

MUSTAQIL ISHLASH UCHUN MASALALAR YECHIMLARI

1-masala yechimi

$$\text{NS da } 22.4 \text{ L} = 1 \text{ mol}$$

$$11.2 \text{ L} = 0.5 \text{ mol}$$

$$M = m / n = 14 / 0.5 = 28 \text{ g} \cdot \text{mol}^{-1}$$

2-masala yechimi

$$V = 4.0 \text{ L} = 4.0 \cdot 10^{-3} \text{ m}^3$$

$$M = (m \cdot R \cdot T) / (p \cdot V)$$

$$M = (0.006 \cdot 8.31 \cdot 300) / (1.5 \cdot 10^5 \cdot 4.0 \cdot 10^{-3})$$

$$M = 14.958 / 600 = 0.0249 \text{ kg} \cdot \text{mol}^{-1} \approx 25 \text{ g} \cdot \text{mol}^{-1}$$

3-masala yechimi

$$\text{H}_2: 5.6 \text{ L} \rightarrow 0.25 \text{ mol} \rightarrow m = 0.25 \cdot 2 = 0.50 \text{ g}$$

$$\text{CO}: 11.2 \text{ L} \rightarrow 0.50 \text{ mol} \rightarrow m = 0.50 \cdot 28 = 14.0 \text{ g}$$

$$m_{umumiy} = 14.5 \text{ g}$$

4-masala yechimi

$$n = m / M = 10 / 28 = 0.357 \text{ mol}$$

$$V = (n \cdot R \cdot T) / p$$

$$V = (0.357 \cdot 8.31 \cdot 400) / (2.0 \cdot 10^5)$$

$$V = 1187 / 200000 = 0.00594 \text{ m}^3$$

$$V = 5.94 \text{ L}$$

5-masala yechimi

$$n_{umumiy} = 3 + 5 = 8 \text{ mol}$$

$$\varphi(\text{O}_2) = 3 / 8 = 0.375$$

$$p(\text{O}_2) = 0.375 \cdot 1.6 = 0.60 \text{ atm}$$

6-masala yechimi

$$\text{H}_3\text{PO}_4 \rightarrow z = 3 \rightarrow E_1 = 98 / 3 = 32.7$$

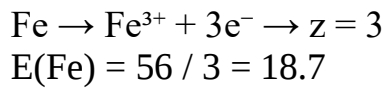
$$\text{NaOH} \rightarrow z = 1 \rightarrow E_2 = 40$$

$$m_1 / E_1 = m_2 / E_2$$

$$14.7 / 32.7 = m / 40$$

$$m = 18.0 \text{ g}$$

7-masala yechimi



$$5.6 / 18.7 = m / 8$$

$$m = 2.4 \text{ g}$$

8-masala yechimi

$$22.4 \text{ L} = 1 \text{ mol}$$

$$N = n \cdot N_A = 1 \cdot 6.02 \cdot 10^{23}$$

$$N = 6.02 \cdot 10^{23} \text{ molekula}$$

9-masala yechimi

$$V = 0.56 \text{ L} = 5.6 \cdot 10^{-4} \text{ m}^3$$

$$M = (m \cdot R \cdot T) / (p \cdot V)$$

$$M = (0.0008 \cdot 8.31 \cdot 350) / (2.0 \cdot 10^5 \cdot 5.6 \cdot 10^{-4})$$

$$M = 2.327 / 112 = 0.0208 \text{ kg} \cdot \text{mol}^{-1} = 20.8 \text{ g} \cdot \text{mol}^{-1}$$

10-masala yechimi

$$M_{\text{aralashma}} = 0.40 \cdot 44 + 0.60 \cdot 28$$

$$M = 17.6 + 16.8 = 34.4 \text{ g} \cdot \text{mol}^{-1}$$