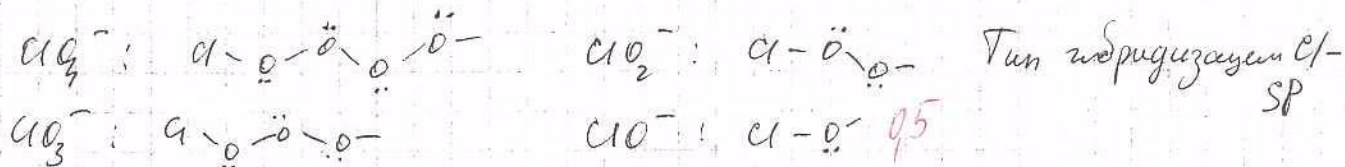


Общий балл	Дата	Ф.И.О. Жюри	Подпись
35	17.05.25	Фасутова	<i>[Signature]</i>
Шифр		025-2-X-60	

№1

1. X - хлор (Cl) A - $\overset{+1}{\text{Cl}}_2\text{O}$ оксид хлора (I) $\text{Cl}-\text{O}-\text{Cl}$
 B - $\overset{+3+5}{\text{Cl}}_2\text{O}_3$ оксид хлора (III, V) $\text{Cl}-\text{O}-\text{O}-\text{O}-\text{O}-\text{Cl}$
 4.5 C - $\overset{+5+7}{\text{Cl}}_2\text{O}_5$ оксид хлора (V, VII) $\text{Cl}-\text{O}-\text{O}-\text{O}-\text{O}-\text{O}-\text{Cl}$
 D - $\overset{+7}{\text{Cl}}_2\text{O}_7$ оксид хлора (VII) $\text{Cl}-\text{O}-\text{O}-\text{O}-\text{O}-\text{O}-\text{O}-\text{O}-\text{Cl}$

2. $\text{Cl}_2\text{O} + \text{H}_2\text{O} = 2\text{HClO}$ E - HClO хлорноватистая к-та
 $\text{Cl}_2\text{O}_7 + \text{H}_2\text{O} = 2\text{HClO}_4$ F - HClO_4 хлорная к-та
 $2\text{ClO}_2 + \text{H}_2\text{O} = \text{HClO}_3 + \text{HClO}_2$ 2 H - HClO_2 хлористая к-та 1
 $2\text{ClO}_3 + \text{H}_2\text{O} = \text{HClO}_3 + \text{HClO}_4$ I - HClO_3 хлорноватая к-та



3. $2\text{ClO}_2 + 2\text{NaOH} = \text{NaClO}_3 + \text{NaClO}_2 + \text{H}_2\text{O}$ 1

1	2	3	4	5
12	20	-	2	1

$n_{\text{ClO}_2} = \frac{4,78}{22,5} = 0,2 \text{ моль}$

$m_{\text{p}}(\text{NaOH}) = 30 \cdot 1,1303 = 101,727 \text{ г}$

$m_{\text{p}}(\text{NaOH}) = 101,727 \cdot 0,12 = 12,2 \text{ г}$

$n_{\text{NaOH}} = \frac{12,2}{40} = 0,31 \text{ моль} \Rightarrow \text{изб} 2$

$m_{\text{ClO}_2} = 0,2 \cdot 67,5 = 13,5 \text{ г}$

$m_{\text{пр}} = 13,5 + 101,727 = 115,227$ 1

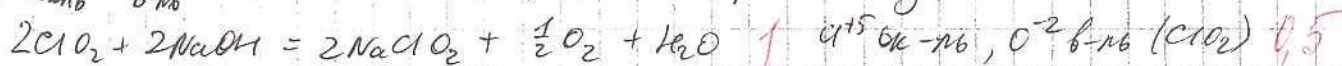
$m_{\text{NaClO}_3} = 0,1 \cdot 106,5 = 10,65 \text{ г}$

$\omega_{\text{NaClO}_3} = \frac{10,65}{115,227} = 0,0927$ 9,27% 4,5

$m_{\text{NaClO}_2} = 0,1 \cdot 90,5 = 9,05 \text{ г}$

$\omega_{\text{NaClO}_2} = \frac{9,05}{115,227} = 0,7854$ 78,54%

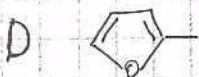
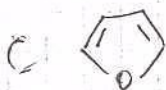
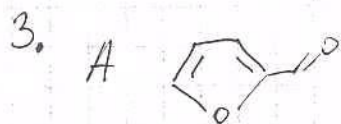
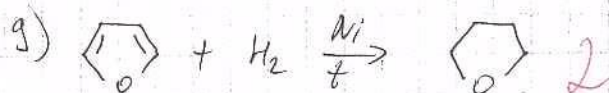
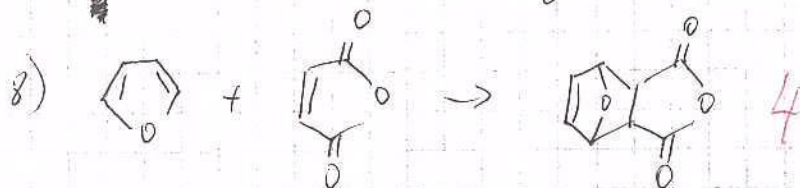
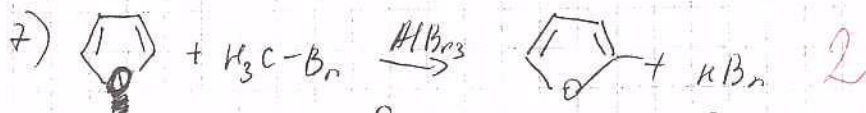
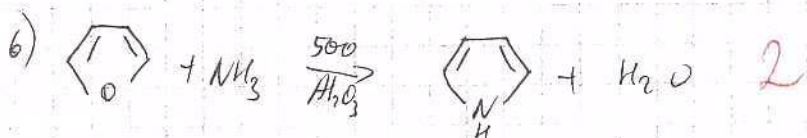
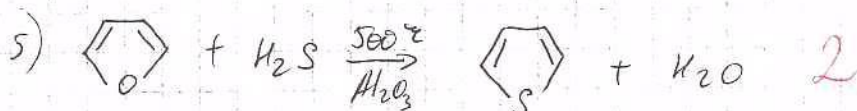
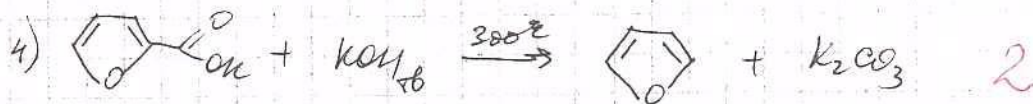
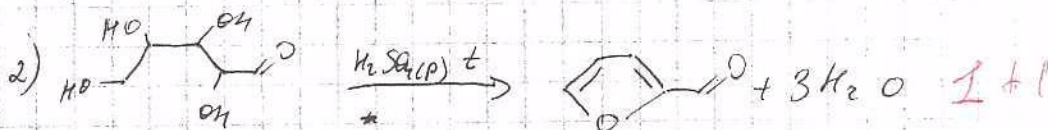
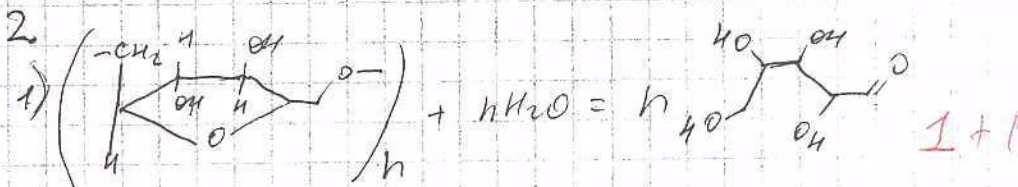
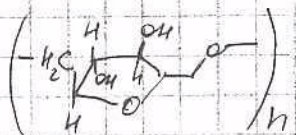
4. $E_{\text{ок-лб}} - E_{\text{в-лб}} = 0,954 - 0,401 = 0,553 \text{ В} \Rightarrow \text{р-ия возможна}$ 1



Общий балл	Дата	Ф.И.О. Жюри	Подпись
35	17.03.25	Резушкова	
Шифр			025-2-X-60

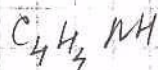
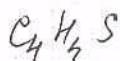
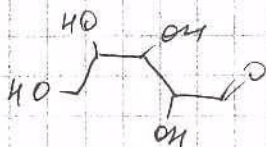
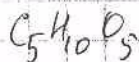
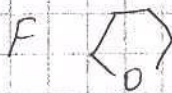
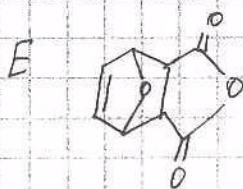
~2

1. пентозан



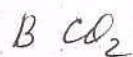
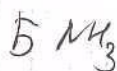
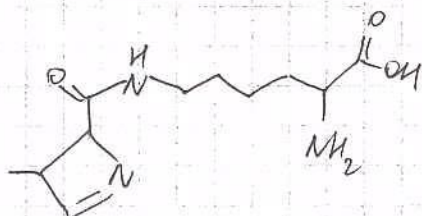
Общий балл	Дата	Ф.И.О. Жюри	Подпись
35	17.03.25	Фасутов	<i>[Signature]</i>

Шифр 025-2-X-60



~4

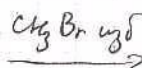
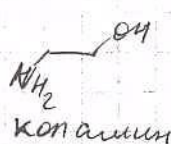
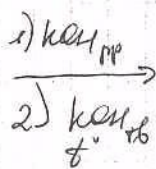
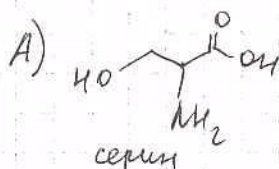
A



2

4. $I = \frac{0,025}{3,25 \cdot 10^{-3}} = 7,68 \frac{K_2}{мин}$

~5



1

2. подное число определяет насколько насыщен этот жир (сколько мол-л I_2 присоед-ет)

3. число окисления определяет необходимую величину для нейтр-цет кислоты р-ом целочи (кон)