

	mis 19 c. M. 1201 : Quiz och ja seus and
	Name: Pryausly Mahato Roll No.: pm21m8002
	PV= nRT
Q.	Given 308 x 1880.0x8 = 791 = 200.9 =
-	01 A 702720
	$a = 1.4 \text{ atm } L^2 \text{ mol}^{-2} = 1.4 \text{ atm } L^2 \text{ mol}^{-2} = 1.4 \text{ atm} L^2 \text{ mol}$
	b = 0.04 Lmol-1
	Val. of gas = 10L
	No. of moleco (n) = 2 mel and po moles
	T = 300 K
0)0	Pencentage Deulation = Pideal - Press 1 x 400
	Using the Vander Wasis Roal Gas Eg? :-
	(P+am²) (V-mb) = mRT
	=> (P+ 1.4 x4) (10-2x0.04) = 2x0.0821 x 300
	=> (P +2.56) : (9.92) = 149.2600 × 210.0 <=
	4.926 4.926 (000)
	$= \frac{1}{1000} = \frac{49.26}{9.92}$
310	* Percentage Deviation 9 der Believe
	P + 0.052 = 4 .966 22 - 0 =

p ~ 4.91 atm

.. Pressure of Real Gas = 4.91 atm

According to the Potent Ges Eg?:-

PV = mRT $\Rightarrow P_{ideal} = mRT = 2 \times 0.0821 \times 300$ 10

=> Pideal = 49.26 = 4.926 atm | 1.1 = 5

Extent of deviation from Ideal Gas :-

Percentage Deviation = | Pideal - Preal x 100°60

Pideal - Preal x 100 = 4.926 - 4.926

A.926

0.016 x 100 = 1.6 = 0.325 9 = 4.926

> Percentage Deviation from Ideal Behaviour 4