

## **SNS COLLEGE OF ENGINEERING**

Kurumbapalayam (Po), Coimbatore – 641 107



## AN AUTONOMOUS INSTITUTION

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

	yn+1=4n+h[b(xn+1), yn+1hb(xn,4n)] - 3
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1	agus. (B) (01) (5) called as modified Euleri formula
11	op:
1.00	
	In Fuller method South = Ynthy
1	where Ay = hf(xo, yo) where f(xo, yo) = 86 pe at (xo, yo)
-	an modified E.M YM, = Yn+Ay.
١	where Ay = h [average of the slopes at no 8 n.]
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	= to average of the values of and at the
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	end of the newar to
1.	Problems - modified Eulen method
١.	Problems - modified Euler method.  Solve the equation dy = 1-4, given y(0) = 0
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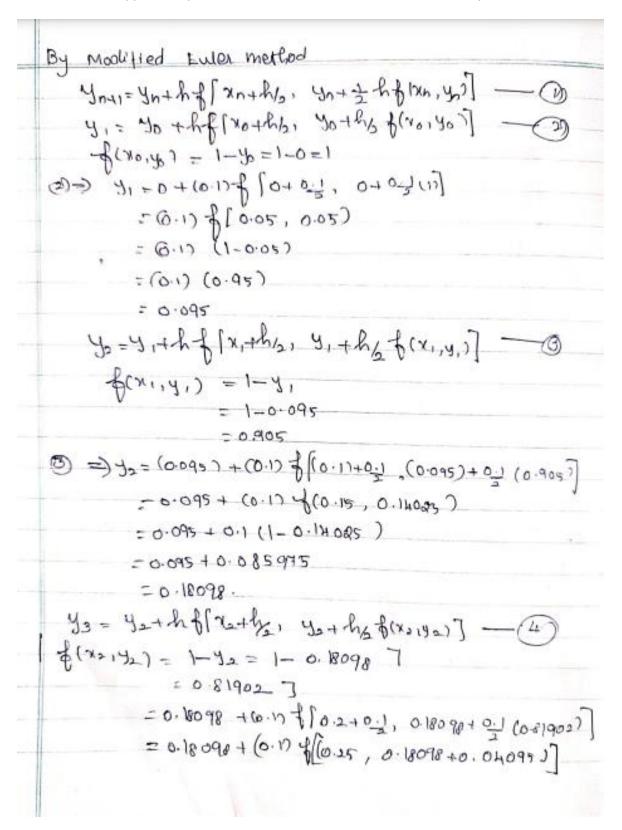
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= (0.8787) + 0.0778069 = 0.858787			
4(0.1) = 0.095			
y10.27 = 0.18098 , y10.50 =0.258787			
exact sol		0.00 37 -0.036 10+	
		gives = du	
	: _ log (1-	-4) = x+C.	
	20g (1	-A) = -x-c	
	٠٠. ١	5 = e7.A	
41	X=0, y=0		
	1.1.	= 1-e <sup>x</sup> //	
Using	this exact		
. 7	460.17 =	1-e-1 0,9516258	
	0	1-E0.2 = 0.181269247.	
		1-e-0-3-025181779,	
The vo	-	tobulated,	
X	M·E	Exact bolu	
0.1	8 95	0.9516	
0.2	89081.0	0-181811	
0.3	0.258787	0.25018	