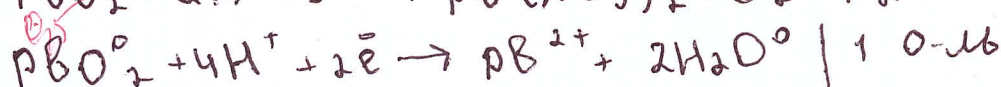
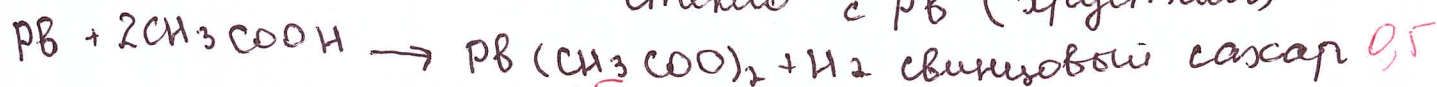


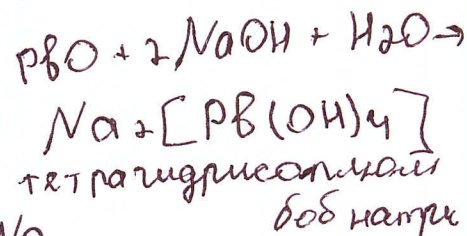
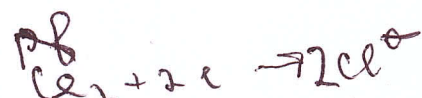
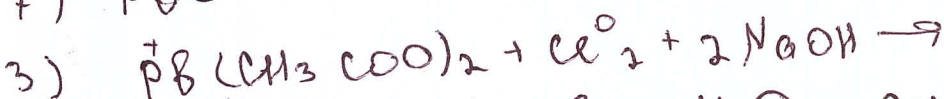
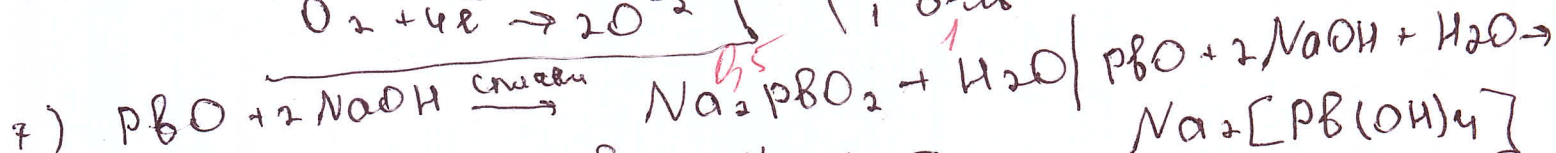
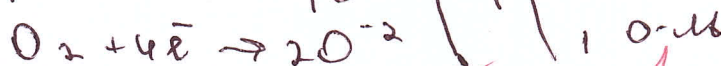
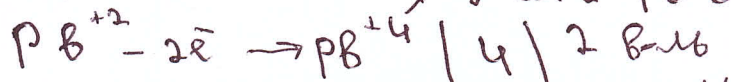
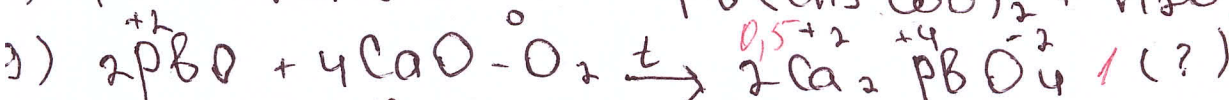
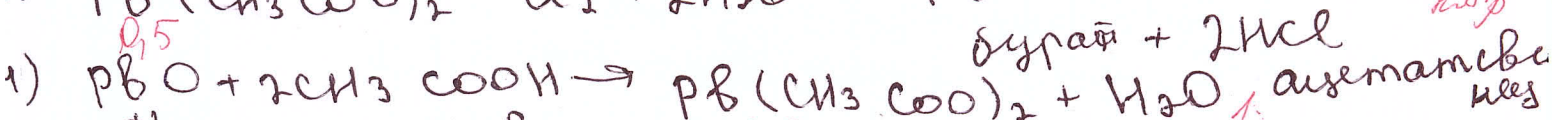
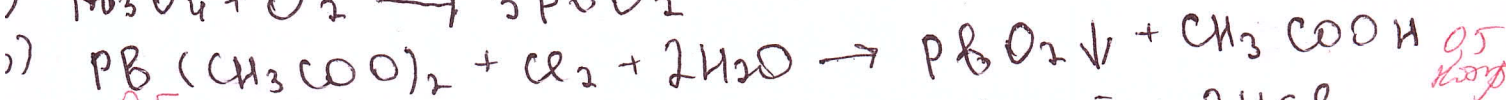
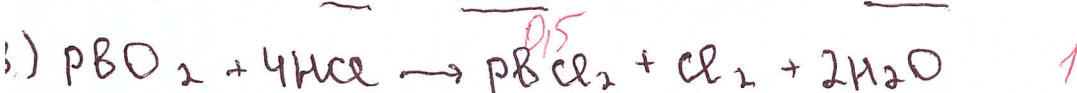
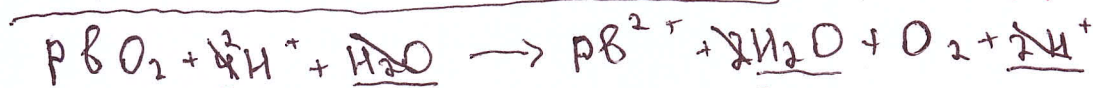
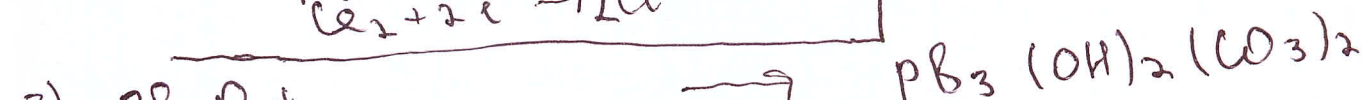
Открытая региональная межвузовская олимпиада вузов Томской области (ОРМО)

Общий балл	Дата	Ф.И.О. членов жюри	Подписи членов жюри
46,5	14.03	Селюкина	

Задание - 1). М-РВ ¹ РВ₃O₄ - свинцовый сурик ^{0,5}
(красн)
РВ₃(ОН)₂(СО₃)₂ - свинцовое белое
стекло с РВ (хрусталь)



$$\begin{array}{r|rrrr} 1 & 2 & 3 & 4 \\ \hline 105 & 8 & 25 & 1 \end{array}$$

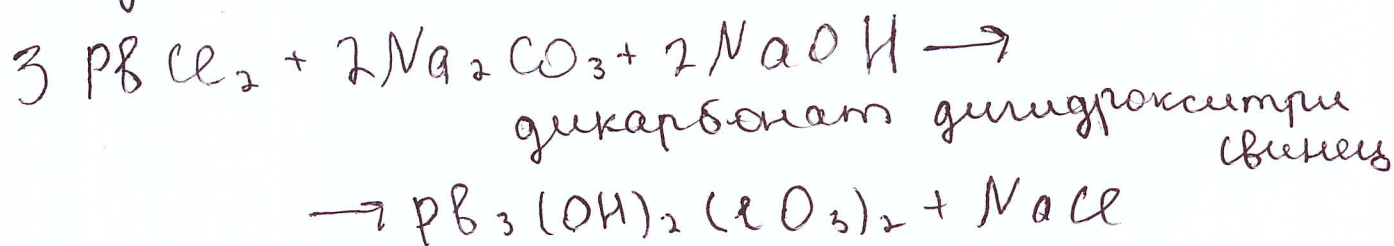
тетрагидроксоант
боб натрия

1 страница



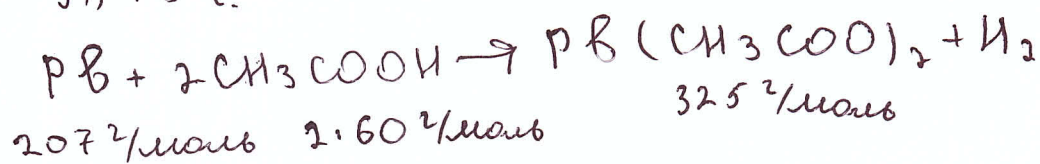
хлорид свинца

Задание-1. Продолжение.



Можно использовать ацетат свинец

51,75 г.



$$m(\text{CH}_3\text{COOH}) - \text{с.в.м} = 0,1 \text{ моль/л} \cdot 1 \text{ л} \cdot 60 \text{ г/моль} = 6 \text{ г}$$

$$n(\text{CH}_3\text{COOH}) = \frac{6 \text{ г}}{60} = 0,1 \text{ моль}$$

$$n(\text{Pb}) = \frac{51,75 \text{ г}}{207 \text{ г/м}} = 0,25 \text{ моль} \quad 1$$

0,25 моль свинец $\rightarrow$ моль, уксуса

1 моль свинец $\rightarrow$ 2 моль укс

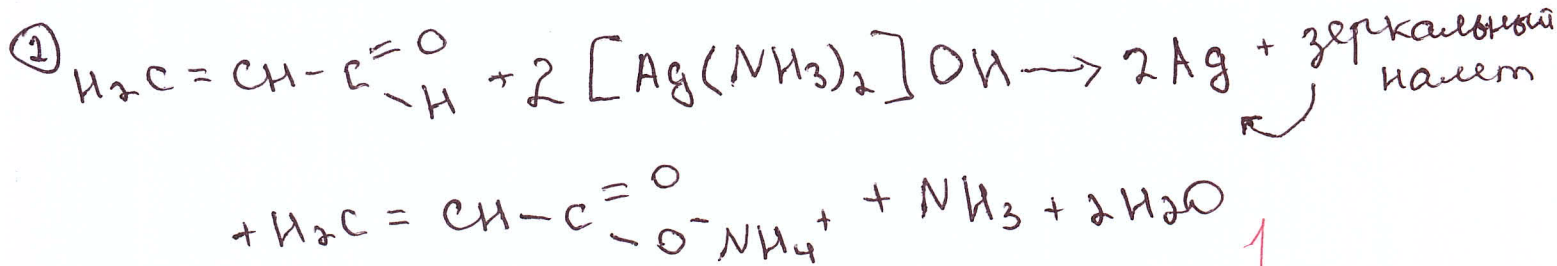
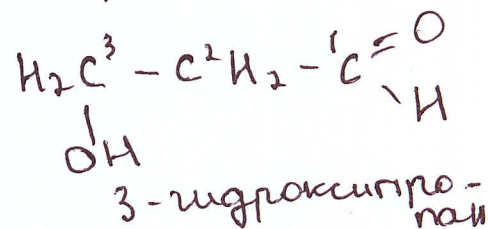
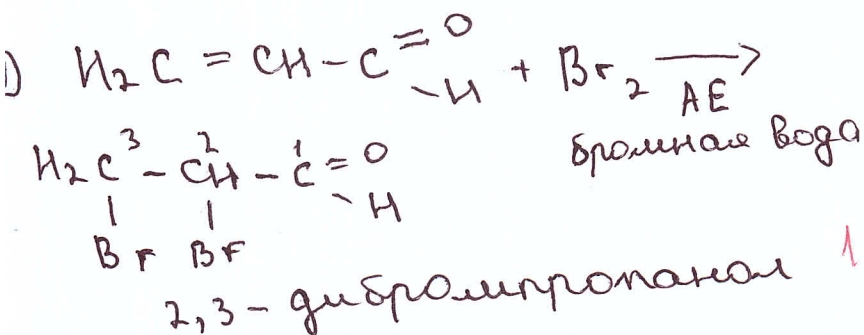
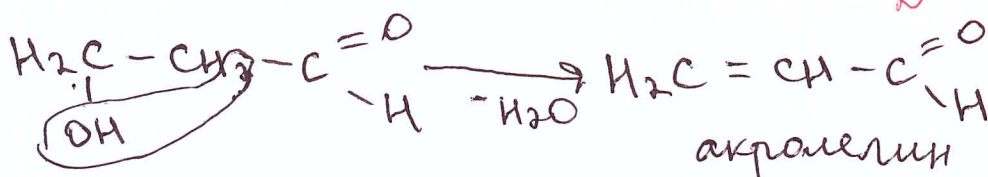
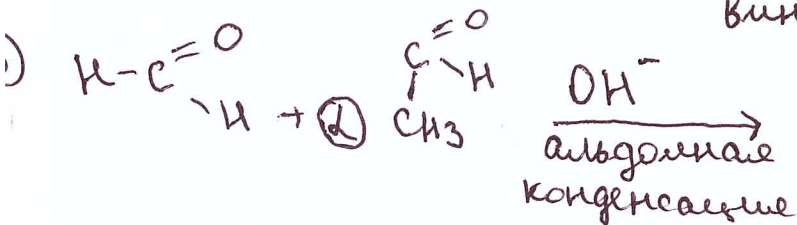
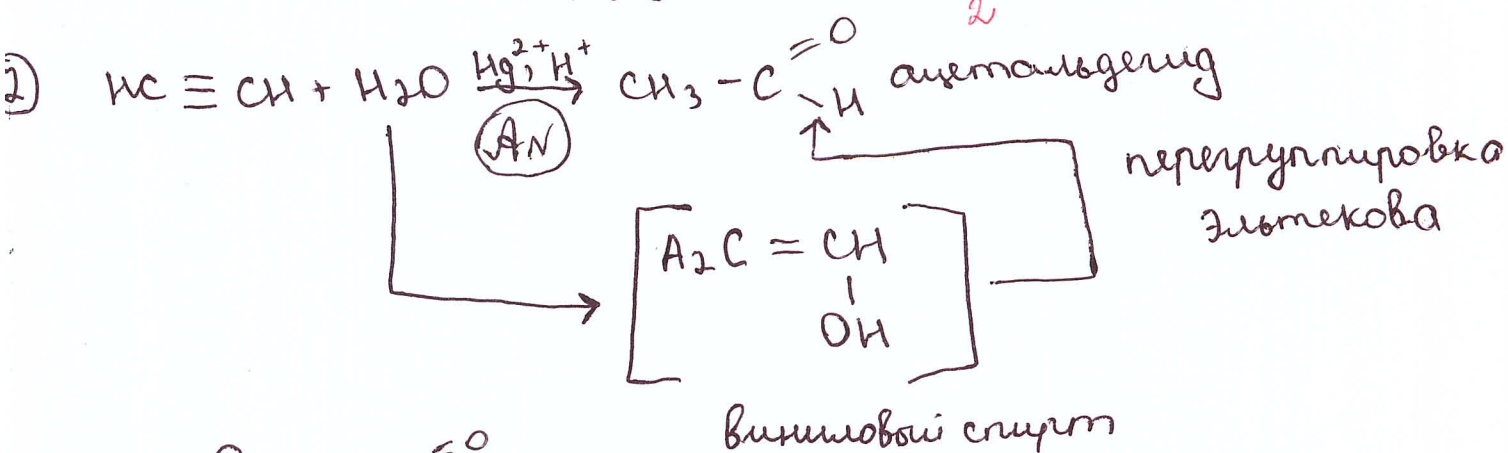
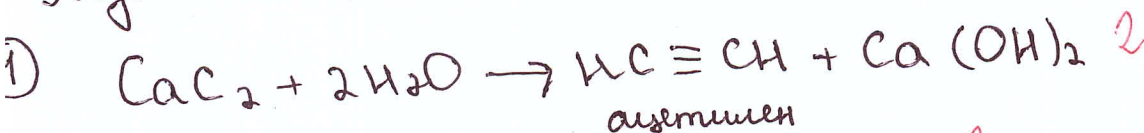
$x = 0,5 \text{ л}$ - кислота

$x = 0,5 \text{ моль}$.

$$m(\text{Pb}(\text{CH}_3\text{COO})_2) = 325 \text{ г/м} \cdot 0,1 \text{ моль} = 32,5 \text{ г}$$

$$\text{с.м}(\text{Pb}(\text{CH}_3\text{COO})_2) = \frac{0,1 \text{ моль}}{1 \text{ л}} = 0,1 \text{ моль}.$$

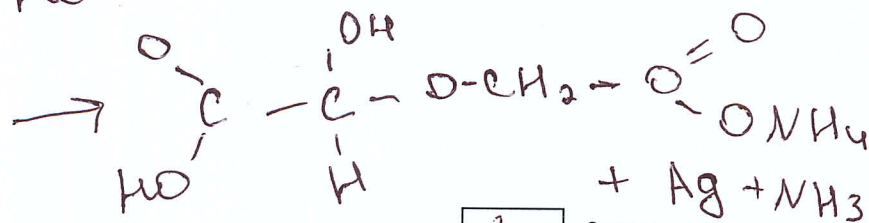
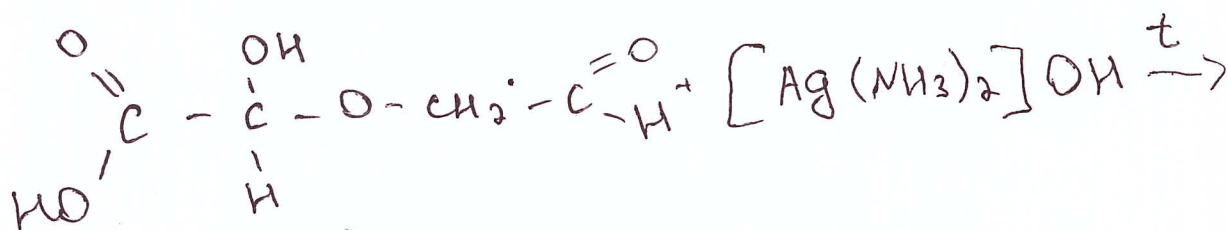
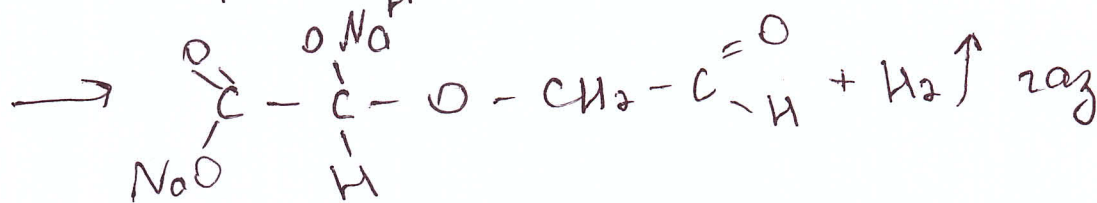
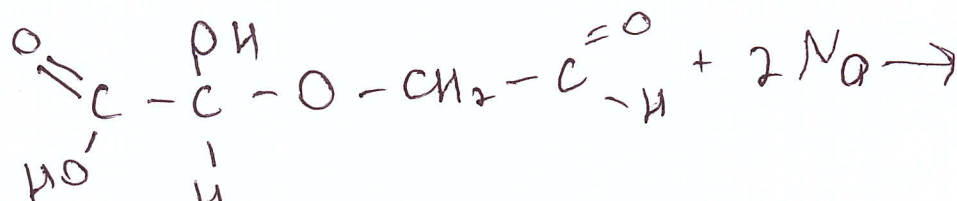
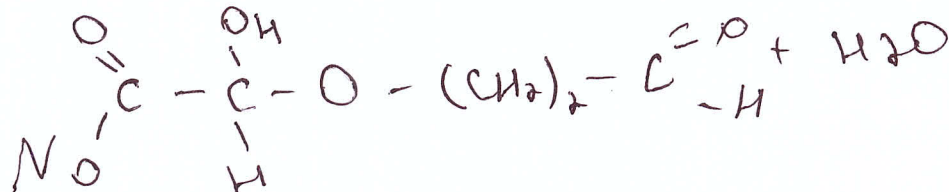
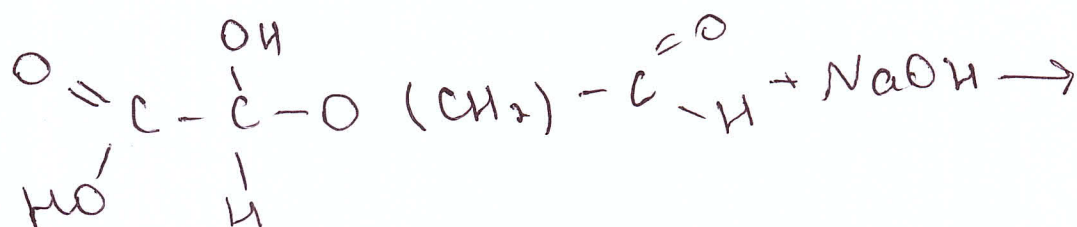
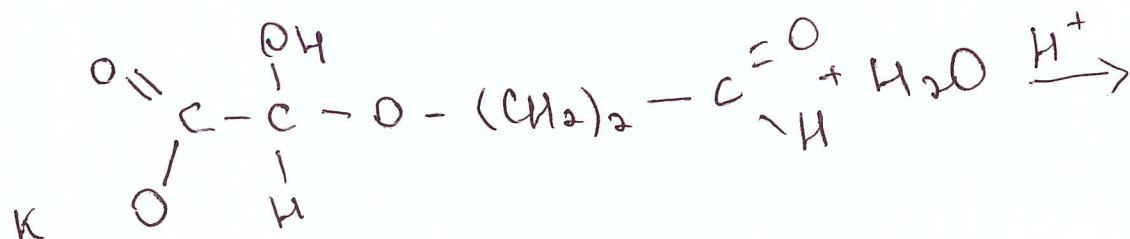
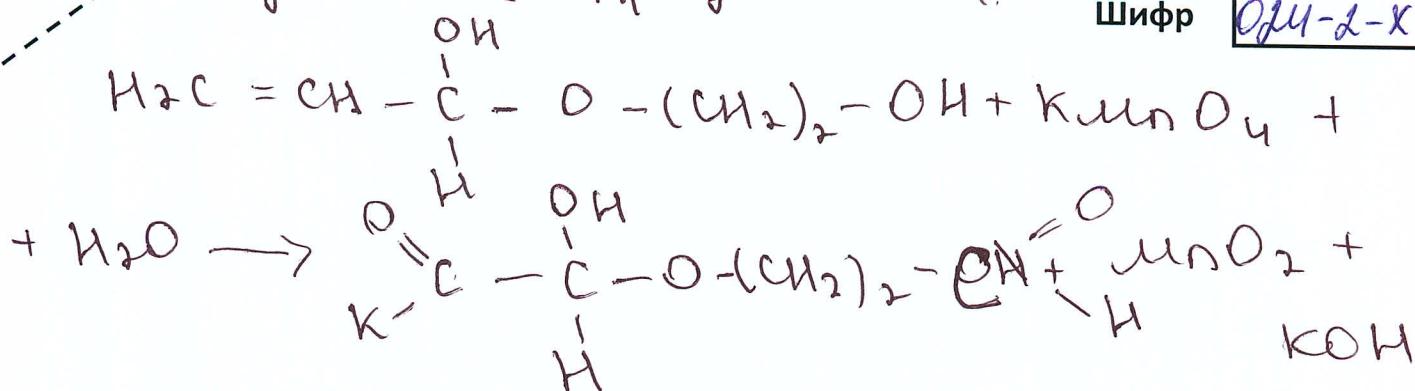
Задание - 2.



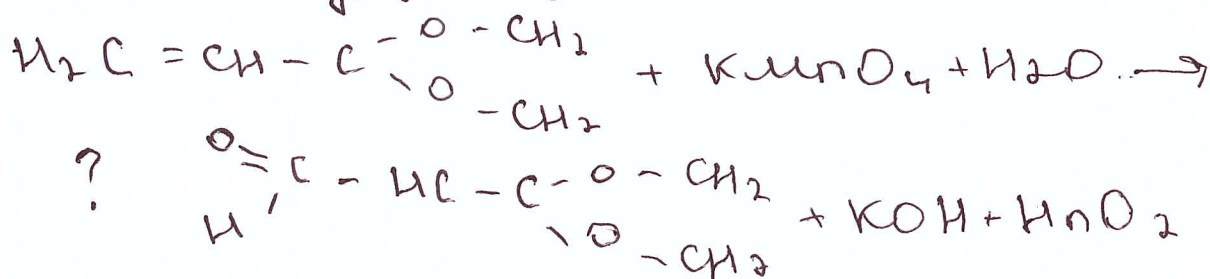
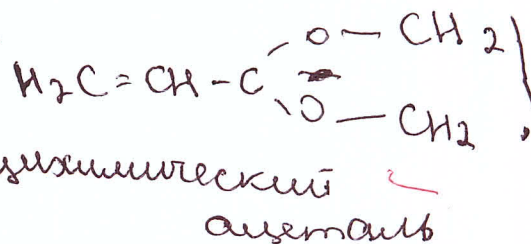
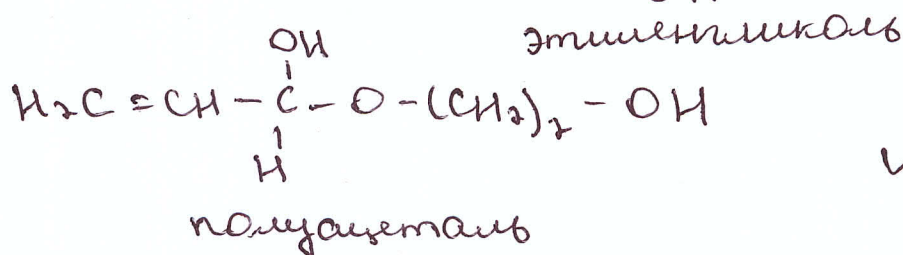
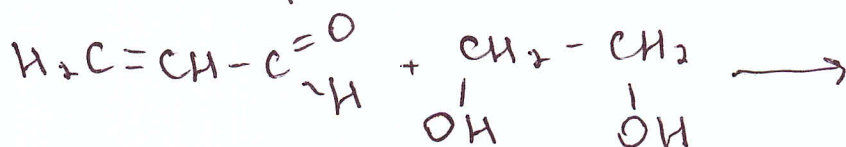
Задание - 2 Продолжение.

Шифр

ОМ-2-х-98



Реакция серебряного зеркала при t^0 !



Задание-3:

Реакция в-ва с HCl и NaNO_2 - проба Ван-

Вещество - маслянистая жидкость цвета нитрозосоединения. Слайка желтого



$$m(\text{C}) = 40,912$$

$$m(\text{N}) = 31,822$$

$$m(\text{O}) = 18,182$$

$$m(\text{H}) = 9,092$$

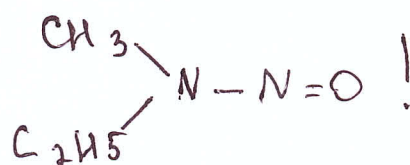
$$n(\text{C}) = \frac{40,91}{12 \text{ г/моль}} = 3,4$$

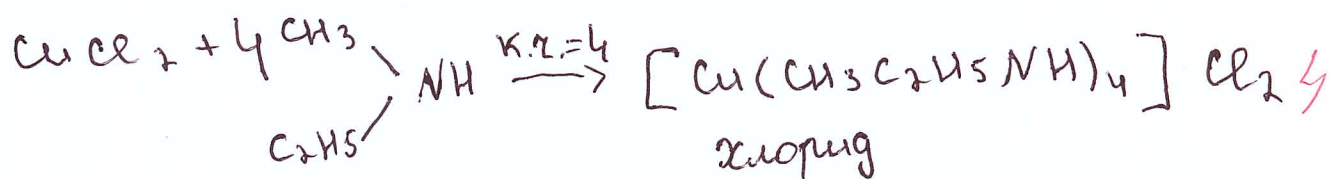
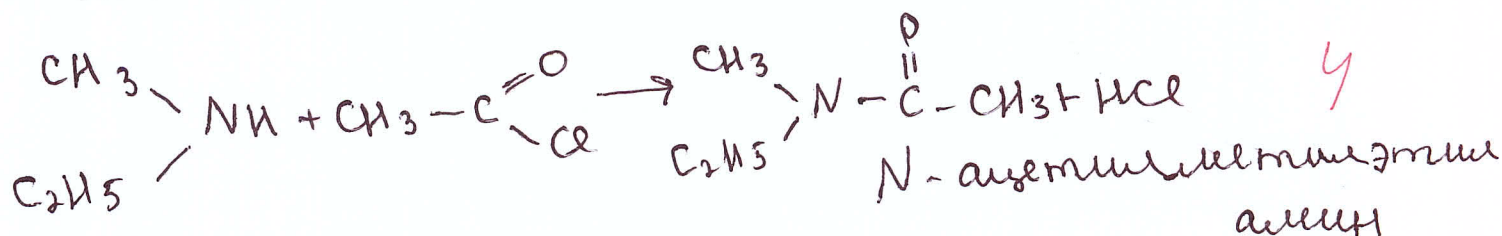
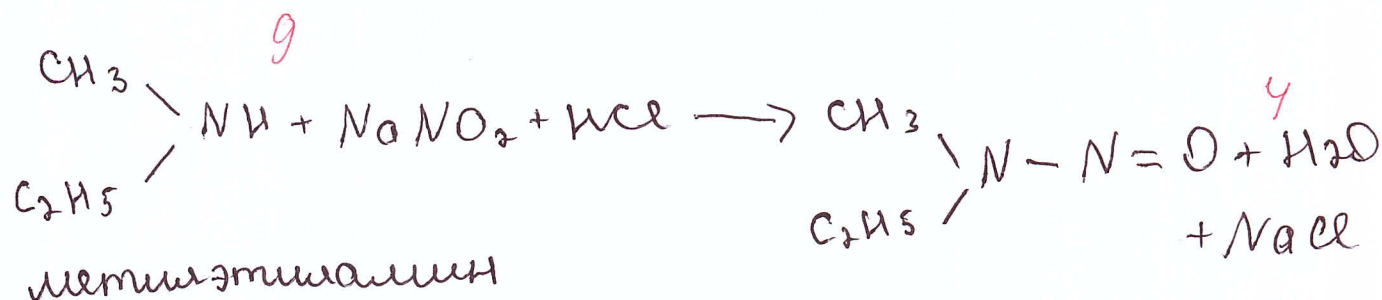
$$n(\text{N}) = \frac{31,82}{14,7} = 2,27$$

$$n(\text{O}) = \frac{18,182}{16,4} = 1,13$$

$$n(\text{H}) = \frac{9,09}{1,91} = 9,09$$

$$\text{C} : \text{N} : \text{O} : \text{H} = 3 : 2 : 1 : 8$$

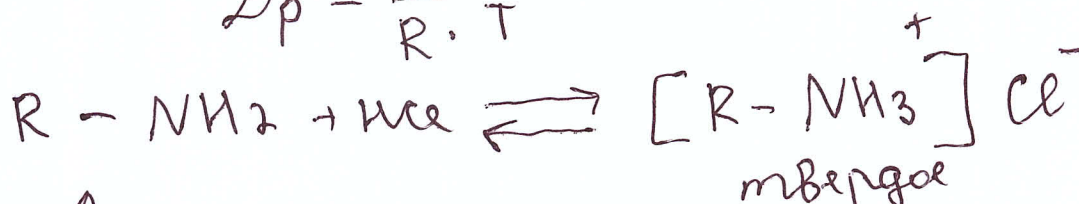




тетра метилэтиламинно меди (II)

Задание 4)

$$D_p = \frac{p}{R \cdot T}$$



$p \uparrow$ - сдвигается вправо

$$p = p_0 \frac{p}{p_0} \cdot \frac{T_0}{T}$$

$$p = \frac{p}{R T}$$

$$T_0 = 20^\circ \text{C}$$

$$p_0 = 1,2 \text{ %}$$

$$p = 101,325 \text{ кПа} = 1 \text{ атм}$$