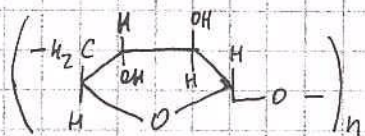


Общий балл	Дата	Ф.И.О. Жюри	Подпись
47	17.03.25	Федотова	<i>[Signature]</i>

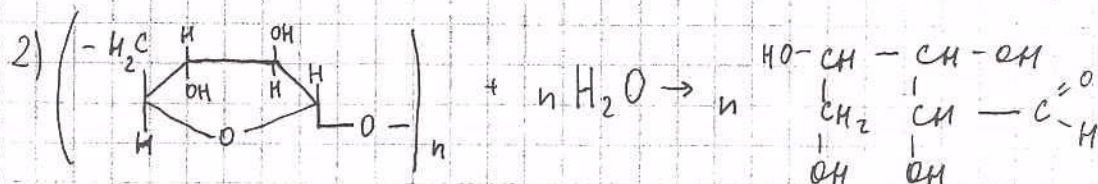
Шифр 025-2-X-58

Задание 11-2

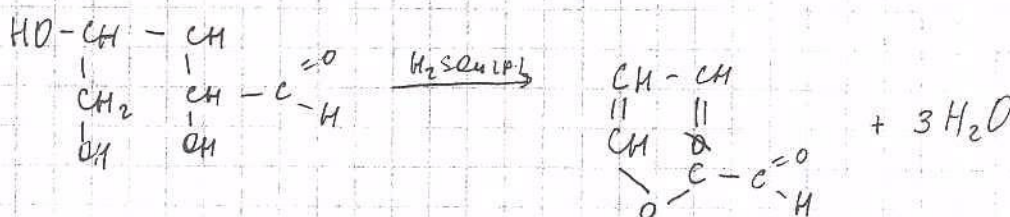
1) пентозан



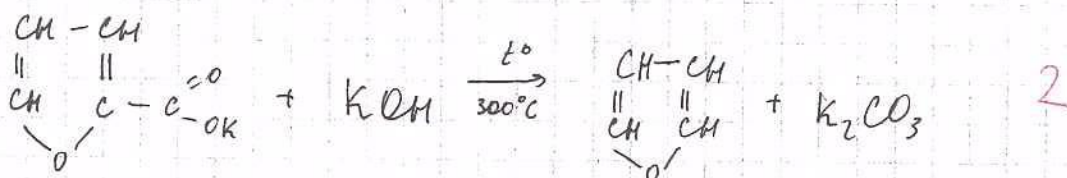
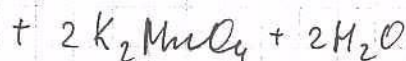
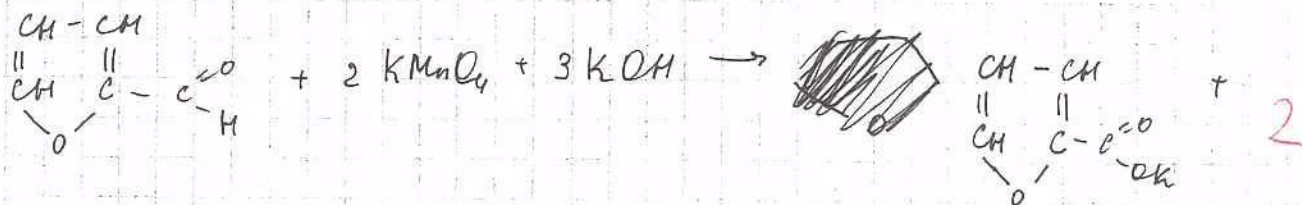
1 2 3 4 5
13 18 16 0 -



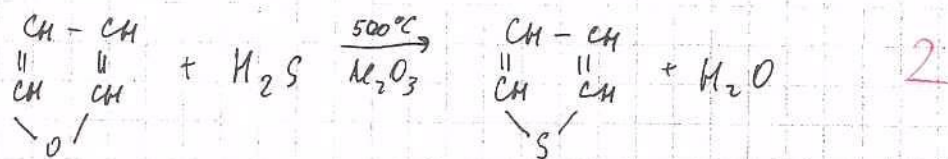
2



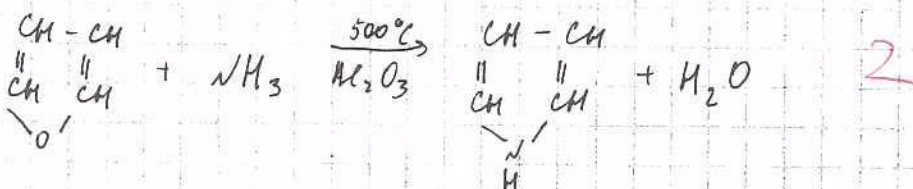
2



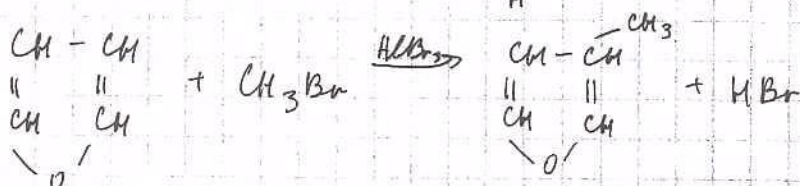
2



2

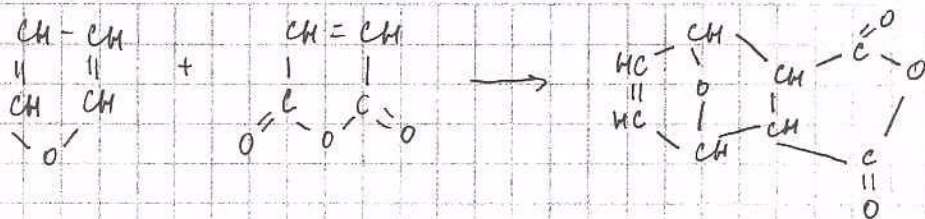


2

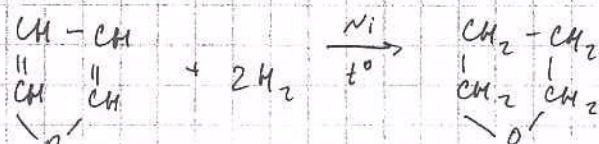


Общий балл	Дата	Ф.И.О. Жюри	Подпись
47	17.05.25	Федотов	<i>[Signature]</i>

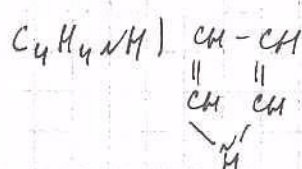
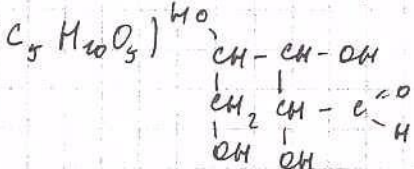
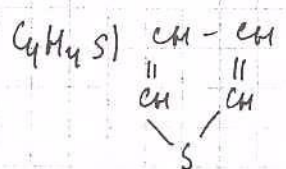
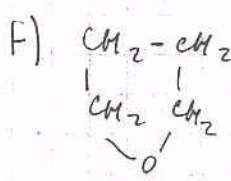
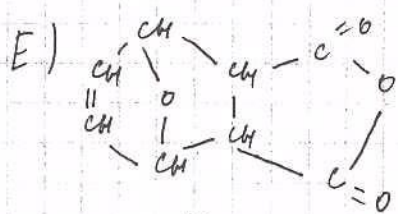
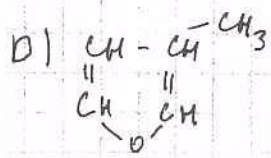
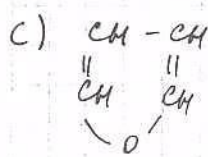
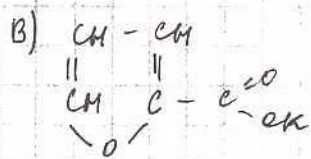
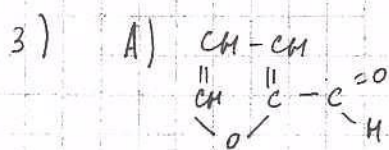
Шифр 025-2-X-68



4



2



Задача 11-1

1) х) Ce хлор

A) Ce_2O оксид хлора I

B) CeO_2 диоксид хлора (оксид хлора IV)

C) Ce_2O_6 (CeO_3) оксид хлора VI

2

D) Ce_2O_7 оксид хлора VII

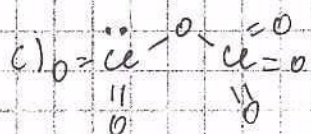
A) $\text{Ce}^+ - \text{O} - \text{Ce}^+$

B) $\text{O} = \text{Ce} = \text{O}$

D) $\text{O} = \overset{\text{O}}{\underset{\text{O}}{\text{Ce}}} - \text{O} - \overset{\text{O}}{\underset{\text{O}}{\text{Ce}}} = \text{O}$

15 + 0,5

Общий балл	Дата	Ф.И.О. Жюри	Подпись
47	17.03.25	Рязанова	<i>[Signature]</i>
Шифр			025-2-X-58

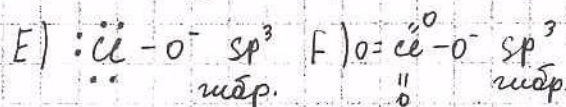


2) Е) HClO хлорноватистая кислота

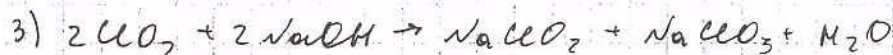
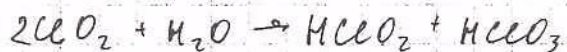
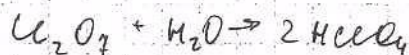
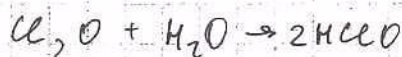
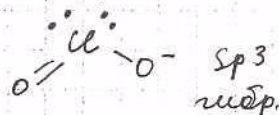
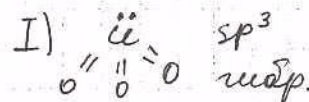
Ф) HClO_4 хлорная кислота

И) HClO_2 хлористая кислота

І) HClO_3 хлорноватая кислота



И) ~~HClO_2~~



$m_{\text{р-ра}}(\text{NaOH}) = \rho \times V = 1,1309 \frac{\text{г}}{\text{мл}} \times 90 \text{ мл} = 101,78 \text{ г}$

$m(\text{NaOH}) = M \times n = 101,78 \text{ г} \times 0,12 = 12,212 \text{ г}$

$n(\text{ClO}_2) = \frac{V}{V_m} = \frac{4,48 \text{ л (н.у.)}}{22,4 \text{ л}} = 0,2 \text{ моль - недостаток}$

$n(\text{NaOH}) = \frac{m}{M} = \frac{12,212 \text{ г}}{40 \text{ г/моль}} = 0,31 \text{ моль - избыток}$

$n(\text{NaClO}_2) = n(\text{NaClO}_3) = 0,2 \text{ моль}$

$m(\text{NaClO}_2) = 0,2 (23 + 35,5 + 32) = 18,1 \text{ г}$

$m(\text{NaClO}_3) = 0,2 (23 + 35,5 + 48) = 21,3 \text{ г}$

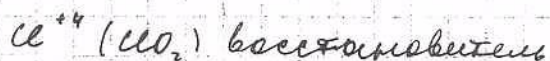
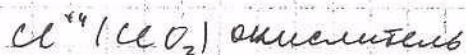
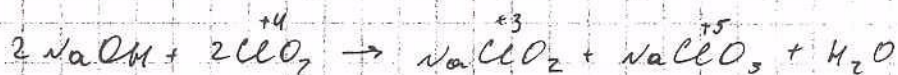
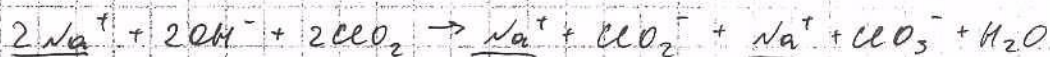
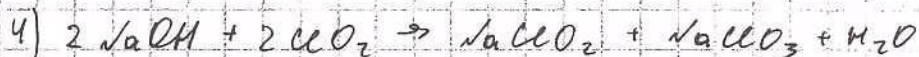
$m(\text{ClO}_2) = 0,2 (35,5 + 32) = 13,5 \text{ г}$

$m(\text{р-ра}) = m(\text{ClO}_2) + m_{\text{р-ра}}(\text{NaOH}) = 13,5 \text{ г} + 101,78 \text{ г} = 115,28 \text{ г}$

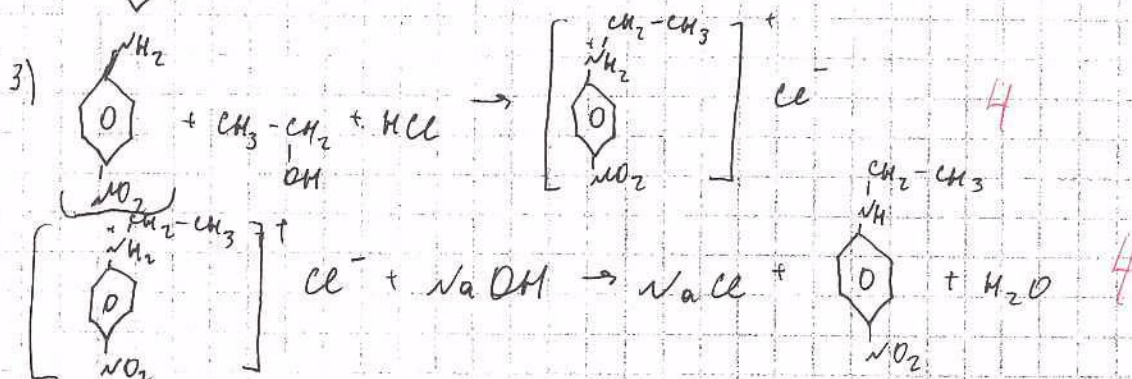
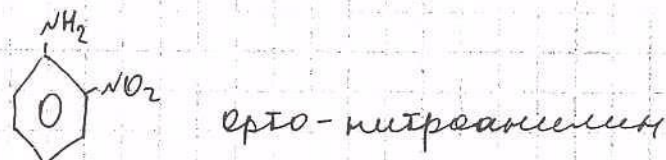
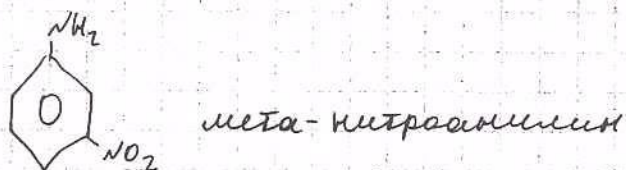
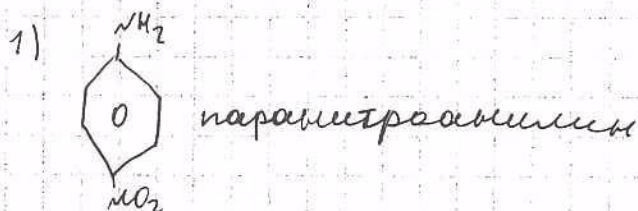
$w(\text{NaClO}_2) = \frac{m(\text{в-ва})}{m(\text{р-ра})} = \frac{18,1 \text{ г}}{115,28 \text{ г}} = 0,157 \text{ или } 15,7\%$

Общий балл	Дата	Ф.И.О. Жюри	Подпись
47	17.03.25	Фадеев	<i>[Signature]</i>
Шифр			025-2-X-58

$$\omega(\text{NaClO}_3) = \frac{m(\text{б. в. в.})}{m(\text{р-ра})} = \frac{21,32}{115,28} = 0,1848 \text{ или } 18,48\%$$



Задача 11-3.



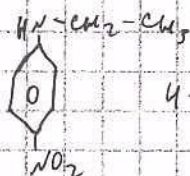
Место для
скобы



Открытая региональная
межшкoльническая олимпиада

Общий балл	Дата	Ф.И.О. Жюри	Подпись
47	17.05.25	Федосеева	

Шифр 025-2-X-58



4-нитро-1-этилбензол

2

Задача 11-4

A) $\text{C}_{12}\text{H}_{21}\text{N}_3\text{O}_3$ пиримизин