	C31
	101110728 Date
	TUSHOZSKIZMA
	DAA- Assignment Page No.
0	void functiontry
	1 int J=1, 1=0;
	while (ikn)
	λ i+= J;
	J++;
	3
	for 0/13=100 vi=18 11/05 Tw Uno -000 10
	J=3 i=1+2+3 J
	1007
	: 1+2+3++ <n ()<="" td=""></n>
	1+2+3+m <n< td=""></n<>
	winth XV
	Manual Constant
	m & Jn
	by Bummation method
	1= 1+1+ In times
	1.7(h)=1/h 100 100 100 100 100 100
	Calledon 1
(\$)	For Fibbonacci series
	F(n) = F(n+)+ F(n-2)
	F(0)=0 F(1)=1=1=1=1=1=1=1=1=1=1=1=1=1=1=1=1=1=1=
	C.
	E(n)
	f(n-1) f(n-2)
	C(+2) F(n-4)
	F(n-1) F(n-3) (F(n-3)) (F(n-3))
	/ Via Comment of the
	PCI) F(0)
-	

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at every function call we get for n levels	two function cars
We have = 2x2 n timus T(n)=2n	
minimum Space: Considering rec Stack:	MrSive
No or come work = u	
for each call we have space a	subject to oth
:. T(n)=0(h21	
2)	
a) n logn	h) + + + + + + + + + + + + + + + + + + +
quick sort (int aro (), intl, in	
fif(l(h)	
dint pi= portion (air, lgh?	
Function, l, pi-U	
Func (arr pi+J, h);	
A service of the serv	=1
int partion (intax [], intly inth	
dipt bi=ovuEh]	
$inti=(\lambda-1);$	Alaman and Il Maria
For (int J=1; J <= h; J++)	
Lif (anki) Light (anki) > 1: b	
ditt;	
Swap (ann Ci) ann Ci)	
James March Cale	
7	,

Swap (ann(i+1), ann(n))

return cit b;

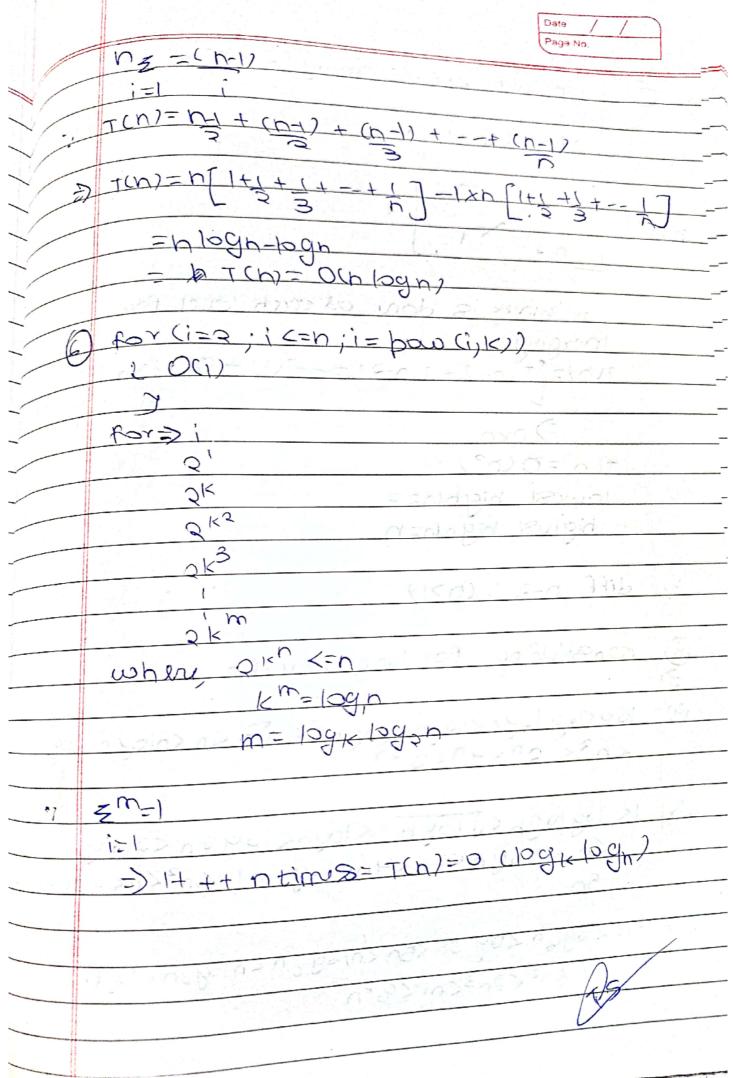
(a) n logn

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24	
12	Oate / /
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(b)	<u>43</u>
+	
	multiplication of tub sou
	multiplication of two square matrix
	Por (i=0;ich;itt)
	d for (T-D
	d for (J=0; J<6; J++)
	(resci)[]+= aci][k]*b[k][j].
	TRESCIDENT += aciTek7* hek7877.
(02	100(100 m) 10 m/s 1 m more 1 mm
1	for (C=2; i <n; i="i+1)-</td"></n;>
-	(c+t;
	7
(4)	T(n) = 7 (h/4) + I(h/2) + Can?
	(EADDO POPOLO CONTRACTOR OF THE PROPERTY OF TH
	n = 0
	- D
	T(h/2) T(h/2) ~
	(i= ren/ren-tin/g) 6
	T(h/4)
	7(n/6) T(n/16) /
/	
	Af level > Och?
	$1 \rightarrow D_3 + D_3 = C2D_3$
	L 22 (6 2484)
	$0 > -3 + n^2 + n^2 + n^2 + n^2 = (5)^2 n^2$
_	
	83 (63 H3 d5 (8)
	13.5

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4	Date Page No.
	max lengt= p = q = k= log > p
	$T(n) = \left[n^2 + \left(\frac{5}{16} \right) n^2 + \left(\frac{5}{16} \right)^2 + - \left(\frac{5}{N} \right) \log n^2 \right]$
	$(n)=cn^{2}\left(1+5+(5)^{2}+-(5)\log^{n}\right)$
- =	$T(n) = cn^2 \times 1 \times \left[\frac{1 - (5) \log n}{1 - 5116} \right]$
	$= \frac{2n^{2} \times 11}{5} \left(\frac{1-(5)}{(4)} \log n \right)$
	. t(n)= O(n2)= O(cn2)
(5)	for (i=1: i/=h. iii)
0	for (i=1; i <=n; i++) d for (J=1; J < n; J+=i)
	3
for i	3
	1+3+5
3	
	(Mar)
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	Date / / Page No.
	given also vivides array in 99% & 1%
	wat.
	: +(n2=T(n-1/+0(1)
	n 7
nie	se 1 = n-1 2
	n-2
	on work is done as each level for
	T(h)= [T(n-1) + T(h-2) +7(1) + O(1) xn]
	3 nxn
	TUNEST PIGHUES
	highest highligh
-,	diff= n-2 : (n>1)
(D)	considering for lange value of n'
(4)	rus suchues su rus such chonis
	< 4 5 5 4 5 4 4 4 5 5 4 1
1-	16 100 100 6 5 109h < 109n < 1097n < 2109n
<u>(b)</u>	1< log logh (Jiogn < logn< log 2 n < 2 log
	5n
(0)	9/2 <1096 u 708 3v (2v <1)-8 (u < u / b > 106 (u))
	<80,<303<01<8,0
Themself pro-	