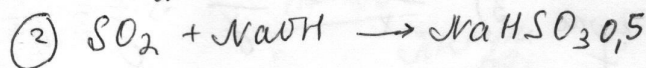
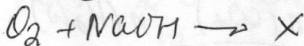
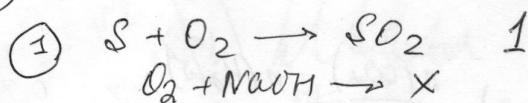


(5) 210 опреженно E-220 - это  $\text{SO}_2$



$$1) m(\text{S}) = \frac{6,4}{32} = 0,2 \text{ моль}$$

$$\text{до р-и } n(\text{SO}_2) = 0,2 \text{ моль}$$

$$2) m(\text{NaOH})_{\text{р-ра}} = \rho \cdot V = 1,38 \cdot 1,087$$

$$= 1,50 \text{ (г)}$$

$$3) m(\text{NaOH}) = m_{\text{р-ра}} \cdot W = 1,50 \cdot 0,08$$

$$= 0,12 \text{ г}$$

$$4) m_{\text{ед}}(\text{NaOH}) = n_{\text{ед}} \cdot M_r = 0,1 \cdot 40 = 4 \text{ г}$$

$$2) m(\text{NaHSO}_3) = \frac{m_{\text{р-ра}}}{n_{\text{р-ра}}} \cdot M_r = 0,2 \cdot 104 = 20,8 \text{ г}$$

до р-и

$$n(\text{SO}_2) = n(\text{NaHSO}_3)$$

$$4) n(\text{NaOH}) = \frac{12}{40} = 0,3 \text{ (моль)}$$

25.

$$5) \text{до гр. р-и } n(\text{NaOH})_{\text{ед}} = 0,3 - 0,2 = 0,1 \text{ (моль)}$$

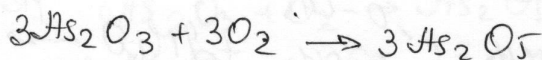
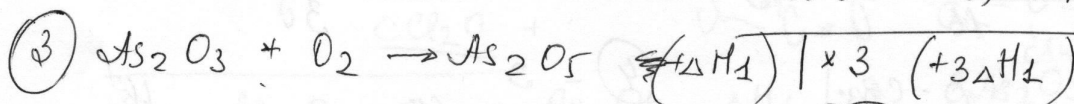
9) В растворе:

$$W(\text{NaOH}) = \frac{4}{162,8} \cdot 100\% = 2,46\%$$

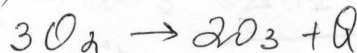
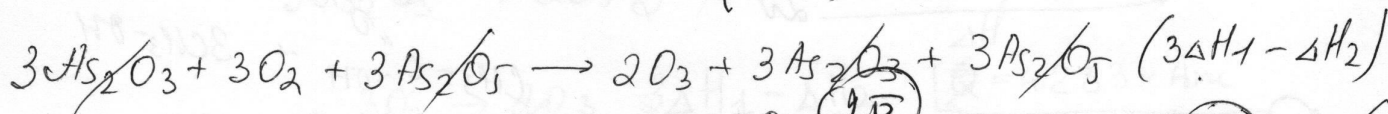
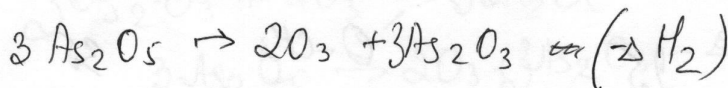
$$10) W(\text{NaHSO}_3) = \frac{20,8}{162,8} \cdot 100\% = 12,78\%$$

$$\text{Ответ: } W(\text{NaOH}) = 2,46\% \\ W(\text{NaHSO}_3) = 12,78\%$$

Σ 3,55



(2Б)

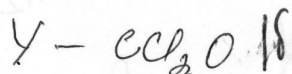
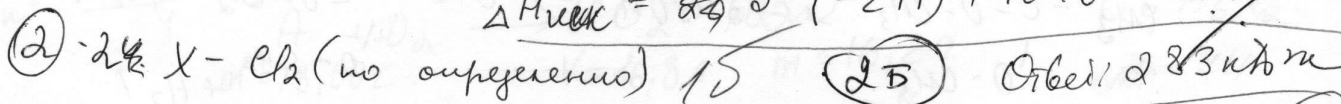


(2Б)

(2Б)

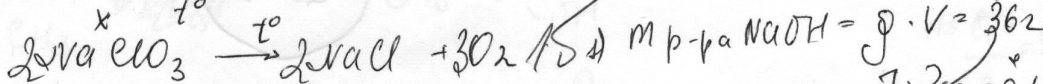
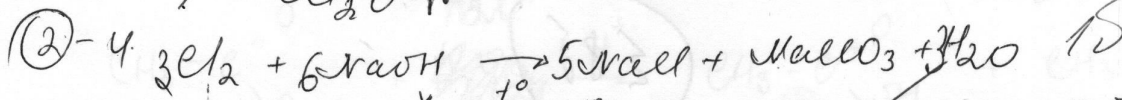
(8Б)

$$\Delta H_{\text{рек}} = 3 \cdot (-271) + 1096 = 283 \text{ кДж}$$



(2Б)

Ответ: 283 кДж



$$2) n(\text{O}_2) = \frac{1n}{22,4n} = 0,045 \text{ моль}$$

$$3) \frac{x}{2} = \frac{0,045}{3}; x = n(\text{NaClO}_3) = 0,03 \text{ моль}$$

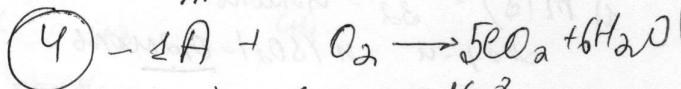
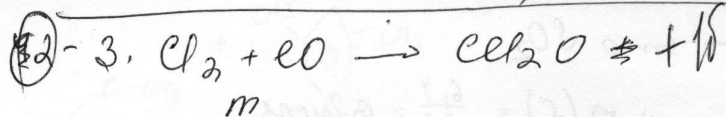
$$4) \frac{n(\text{NaOH})}{6} = \frac{n(\text{NaClO}_3)}{1} \Rightarrow n(\text{NaOH}) = 6 \cdot 0,03 = 0,18 \text{ моль}$$

$$6) W(\text{NaOH}) = \frac{7,2}{40} \cdot 100\% = 18\%$$

$$7) M = \frac{n}{V} = \frac{0,18}{0,2288} = 6,25 \text{ моль/л}$$

$$5) m(\text{NaOH}) = 7,2 \text{ г}$$

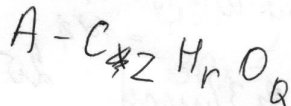
Отвѣт:  $C = M = 6,25 \text{ моль/л}$ ;  $\omega(\text{NaOH}) = 18\%$



1)  $n(\text{CO}_2) = \frac{16,8}{22,4} = 0,75 \text{ моль}$

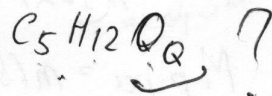
2)  $n(\text{H}_2\text{O}) = 0,9 \text{ моль}$

3)  $\frac{n(\text{CO}_2)}{x} = \frac{n(\text{H}_2\text{O})}{y} \rightarrow \frac{x}{y} = \frac{0,75}{0,9} = \frac{5}{6}$



$z = 5$

$r = 2,6 = 12 +$



4) По р-и киевого муронга  $\Rightarrow$   
коэффициенты перед А в р-и  
окисления - 1

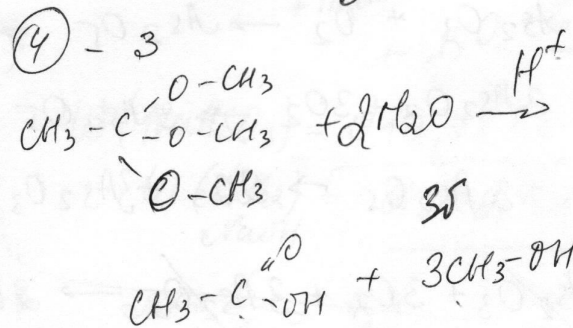
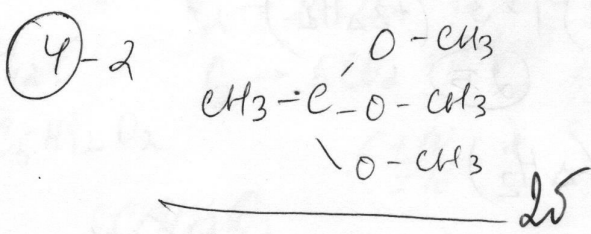
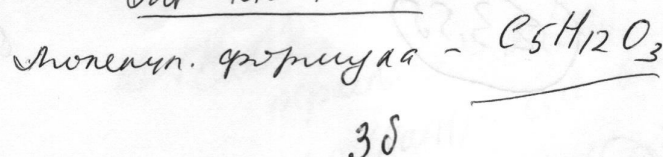
5)  $\frac{m}{1} = \frac{9,9}{6} \Rightarrow m = \frac{9,9}{6} \text{ моль}$

6)  $m = M_r(\text{A}) \cdot n(\text{A})$   
 $18 = M_r \cdot \frac{9,9}{6}$

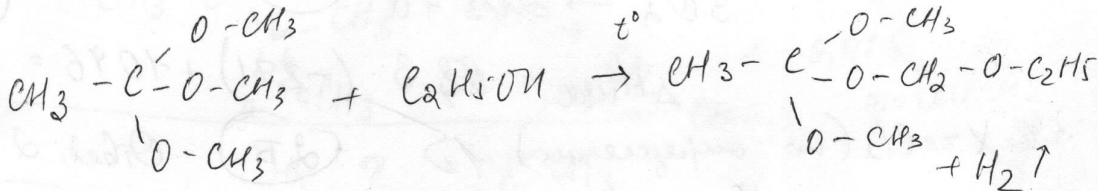
$M_r = 120 \text{ г/моль}$

а) Значит,  $z = 5, r = 12$

$Q = \frac{120 - 5 \cdot 12 - 12}{16} = 3$



4) - 5



Σ 85

Σ 23,5

11 ХК-118  
 Услови  
 Номер анализа - 13

Укона №7

	1	2	3	4	5	кол-во осадков, гр. прибавков р-н
1	—	осадок мелко мелко тон	помутне ние р-ра	Белый осадок → мелко → белый коричневый	нет	3
2	осадок мелко мелко	—	нет	белый творож. мелко	нет	2
3	помутне ние р-ра	нет	—	белый творож. осадок	нет	2
4	Белый осадок → мелко → белый коричневый цвет	белый творож.	белый творож. осадок	—	мелко осадок (светло- мелко)	4
5	нет	нет	нет	мелко реакт. (светло- мелко)	—	1
кол-во осадков, прибавков р-н	3	2	2	4	1	—

Синоцид  
 реакция и  
 прирост,  
 можно отметить,  
 что

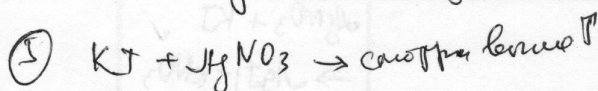
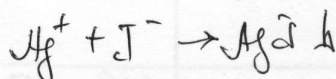
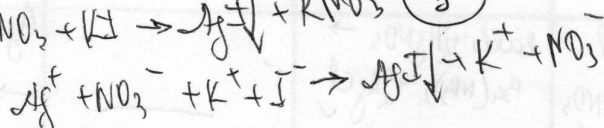
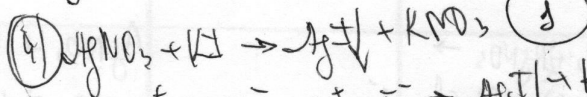
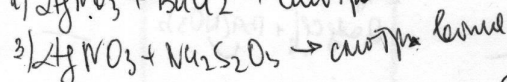
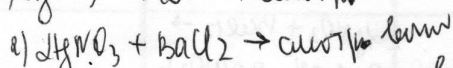
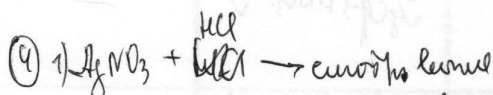
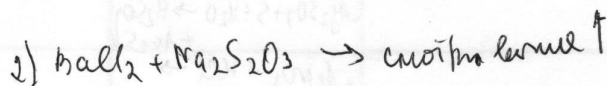
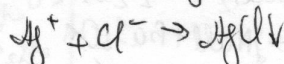
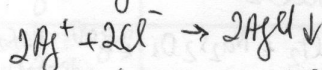
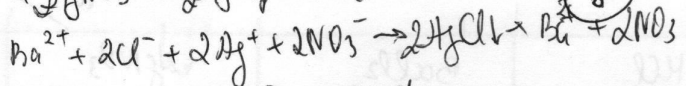
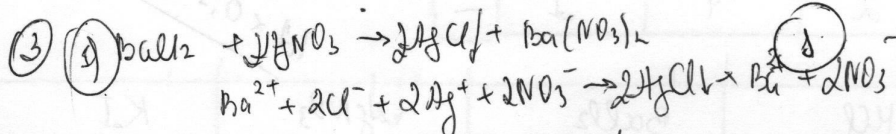
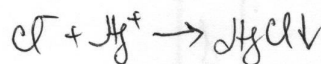
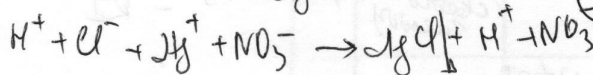
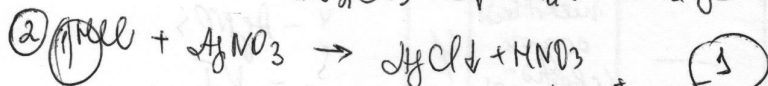
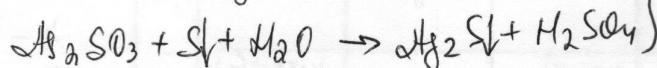
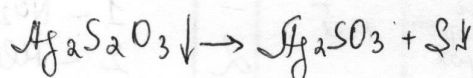
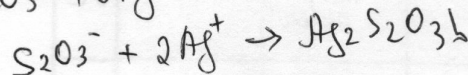
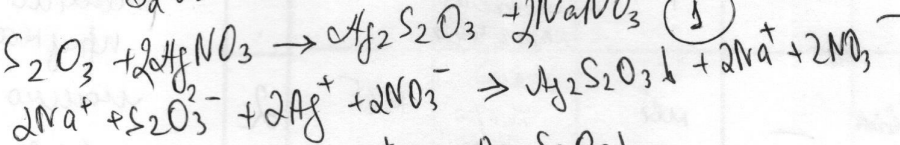
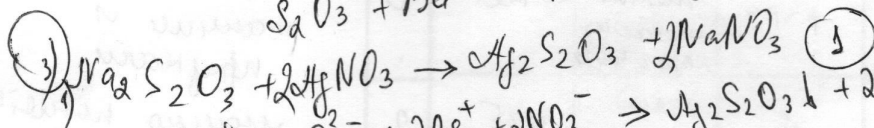
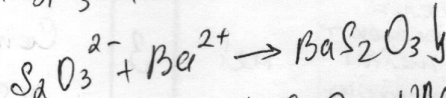
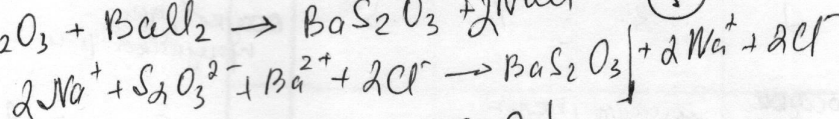
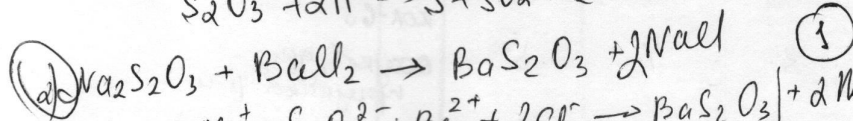
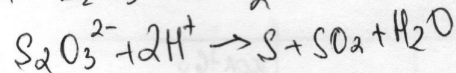
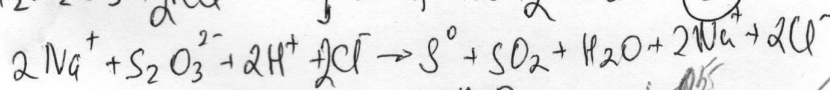
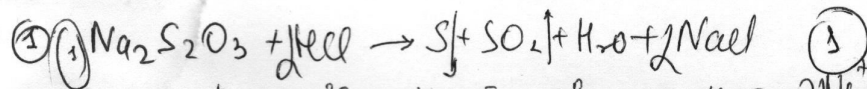
- 1 -  $\text{Na}_2\text{S}_2\text{O}_3$
- 2 -  $\text{HCl}$
- 3 -  $\text{BaCl}_2$
- 4 -  $\text{AgNO}_3$
- 5 -  $\text{KI}$

Тот:  
 $12 \times 0,5 = 6$

	$\text{Na}_2\text{S}_2\text{O}_3$	$\text{HCl}$	$\text{BaCl}_2$	$\text{AgNO}_3$	$\text{KI}$
$\text{Na}_2\text{S}_2\text{O}_3$	—	$2\text{Na}_2\text{S}_2\text{O}_3 + \text{HCl} \rightarrow \text{NaCl} + \text{S} \downarrow + \text{SO}_2 \uparrow + \text{H}_2\text{O}$	$\text{BaCl}_2 + \text{Na}_2\text{S}_2\text{O}_3 \rightarrow \text{BaS}_2\text{O}_3 \downarrow + 2\text{NaCl}$	$2\text{AgNO}_3 + \text{Na}_2\text{S}_2\text{O}_3 \rightarrow \text{Ag}_2\text{S}_2\text{O}_3 \downarrow + 2\text{NaNO}_3$ $\text{Ag}_2\text{S}_2\text{O}_3 \rightarrow \text{Ag}_2\text{SO}_3 + \text{S} \downarrow$ $\text{Ag}_2\text{SO}_3 + \text{S} + \text{H}_2\text{O} \rightarrow \text{H}_2\text{SO}_4 + \text{Ag}_2\text{S} \downarrow$	—
$\text{HCl}$	$\text{Na}_2\text{S}_2\text{O}_3 + \text{HCl} \rightarrow 2\text{NaCl} + \text{S} + \text{SO}_2 \uparrow + \text{H}_2\text{O}$	—	—	$\text{AgNO}_3 + \text{HCl} \rightarrow \text{AgCl} \downarrow + \text{HNO}_3$	—
$\text{BaCl}_2$	$\text{Na}_2\text{S}_2\text{O}_3 + \text{BaCl}_2 \rightarrow \text{BaS}_2\text{O}_3 \downarrow + 2\text{NaCl}$	—	—	$2\text{AgNO}_3 + \text{BaCl}_2 \rightarrow 2\text{AgCl} \downarrow + \text{Ba(NO}_3)_2$	—
$\text{AgNO}_3$	$2\text{AgNO}_3 + \text{Na}_2\text{S}_2\text{O}_3 \rightarrow \text{Ag}_2\text{S}_2\text{O}_3 \downarrow + 2\text{NaNO}_3$ $\text{Ag}_2\text{S}_2\text{O}_3 \rightarrow \text{Ag}_2\text{SO}_3 + \text{S} \downarrow$ $\text{Ag}_2\text{SO}_3 + \text{S} + \text{H}_2\text{O} \rightarrow \text{H}_2\text{SO}_4 + \text{Ag}_2\text{S} \downarrow$	$\text{AgNO}_3 + \text{HCl} \rightarrow \text{AgCl} \downarrow + \text{HNO}_3$	$\text{BaCl}_2 + \text{AgNO}_3 \rightarrow \text{Ba(NO}_3)_2 + 2\text{AgCl} \downarrow$	—	$\text{AgNO}_3 + \text{KI} \rightarrow \text{AgI} \downarrow + \text{KNO}_3$
$\text{KI}$	—	—	—	$\text{AgNO}_3 + \text{KI} \rightarrow \text{AgI} \downarrow + \text{KNO}_3$ желт?	—



P-u:



Other: I -  $\text{Na}_2\text{S}_2\text{O}_3$  (1)

II -  $\text{HCl}$  (1)

III -  $\text{BaCl}_2$  (1)

IV -  $\text{AgNO}_3$  (1)

V -  $\text{KI}$  (1)

17.5

+ 1.5 = 18.5

Drat

5.0

$\text{S}^{+2} + 2\text{e}^- \rightarrow \text{S}^0$   
 $\text{S}^{+2} - 2\text{e}^- \rightarrow \text{S}^{+4}$

Drat

6.5

Pracisuu