		DOM5 Page No.
	Question 7	Date / /
	DFT of N-numbers can be writt	en as
	$f_q = \int f(\kappa) w^{q \kappa} -$	
	K=0	
	- iat	
	where $W = e^{-ia\pi t}$	
	Scaling is ignored as it would no calculation of time complexity.	ot affect our.
	calculation of time complexity.	
	lets assume N=r,r2	
	then	
	2=211,+20 ; 20=0,1	1, \(\gamma_1 - 1\)
	9,=0/1	, ··· r <sub>2</sub> -1
	·	
	K= K1/2 + K0 ) K0=011,	
	K1 =0,1,.	
	In terms of these indices; eq D can	be written as
	1 2 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	(gtko)
	f(20,91) = > > f(K11K0) W9(K	
	9 (K12+K0) K218112 WOK182 W	tiriko 70Ko
	gakira girika	20Ko
	= W DON'T W	W
	leti diline	
	let dyine  f > f(K1/K0) W201	K112
	J1 _ J (17/10) VV	
	then A	
	2	19.n.+9.7k
	f(90,91) = ), f, (20, Ko	(217) +20)K.
	R.	
	There are N-operations in elements	in f, (2.,k.)
	each requiring rioperations to	obtain fi-
1000	Sca	nned with CamScanner

4	Similarly it to be Date of 1		
	Similarly it takes No		
1	Similarly it takes Nr2 operations to get of (20,21)		
	this two steb along		
	operations. Step algorithm requires T-N(11+12) (2)		
1	For m-step algorithms 11:		
	For m-step algorithm this generalises to T= N(ri+ri++rm), where N=ri+ri++rm. 3)		
	emma 1		
K) IN	Sjotty < rj Where  sjotty < rj Where  sjotty < rj Where  sjotty < rj Where		
	The Table 1912		
100	so It Nis highly composite then T can be minimised further giving good reduction in time complexity.		
	minimused further giving good reduction in time		
	completity. Literary personal bearing liver		
<del>- b</del>	160 all to equality in lemma 1 there is not loss		
	Also due to equality in lemma 1 there is nos loss if factors of 2 are combined.		
	the state of the s		
	it rier il i consequence in the		
4	It rier + j		
4	if $r_j = r$ $\forall j$		
13- 13-	It rier + j		
13 rue	It rier + j		
t 30 Non	It rier + j		
in the state of th	It rier + j		
13	It rier + j		
Lan Kan	It rier + j		
L'AND	It rier + j		
L'A	It rier + j		
in the state of th	It rier + j		
L'AN L	It rier + j		
13 - 13 - 13 - 13 - 13 - 13 - 13 - 13 -	It rier + j		
1	It rier + j		
L'AN CO	It rier + j		