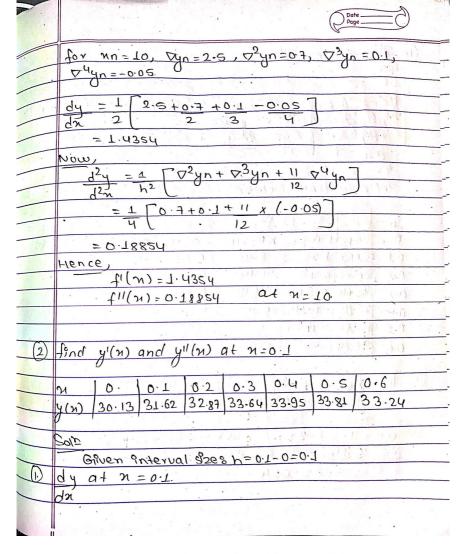
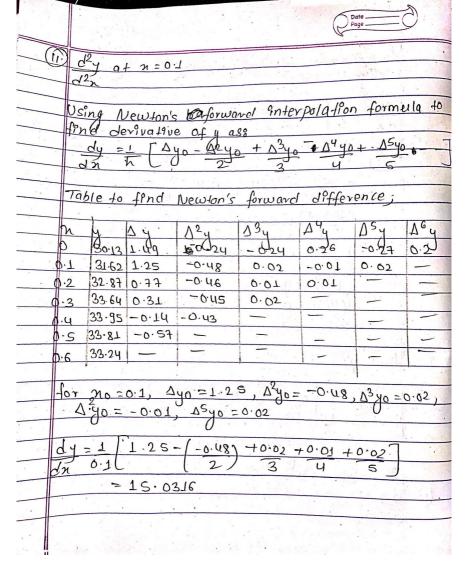
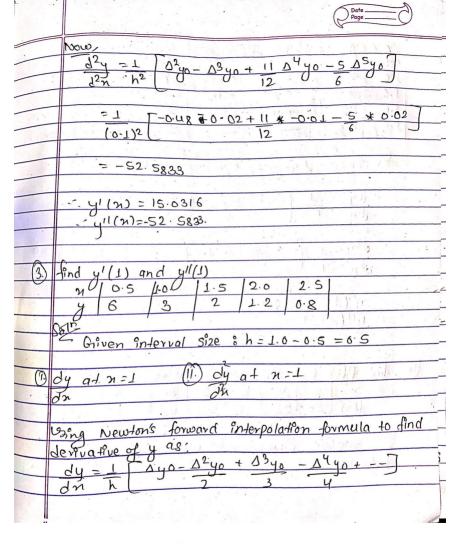
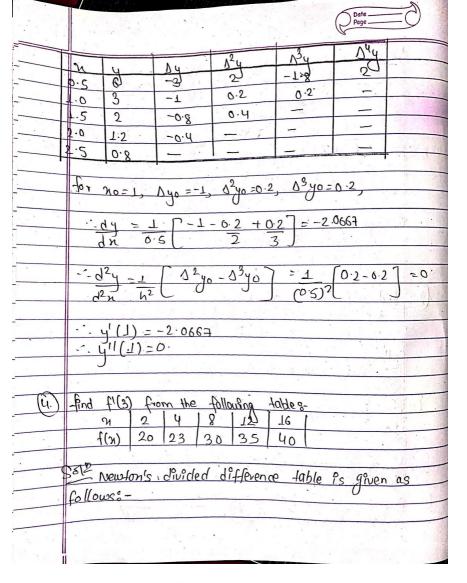
	Assignment 6. Page 0													
1	(1) find f'(n) and f'(n) at n=10.													
	7 1 2 1 4 16 1 4 1 20 1 12													
	f(n) 0.25 1 2.2 4 6.5 8.5													
	2012													
	Given interval size sh = 4-2-2													
	1) dy 0+ n = 10													
	dn													
	(1.) d2y a+ n=10													
	Using hard													
	Using Newton's backward interpolation formula le													
	HILLIAM OF MUSIC													
	$\frac{dy}{dn} = \frac{1}{h} \left( \frac{\partial y}{\partial x} + \frac{\partial^2 y}{\partial x} + \partial^2 y$													
	2 3 4 5													
	Thus, table to find Newton's backward differences													
		in time nemions packmand gitte neuces												
-	N.	14	ATY	72y	√3y	<b>▽</b> 44	DS4							
		U	0	0	0	U	d							
	2	0.25	8000	_	100		-							
	14	7	0.452	_	_	P. Ly								
	6	2.2	1.02	0.45	_	_								
. :	8	4	1.48	0.6	0.12	-	- 1							
	10	6.5	2.5	6 · 7	0.1	-0.05	-							
1	12	8.5	2	-0.5	-1.2	-1.3	-1-25							
					,									
<u> </u>	-			196										









						Date	ı				
	21	4=f(n)	Dyna	$\nabla_{5}$	DBy	Nyy					
	2	20	1.5	0.0478	-0.0104	0.0011					
	41	23	L.75	-0.0625	0.0052	11 7 - 1	. 0				
	g	3o ·	1.25	0	-: 17/10	10014.					
	12	35	1.25	- 1 2 1	· (	- 1 1					
San T	16	40	-17	<u> </u>	. 11 11 11 11	(2) 1					
	\$173,34 TO 18 TO 18 TO 18 TO 18 TO 18										
	Newton's divided difference interpolation polynomial is:										
	$f(n) = y_0 + (n-n_0)y_0 + (n-n_0)(n-n_1)\Delta^2y_0 + (n-n_0)(n-n_1)$ $(n-n_2)\Delta^3y_0 + (n-n_0)(n-n_1)(n-n_3)\Delta^4y_0$										
(n-n2) 1340 (n-no) (n-ns) (n-ng) 1940											
	$= 20 + (1-5n-3) + (n^2-6n+8) * 0.0416 + (n^2-6n+8) * (n-8) *$										
	(40.010A) + (45-6x+8)+x (45-8x-15x+6e) x 0.0011										
		(1 - 2)	1001116-2	-0.2496n	+1.22201	(n3-6 n2-	+821				
	= 20+	(1.5x-3)+	(0.00167°	·4 (23,023	10332817	12 - 1223-1-	722°				
	48 7 - 64) * - 0.0104+ (N4-633+823+4822-642-1223+7222 962 + 962-65362 + 768) * 0.0611										
	962 -	+ Jon4	15+6m T	108) × 0.00	17						
	0.04	(1.cm 2)	+ ( 1.0.01.16	m <sup>2</sup> - M.2 U.96	2 + 0.3362	4(8					
	$= 20+(15n-3)+(0.0116n^2-0.2496n+0.33628)+$ $13^3-143^2+56n-64)*(0.0104)+(34-263^3+2243^2-$										
	7367 + 268 - 890 × 6.000										
Q.	120	1 + 40x )	HDD O T		9 3	11. 1 1 1	. 51				
=	20+1	(1.5×1-3)	+ (0.0416	n -6.249	6n+0.33	28)-					
	20+(1.5x-3)+(0.0416x2-0.524n+0.3329)-										
	m3 4 0.2464n2 - 0.8096n + 0.8448										
			,								

