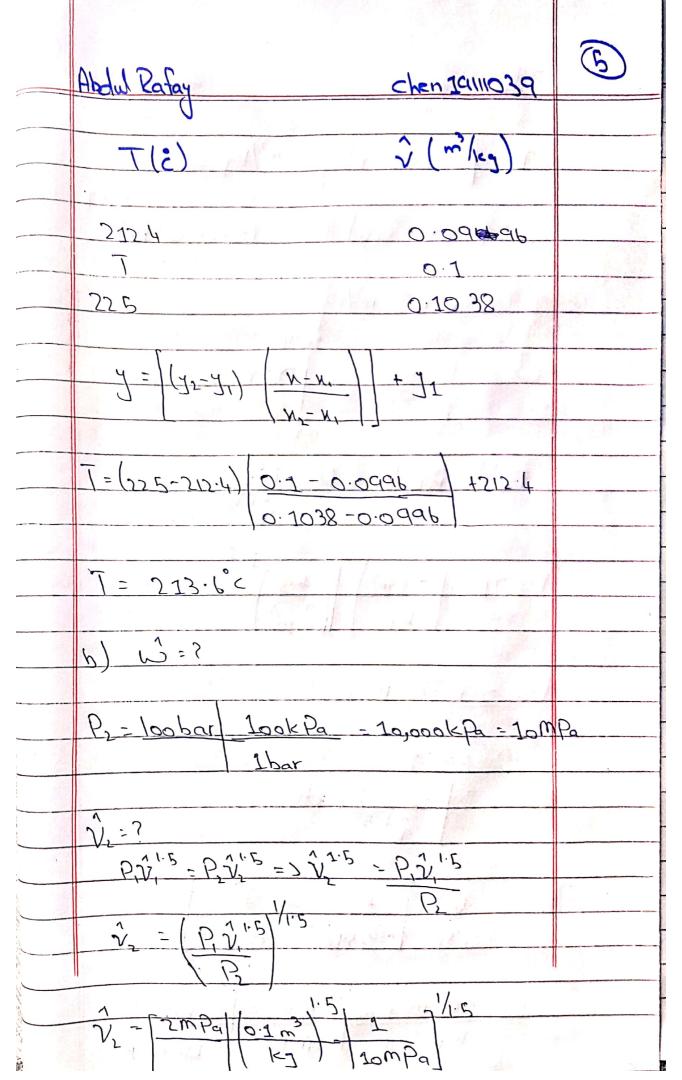
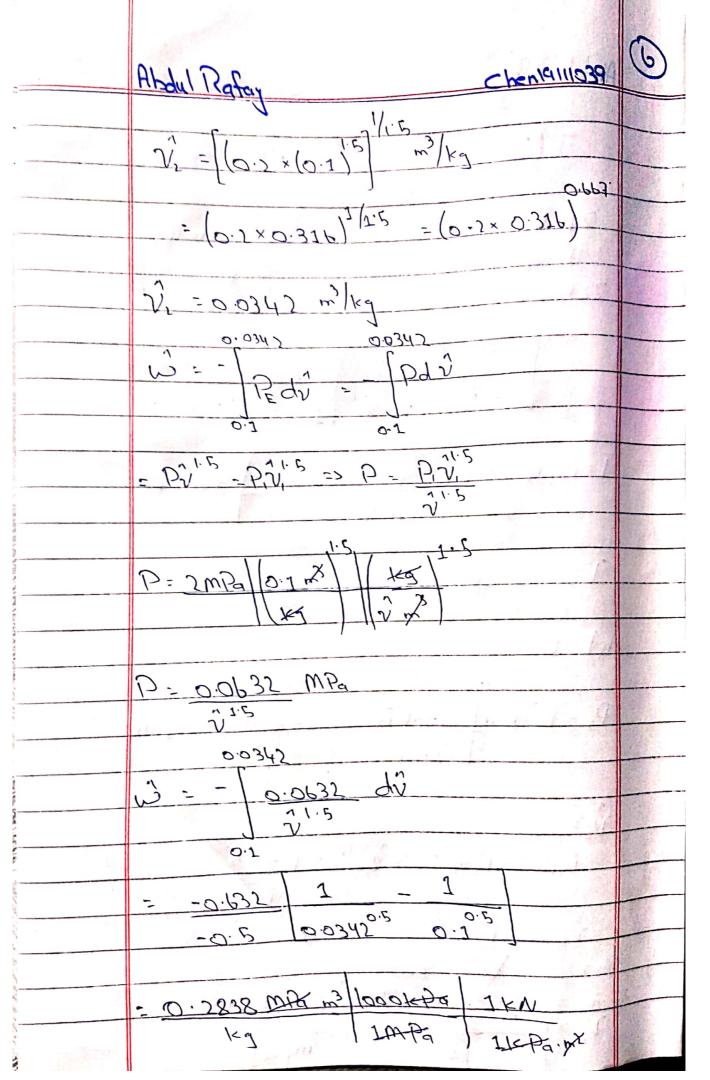
	1
Abdul Rofan	
Abdul Rafay Thermodynamics	4
Dr. Amir	
Chemical Engineering	
Chen 19111039	
and we wife the	
Answer: no:1	
Defination:	4.
3 System: - consideration Anything under (concentration)	
Hnything under (concentration)	
that have some inputs by which some	
process is going on and producing some	
output is called system.	
) Adiabatic Process:-	
It is the process	
in which the system is not able to	
exchange mass as and heat from the	
surrounding, is called adiabatic process.	
but can exchange energy in the form of work	
· Surrounding:	
Everything that is other then system and boundry is	
called surrounding.	
7	

n.	Abdul Rafay Chen 19111039	0
		TO D
١	Isobted suchair	
W.A.	Isolated system:- It is the type of	
		30
	System in which the neither mass	
	nor chergy could be exchanged from surrounding in any form:	
	Example: - Vacume flask.	
.)	Extensive Property:- It is the type of property which varies with the amount	
	It is the troe of	
	property which varies with the amount	1
	of matter change It can be observed 3	/]
	measured without any chemical change (reaction)	
	occuring.	
	Answer no: 2	
\	- A - A - A - A - A - A - A - A - A - A	
	Data:-	
	P=7bar	
1	h = 2600 KJ/kg.	
1	Lindy	
	Calculate:	10年
		1.
	v = 3	
	$\hat{\mathbf{u}} = \mathbf{?}$	
	U-(

Abdul Rafay chen 1911103	A 3
O .	
Solution:	
as we lenow	
h=hf ruhfg	
2600 = 697.1 + N (2064.a)	
2600 -697.1 = x(2064.9)	
1902.9 = x (2064.9)	
N = 1902.9	
50PM-d	
N = 0.051	
3 = V+ + V V+3	
=0.001108+(0.921)(0.273-0.001108 =0.01108+(0.921)(0.271892))
= 0:001108 + 0:25041	
= 1/0.2515 m3/kg/kg	
Now it = Uf + NUFT	
= KOKS X (XOX)XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	
u=696.3+(0.921)(1874.8)	
Q = 696.3 + 1776.6908	
u= 2420 KJ/kg	3
	Source .

	0.1.0.0	(H)
	Abdul Rafay Chen 19111039	
	Answer no:3	V () 4
	Data:-	
	m= 100 kg	
	P = 20 bar	
	$V_1 = 1 \cdot 0 \cdot m^3 \cdot \mu \cdot h \cdot h \cdot \mu \cdot h \cdot h \cdot h \cdot h$	
	P2 = 100 bar 1911 /4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	LONE LYE B SEB	
	Paralion = Prost = constt	
	1=3	
	Pi = 20 bar 100 KPa = 2000 KPa	
	1 1 bar 1 = 2 mPa	
	vi = 1.0m3 - 0.1m2 kg	
-	$\frac{v_1^2 = 1.0 \text{m}^3}{10 \text{kg}} = \frac{1.0 \text{m}^3}{10 \text{kg}}$	
	1 No de St 10 k 1 10 1 2 1 1	
	by steam table at P=2MPa	
	7	3
	$v_{j}^{2} = 0.0012$, $v_{k}^{2} = 0.0996$	
	since 20 > 22 at P => mPa	
	since 20 > 26 at P=2 mPa	
	the steam is superheated.	
1	The state of the s	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	





Abdul 12 afay	ChenIQIID39	D
= 583.8KJ/kg	The II Resident	
	100000000000000000000000000000000000000	
~ = 283.8 KJ	1/4	
	A L L Marine	
c) V=3		
7 1	7	
<u> </u>	V	
at state 1, P1=	2mpa T1=213.12°C	
4, = ?	LA & D. M.	
4, (KJlkg)	7(2)	
2600.3	212.4	
u ₁	513.6	
5958.3	552	
n'= 3P05.	27 KJ1Kg	
	= 10mpg 2/2=0.0342 m) rg
W, (K] K3)	25 (m) [kd]	1
3045.8	0.358	
û.	0.0342	
3144.5 7 = 309	19.15 KI 1cg	

Abdull 2 a fay	Chen 1911039	
$\Delta u^{2} = u_{2}^{2} - u_{1}^{2}$:
_	1.613	
= (3095.15-268	12.97/KJ/Kg	
		,
 <u> </u>	1<9	
$\Delta \hat{y} = \hat{y} + \hat{w}$		
2 - 0y - w	Carlo Maria	
	J. Comments	
 v = (492.18 - 29	83.8) KJ(Kg	
7		
v = 208.38 k]	i kaj.	
	7	
 d) 7=?	1811 B	
	71	
 T2 (2)	N (m) Ird)	
 F	. W	
 500	0.0378	
T 550	0.342	·
 Line to the second seco	0.0356	
 T2=525.1	0 (
	- H Copole to	
	Luk 1	3
A ST		