

Общий балл	Дата	Ф.И.О. Жюри	Подпись
34,5	200325	Федосов	
Шифр			042032

Задача 1

1) X - Cl, A - Cl₂O, B - Cl₂O₂, C - ClO₃, D - Cl₂O₄

$$\frac{4,44}{3} = \frac{1}{16} \quad \rho = 71,04$$

71,04 - если ρ - в л 2

35,52 - Cl

A - Cl₂O, c.o. +2

Cl = 0

$$0,125 : 0,25 = 1 : 2$$

B - ClO₂, c.o. +4

O = Cl = 0

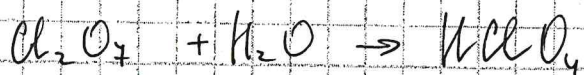
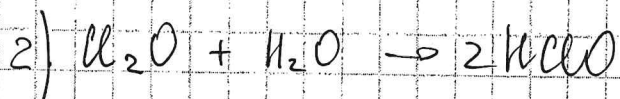
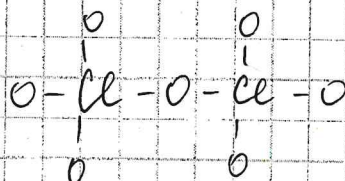
$$0,125 : 0,375 = 1 : 3$$

C - ClO₃, c.o. +6

6

$$1 : 3,5 = 2 : 7$$

D - Cl₂O₄, c.o. +7



1,5



1

$$m(\text{NaOH}) = \rho \cdot V = 90 \text{ mm} \cdot 1,1309 \text{ g/mm} = 101,7812$$

$$\rho(\text{NaOH}) = \frac{m}{M} = 0,30535 \text{ mass} \quad m(\text{NaOH}) = m_p \cdot W = 12,2142$$

$$\rho(\text{NaOH}) = \frac{m}{M} = 0,30535 \text{ mass}$$

$$\rho(\text{Cl}_2\text{O}) = 0,2 \text{ mass}$$

$$m(\text{Cl}_2\text{O}) = 13,52$$

2

NaOH - избыток

$$\rho(\text{NaClO}_3) = \frac{1}{2} \rho(\text{ClO}_2) = 0,1 \text{ mass} \quad \rho(\text{NaClO}_3) = 0,1 \text{ mass}$$

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Задача 1. Преположение

$$m(\text{NaClO}_2) = 101,481 = 9,052$$

$$m(\text{NaClO}_3) = 10,852$$

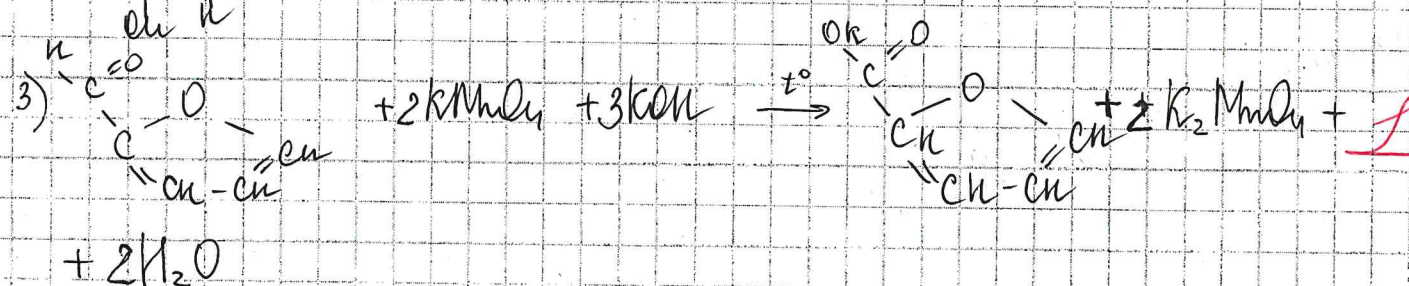
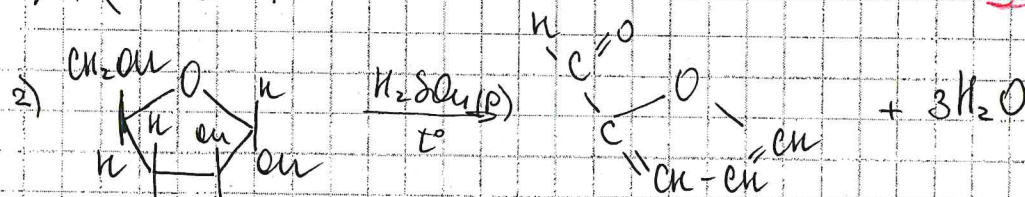
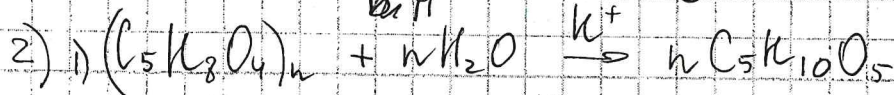
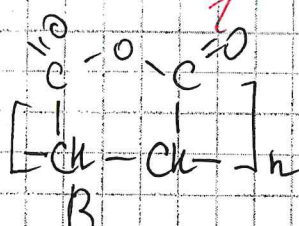
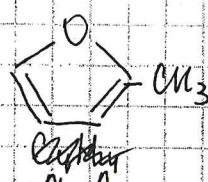
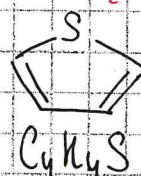
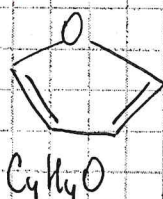
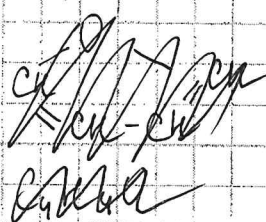
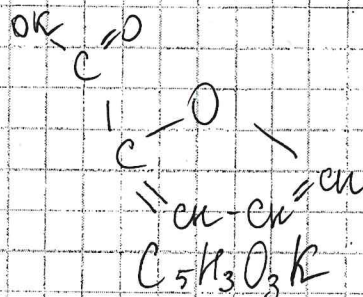
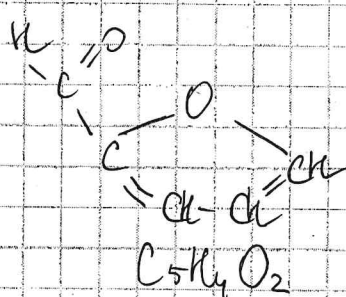
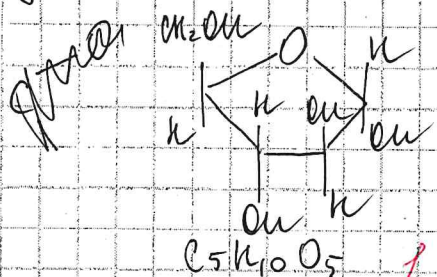
$$m(p) = m_p(\text{NaClO}_2) + m(\text{ClO}_2) = 101,481 + 13,5 = 115,281 \quad 1$$

$$w(\text{NaClO}_2) = \frac{m}{m_p} = 7,85\% \quad 1$$

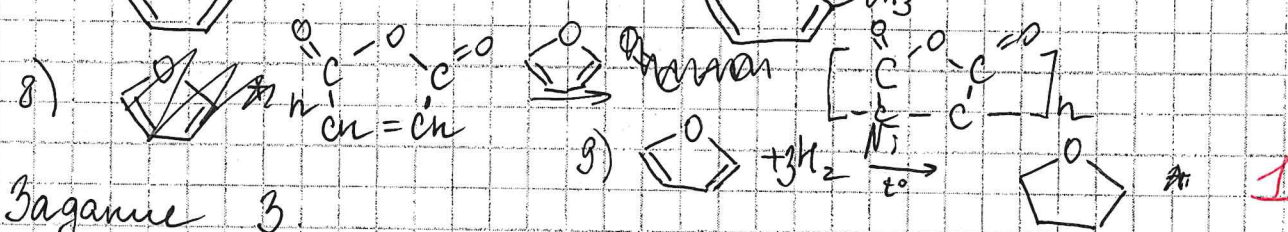
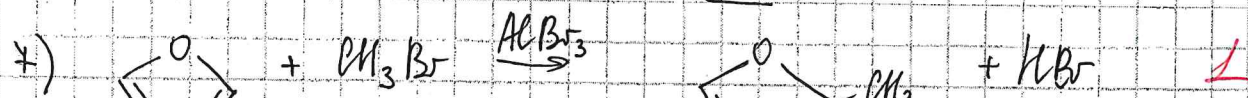
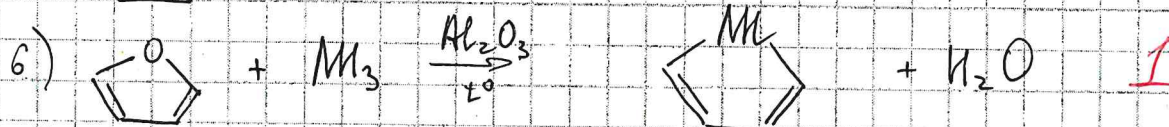
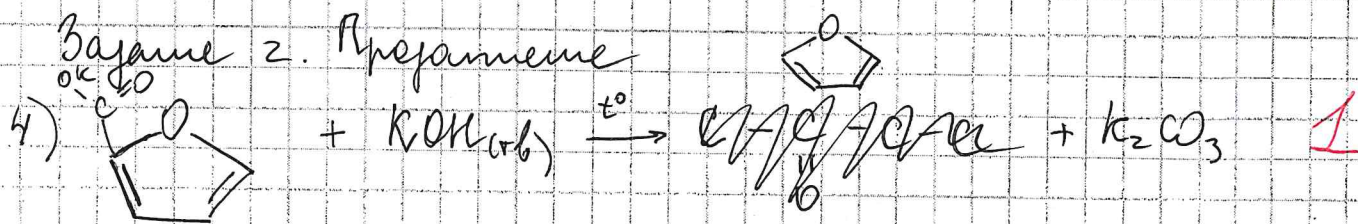
$$w(\text{NaClO}_3) = 9,24\%$$

Задача 2

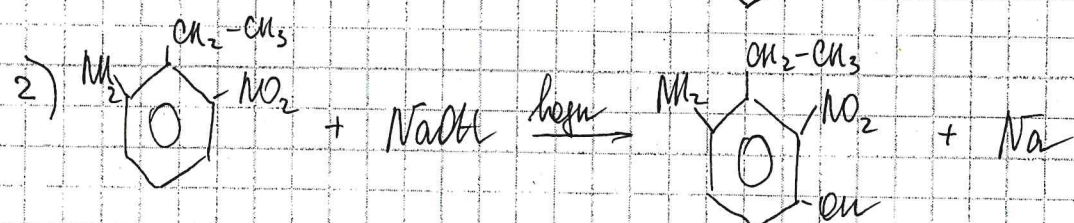
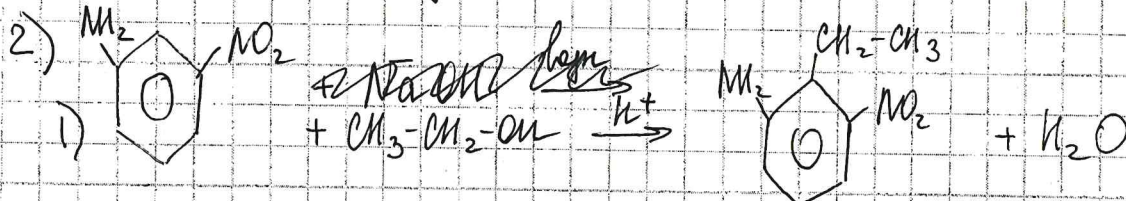
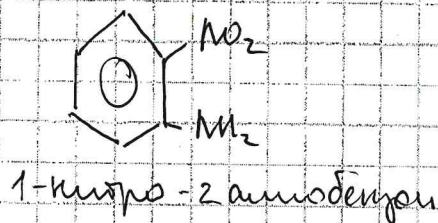
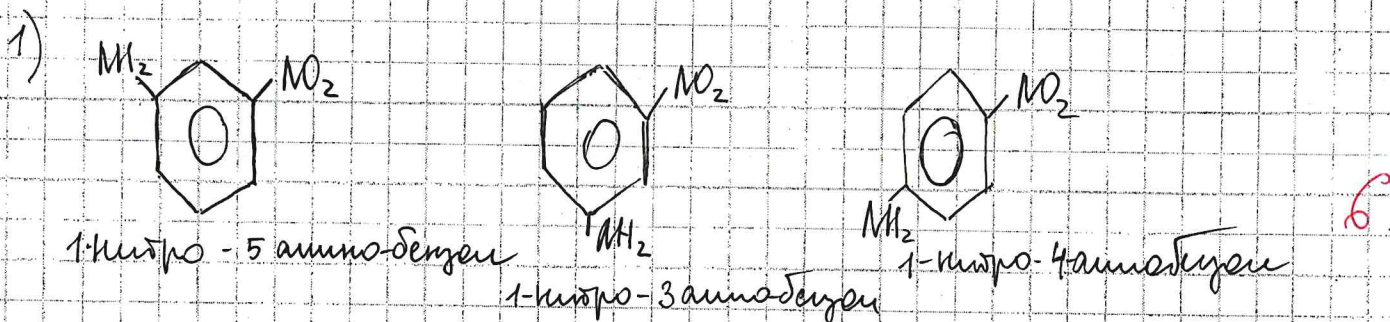
1)



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34,5	20.03.25	Радсавга	<i>[Signature]</i>
Шифр			



Задача 3



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Шифр			

Задача 4

- 1) Более легкий - $C_3H_8O_3$
Более тяжелый - C_6H_6

Задача 5.

