

**Subiectul B.ELEMENTE DE TERMODINAMICĂ**

<b>II. a.</b>	$N = \nu_{O_2} N_A$ <p>Rezultat final: <math>N = 1,2 \cdot 10^{24}</math></p>
<b>b.</b>	$V = \frac{\nu_{O_2} RT_0}{p_0}$ <p>Rezultat final: <math>V = 45,37 \cdot 10^{-3} \text{ m}^3</math></p>
<b>c.</b>	$\mu = \frac{m}{\nu} = \frac{\nu_{O_2} \mu_{O_2} + \nu_{N_2} \mu_{N_2}}{\nu_{O_2} + \nu_{N_2}}$ <p>Rezultat final: <math>\nu_2 = 6 \text{ mol}</math></p>
<b>d.</b>	$p = \frac{\nu RT_0}{V} \text{ sau } p = p_0 + p', \quad p' = \frac{m_{N_2}}{\mu_{N_2}} \frac{RT_0}{V}$ <p><math>m = m_{O_2} + m_{N_2}</math></p> <p>Rezultat final: <math>p = 4 \cdot 10^5 \text{ N/m}^2</math></p>