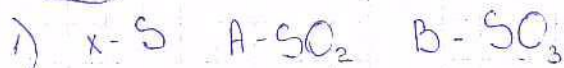


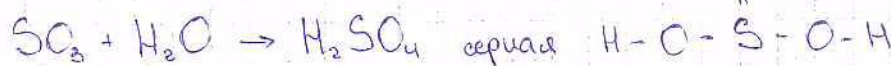
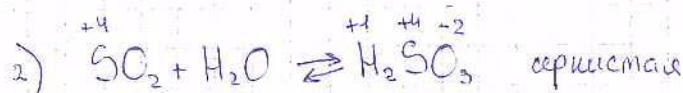
Общий балл	Дата	Ф.И.О. Жюри	Подпись
61,5	11.03.25	Радомы	ymc
Шифр			025 - 2 K - 24

8-1.

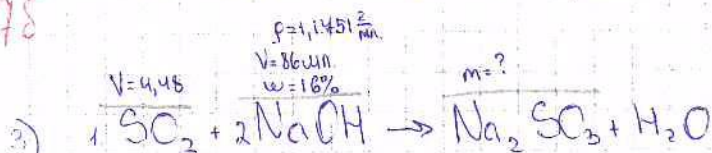


$$\frac{2}{32} : \frac{2}{16} = 0,06 : 0,12 \Rightarrow 1:2 \text{ (SO}_2\text{)}$$

75 $\frac{2}{32} : \frac{3}{16} = 0,06 : 0,19 = 1:3 \text{ (SO}_3\text{)}$



75



1. $n(\text{SO}_2) = \frac{4,48}{22,4} = 0,2 \text{ моль}$

$m(\text{NaOH}) = V \rho = 86 \cdot 1,1451 = 101 \text{ г}$

$m_{\text{исст}}(\text{NaOH}) = 101 \cdot 0,16 = 16,2 \text{ г}$

$n(\text{NaOH}) = \frac{16,2}{23+16+1} = 0,4 \text{ моль}$

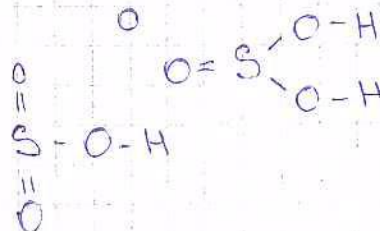
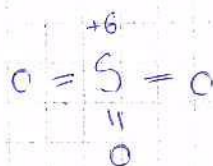
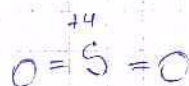
$m_{\text{исст}}(\text{Na}_2\text{SO}_4) = 0,2 \cdot (23+32+16 \cdot 4) = 25,2$

$m_{\text{расч}}(\text{Na}_2\text{SO}_4 + \text{H}_2\text{O}) = 101 + 12,8 = 113,8 \text{ г}$

$m(\text{SO}_2) = 0,2 \cdot (32+16 \cdot 2) = 12,8 \text{ г}$

$\omega = \frac{25,2}{113,8} = 0,2$

1 2 3 4 5
20 8 12,5 15 6



1 + 7 + 6

205

Общий балл	Дата	Ф.И.О. Жюри	Подпись
61,5	11.03.25	Радусов	Радусов
		Шифр	025-2 5-84

Шифр

025-2
K-24

8-2.

4	-	C	=	3	✓						
~				+							
X				P		b	-	m	=	8	
=				=		-				+	
4		K		18	+	d	=	22		e	
		-				=				=	
		n	-	f	=	16	✓			14	
		=		+							
✓		4		S	+	g	=	10	✓		
				=		+		-			
e	-	t	=	6	✓	z		g			
						=		=			
						g		g	✓		

 $a = 8$
$$b = 10$$

$c = 5$

$$d = 4$$
$$e_1 = 2$$
$$f = \sqrt{\quad}$$
$$Q =$$
$$k = 1$$

2. $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$

$$0 = 1$$
 $\sigma = 1$

0.72

5.

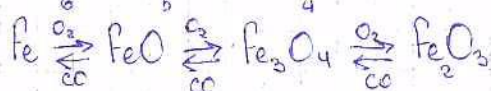
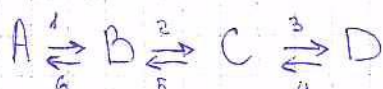
f = 7

 $\chi = \frac{1}{2}$
$$u =$$

2. 5.

12,58

7-3



A hand-drawn diagram of a cell. It consists of an outer oval boundary. Inside this boundary is a smaller, roughly circular nucleus. Within the nucleus, there are several small dots and a larger, darker, irregular shape representing the nucleolus.

$$w_1 = \frac{56}{56+16} = 0,4444444448 \cdot 100\% = 44,48\%$$

2.

$$w_2(O_u) = \frac{16,4}{56,3 + 16,4} \cdot 100\% = 24,6\% \quad w_2(Fe_2) = \frac{56,3}{56,3 + 16,4} \cdot 100\% = 42,41\%$$

③

$$w_3(O_3) = \frac{16.3}{56.2 + 16.3} \cdot 100\% = 30\% \quad w_3(Fe_2) = \frac{56.2}{56.2 + 16.3} \cdot 100\% = 40\%$$

4

$$w_u(C_u) = \frac{16.4}{56.3 + 16.4} \cdot 100\% = 29.58\% \quad w_u(Fe_2) = \frac{56.3}{56.3 + 16.4} \cdot 100\% = 42.41\%$$

⑤

$$w_s(C_u) = \frac{16,4}{56,3+16,4} \cdot 100\% = 29,6\% \quad w_s(Fe_3) = \frac{56,3}{56,3+16,4} \cdot 100\% = 77,41\%$$

Общий балл	Дата	Ф.И.О. Жюри	Подпись
61,5	11.03.25	Родусов В.	Родусов В.

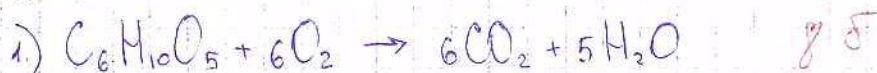
Шифр

025-2
X-24

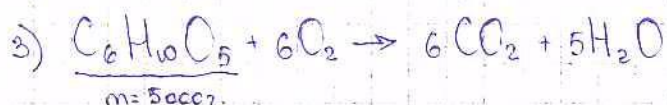
6

$$w(\text{Fe}) = \frac{56}{56+16} \cdot 100\% = 44,4\%$$

8-4.



$$2) \Delta Q = ((-394,6) + (-286,5)) - (-1060) = -2434 \text{ кДж.} \quad 25+25$$



$m = 5000 \text{ г.}$

$$n(\text{C}_6\text{H}_{10}\text{O}_5) = \frac{m}{M} = \frac{5000}{12 \cdot 6 + 10 + 16 \cdot 5} = 30,9 \text{ моль} = 40 \text{ моль} \quad 35$$

$$1 \text{ моль} = -2434 \text{ кДж}$$

$$40 \text{ моль} = X \text{ кДж.}$$

$$-2434 \cdot 40 = -109360 \text{ кДж.}$$

8-5.

