	Horjot Singh Oberai	Date
-	15114032 CS-1	Page No
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01	7/10/- 07 (10/o) 2	
Q 2	$T(n) = 2T(n/2) + n^2$	
Q3	$T(n) = 7T(n/2) + n^2$ $T(n) = 7T(n/2) + n^2$	
Q4	$T(n) = T(n-2) + n^2$	
Qs	$T(n) = 3T(n/3) + 2n/\log n$	
	llogn	
	7	
Ans 1	Submitted	
Ans 2	$T(n) = 7T(n/3) + n^2$	
	T(n)	$n^2$
	7(n/3) 7(n/3) 7(n/3)	7 n <sup>2</sup>
	1111	9
g.		
		1
	1. 2	
	T(n)= N2/ 1-7 + 72 =	
	9 92 8	)
	T(n)= n2 (xaa)	\ = \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
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Ag3	C.S. Hal
	Sub mitted.
As4	$T(n) = T(n-2) + n^2$
	$T(n-2) = T(n-5) + (n-2)^{\frac{1}{2}}$
	4
	2
	T(2): T(0) + 2
<del>3</del>	
	$7(n) = (n-2)^2 + (n-4)^2 - 2^2$
Con	1/2
101	200 = $(2k)^2 = n(n+1)(n+2) = O(n^3)$
for	$\operatorname{odd} \tau(n) = \left\{ \sum_{k=1}^{\infty} - \frac{\sqrt{2}}{4(2k)^{2}} \right\}$
for	$\frac{dd}{dt} = \frac{\pi}{(n)} = \frac{\pi}{2} \frac{1}{(2\pi)^2}$ $\frac{\pi}{(2\pi)^2} = \frac{\pi}{(2\pi)^2}$
for	$\frac{dd}{dt} = \frac{\pi}{2} \left( \frac{\pi}{2} \right)^{2} + \frac{\pi}{2} \left( \frac{\pi}{$
for	$\frac{dd}{dt} = \frac{1}{2} \left[ \frac{1} \left[ \frac{1}{2} \left[ $
for	
for	= n (n+1)(2n+1) - n (n+1)(n+2) $= n (n+1)(n-1)$
for	= n (n+1)(2n+1) - n (n+1)(n+2) $= n (n+1)(n-1)$ $= 6$
for	= n (n+1)(2n+1) - n (n+1)(n+2) $= n (n+1)(n-1)$
for	= n (n+1)(2n+1) - n (n+1)(n+2) $= n (n+1)(n-1)$ $= 6$
For	= n (n+1)(2n+1) - n (n+1)(n+2) $= n (n+1)(n-1)$ $= 6$

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Aus	T(n)= 37 (n/3) + n/logh	
	$\mathscr{E}(n) = \mathscr{E}(n)/n$	
	nf(n) = 3(n/s) f(n/s) + n/pgn	
	f(n)= f(n/3) + 1/logn	
	less fin re- me en	
	p(n/2) b(n/3) /log(n/3)	
	((n/3) 6(13) 6(13)	
	The state of the s	
	$\begin{cases} (n)^{\frac{1}{2}} & \frac{1}{2} \\ \frac{1}{2} & \frac{1}{2} \end{cases}$	
	Kazo log (n/3k)	
	= 6 (1 + 1)	
	logn Pogn-1	
	logn.	
	$\frac{\partial}{\partial x} \left( \frac{\partial}{\partial x} \frac{1}{2} \right)$	
	f(n) = B (log (logn))	
	$f(n) = B(\log(\log n))$ $7(n) = n f(n) = O(m \log(\log n))$	