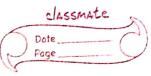
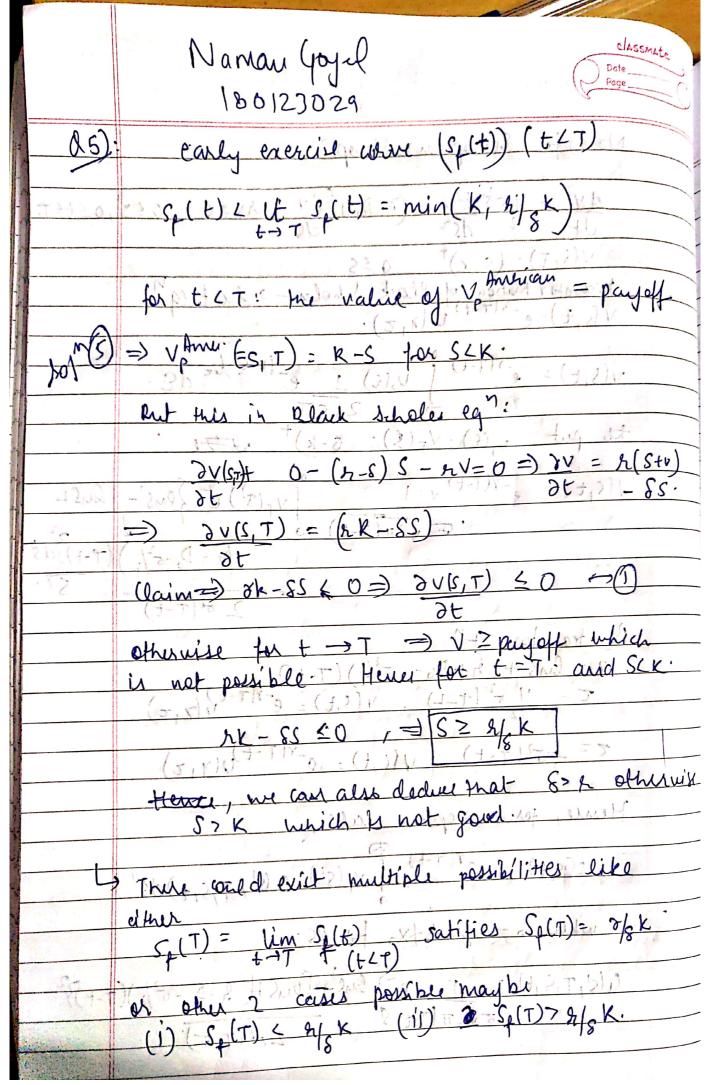
	Namau Gayal classmet
	Namau Gayal 180123029 Classmat
	Well was a la terropolitation will be
10/h(2	young FTCS.
	Live to the state of the state
	(1, 1) =) W -1 (1-2) W; +) (0; +), v.
	A = AC oto Bushings ()
•	Δx^{2}
	so coff matrix = (1) (1000 most
	A = [1-22 -0]
	λ 1-2/ / 0
	- The te delivether of a and by a fine
	THE PRINT ISL WID UN 142A - TO THE
	Soul = Awi who for V. = Oul, 2, + Vmgx-1
1	Winds to the to the state of the there
auto	V() - A () V
	CONTRACT IN 64 NEO
. 10	exact weiters of will = Aw + d is w > subject to rounding creoning exacts exacts with the rounding creoning and result by
3 6 3 1 12	This is the state of the state
hersi	every ext. D(V), who all the onlying /
	and result of Min only withthis
	(VT) = ADV + -tofy VH
	- (x) W(vr) Z AD (+ + + + + + + + + + + + + + + + + + +
•	E-= (K) H early of chard fork? tot all
	Effect of initial rounding error e(8) have on the Heration is (Let $v = 0$ for $v > 1$)
	which will be to the the the state of the st
	$Ae^{V} = A\overline{U} - A\overline{U} = \overline{U}(V_{1}) - \overline{U}_{1} = e^{V_{1}}$ $= Ae^{V} = e^{V_{1}} = e^{V_{2}}$
	$\Rightarrow Ae^{V} = e^{V(1)} \Rightarrow e^{V} = A^{V}e^{(0)}$

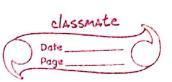
Naman Goyal would



	for stability u regime A'e(2) ->0 for v->0
1173	bodioner tare (3) = On A mode por
	V-) NO
	which is true 1/1 spural radius of A'()
	p(A)= max(hi) <1
	Where 4, lin-1 -> eigen values of A-
	where U = Mm-1
	for G: XB0 EPXN.
	B
	1 Y X
	C 1104 No
	the eigen value are 1/4 = x + 2\bar{5} \frac{1/3\cos(NT)}{N+1}
	1. A= - 1 2 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1 -1
	T 00:
	= I - AG. = I - AG. = I - AG. = I - AG.
	4 = 1-44 x=2, B=Y=-1. N=M=1.
	$\frac{y'' = 2 - 2\cos\left(\frac{kT}{m}\right) = 4\sin^2\left(\frac{kT}{2m}\right)}{m}$
	$M_{\kappa} = 2 - 2\cos\left(\frac{\kappa p}{m}\right)$
	1/ = 11-42 sin2(K).
	Mx (200).
-1	to stubility Mx 21 = 1-47 Sur(KM) (2m)
-)	R=1,2,-M=1
	=> >> and -1 <1-42 shi2 (KIT).
	$\Rightarrow \wedge \text{SM}^2(\text{Kit}) < \sqrt{2} \Rightarrow \Rightarrow \lambda < \frac{1}{2}$
	2M)



Namau Goyal 180123029



(1)	There is S duch that St (T) < S < 3k.
1	, 0
	Thun <u>dv(s, 7)</u> = lk - 85 > 0
	1
	but dain O this is not possible.
(1)	Thue is S such that of & < SK Sp(T).
(1)	8
	Then rk < 85 and k(erdt_1) < 5(e 8 dt_1)
	which implies that divident earns more than
	which supplies my early exprise standarts
	the interest out & coverige to be fact that
	be executed. This It constations in
	hhich implies that dividend earns more than the interest on K., early exercise shouldn't be executed. Thus it contradicts the fact that S < S & (T)-
	hast case $\rightarrow 8 \leq r$.
	'. So (I) > K & not possible. I
	hast case $\rightarrow 8 \le r$. ! $S_{p}(T) > k$ is not possible. \Rightarrow Assume $S_{p}(T) < k$ then for $S_{p}(T) < S < k$ and $t \approx 7$.
294.1	
	dv = rk-SS but rk-SS>0
<u> </u>	dt
44	which can't be possible as LHS 50 and RHS70.
	Henel, Sp(7) = K for 8 \(\frac{1}{2} \).
	Hence, Secrit
	Here we can touchast lande from about
	Here we can touchair with
	discussion that
	ok lim Sp(t) = min(K, 8/8 K).
	tk lim (t) = MM(N)
7	The state of the s
(EXAM) A	L-11