

Общий балл	Дата	Ф.И.О. Жюри	Подпись
38	14.03.25	Фреутовская	
Шифр			919421

Задание 10-1

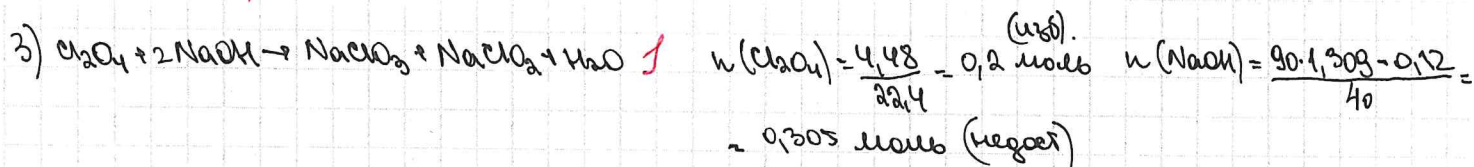
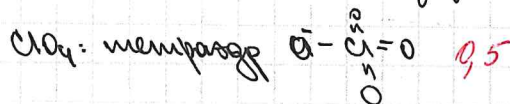
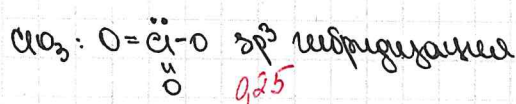
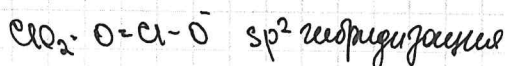
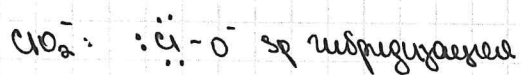
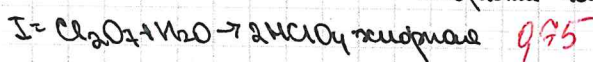
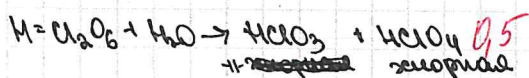
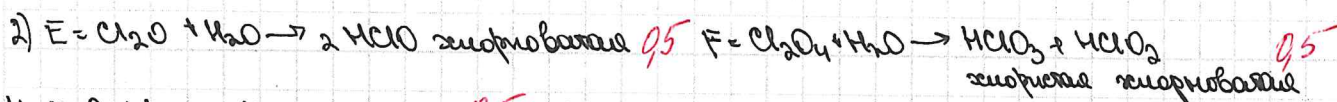
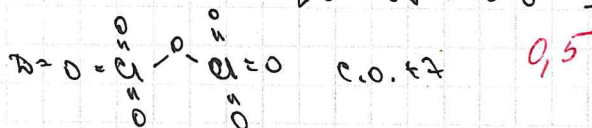
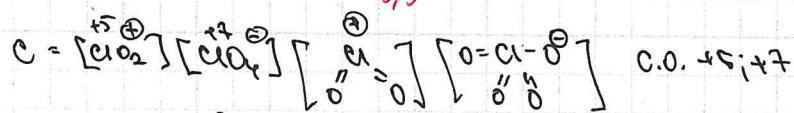
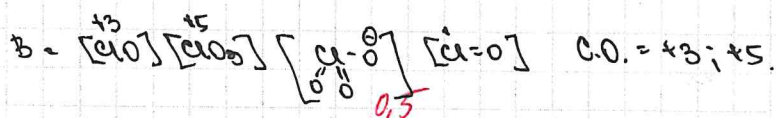
(A) $w_1 = \frac{1}{4,44} = \frac{16}{16n+35,5} \Rightarrow M(Cl) = 71,5 \rightarrow 2m(Cl) = A = Cl_2O$ $Cl \overset{O}{\underset{O}{\text{---}}} Cl$ 2+1

(B) $w_2 = \frac{4}{4,44} = \frac{16n}{16n+35,5} \Rightarrow n=2 \Rightarrow Cl_2O_4$ $O = Cl \overset{O}{\underset{O}{\text{---}}} Cl = O$

1	2	3	4	5
9,5	13,5	14	1	-

(C) $w_3 = \frac{6}{4,44} = \frac{16n}{16n+35,5} = n=3 \Rightarrow C = ClO_3$ у хлора нет с.о. +6, так что $C = Cl_2O_6$ 9,5

(D) $w_4 = \frac{7}{4,44+4} = \frac{16n}{16n+35,5} = n=3,5 \Rightarrow D = Cl_2O_7$ $O = Cl \overset{O}{\underset{O}{\text{---}}} O - Cl \overset{O}{\underset{O}{\text{---}}} O$ 1



$m_{\text{р-ра}} = 0,2 \cdot 135 + 1,9308 \cdot 90 = 129,78 \text{ г}$

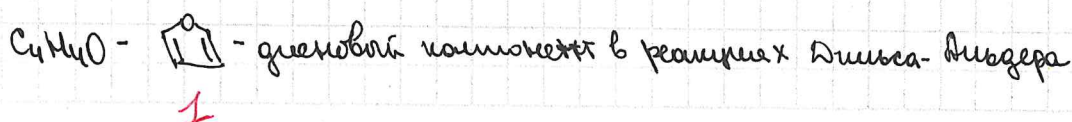
$m(NaClO_3) = \frac{0,305}{2} \cdot 106,5 = 16,242$

$w(NaClO_3) = \frac{16,242}{129,78} = 0,126 \cdot 100\% = 12,6\%$

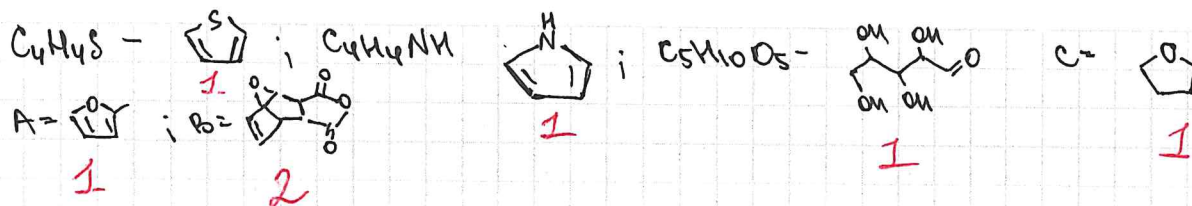
$m(NaClO_2) = \frac{0,305}{2} \cdot 90,45 = 13,82$

$w(NaClO_2) = \frac{13,82}{129,78} = 0,107 \cdot 100\% = 10,7\%$

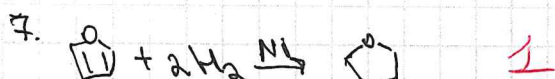
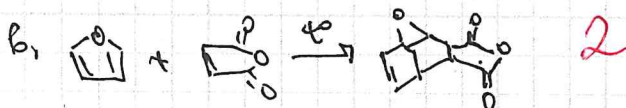
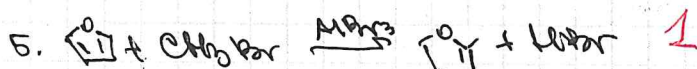
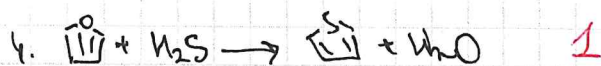
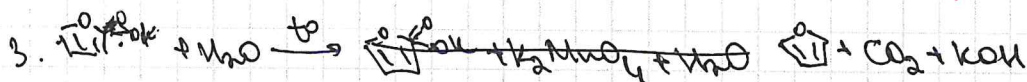
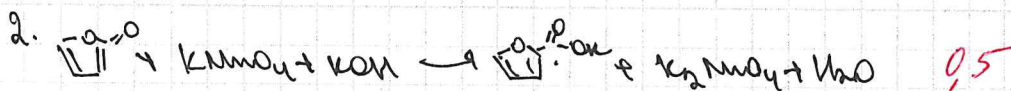
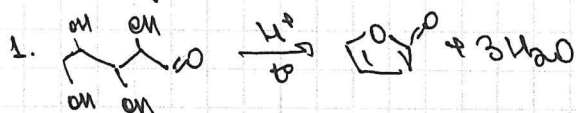
Задание 10-2.



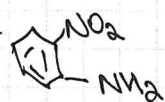
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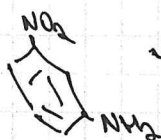
Уравнен. реакции:



10-3 1) C_6H_6 $NaNO_2$ нитроаминами



орто-нитроанилин

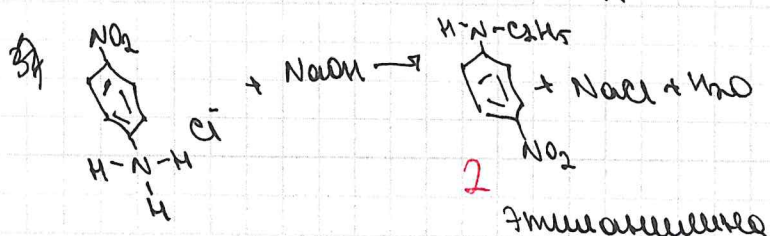
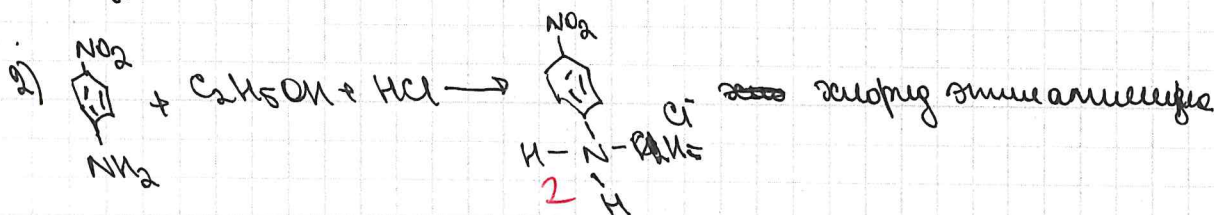


мета-нитроанилин



пара-нитроанилин

6

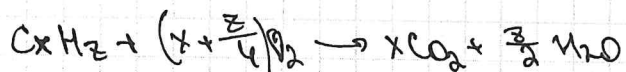
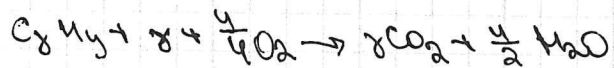


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Шифр			

Задание 10-4

$$1) n_{\text{общее}} = \frac{pV}{RT} = \frac{491,3 \cdot 8}{8,314 \cdot 473,15} = 0,999 \approx 1 \text{ моль}$$

2,5



0,5

Если парциальное давление CO_2 не влияет состав смеси $\Rightarrow x = y \Rightarrow$

$$\Rightarrow Z_{\text{м}} = \frac{44x \cdot n + 44z(1-x)}{n \cdot (12x + y) + (1-x) \cdot (12z + z)}$$

мольная доля.