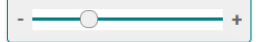




Kimyo



- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
31 32 33 34 35 36 37 38 39 40

1. Keltirilgan reaksiyada 49 gr  $H_3PO_4$  hosil bo'lishi uchun necha gramm oksidlovchi kerak bo'ladi.  $KMnO_4 + PH_3 + H_2SO_4 = H_3PO_4 + MnSO_4 + K_2SO_4 + H_2O?$

- 138,9  
 126,4  
 141,5  
 158

Oldingi savol

Keyingi savol

2.  $H_2S + O_2 = SO_2 + H_2O + Q$

Yuqorida ko'rsatilgan reaksiyaning unumdorligiga ta'sir ko'rsatuvchi javoblar va gaplarni ko'rsating

1. Bosimning 3 marta ortishi	a. 1/8 marta tezlashadi
2. Kislород miqdorining 2 marta kamayishi	b. 243 marta ortadi
3. Haroratning ortishi	c. Unumdorlik kamayadi
	d. Ta'sir qilmaydi

- 1-b; 2-a; 3-c;  
 1-d; 2-c; 3-b;  
 1-b; 2-a; 3-d;  
 1-c; 2-b; 3-a;

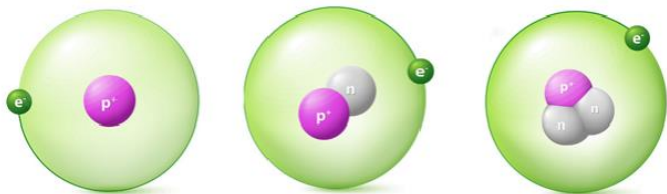
3. Quyida keltirilgan faktlar bilan elememtlarni guruhlang.

1. Metallmas
2. +3 oksidlanish darajasini yuzaga chiqarishi mumkin
3. Havoning tarkibiy qismini egallaydi
4. Allotropik shakl o'zgarishiga ega

- a)  $O_2$   
b) S  
c)  $N_2$   
d) Al

- 1-d, c; 2-b, a; 3-a, b; 4-c, a;  
 1-a, b; 2-b, c; 3-d, c; 4- a, b;  
 1-a, d; 2-c, d; 3-b, c; 4-b, d;  
 1-a, b, c; 2-c, d; 3-a, c; 4-a, b;

6. Quyidagi izotoplar tarkibidagi protonlar umumiy zarrachalarning necha foizini tashkil qilishini tegishli tartibda ko'rsating.



- 50; 33,3; 25
- 50; 33,3; 30
- 33,3; 33,3; 25
- 36; 42; 53,3

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
31 32 33 34 35 36 37 38 39 40

7. Quyidagi ma'lumotlarning hammasi oqsil va aminokislotalar uchun to'g'ri berilganmi?

- 1) Monoaminomonokarbon va diaminodikarbon aminokislotalar indikator rangini o'zgartirmaydi;
- 2) Aminokislotalar oqsillarni gidroliz qilib olinadi;
- 3) Aminokislotalar asoslar va kislotalar bilan reaksiyaga kirishib tuzlarni hosil qiladi;
- 4) Oqsillar gidrolizlanganda faqat  $\alpha$  aminokislotalar hosil bo'ladi.

- Ha
- Yo'q

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
31 32 33 34 35 36 37 38 39 40

8.  $(\text{MeOH})_2\text{SO}_4$  tarkibli moddani ekvivalenti 89 ga teng bo'lsa, noma'lum metallni toping.

- Ca
- Fe
- Ba
- Mg

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
31 32 33 34 35 36 37 38 39 40

9. Quyidagi berilgan fikrga "To'g'ri" yoki "Noto'g'ri" deb javob bering. Qattiq moddalarning eruvchanligi: erishda issiqlik chiqsa, temperatura ortishi bila ortadi, aksincha erishda issiqlik yutilsa, temperatura ortishi bilan kamayadi.

- To'g'ri
- Noto'g'ri

10. Massa ulushi 8,5 % bo'lgan kumush nitratning 800 g eritmasi massasi 50 grammga kamayguncha elektroliz qilindi. Reaksiya natijasida olingan nitra kislotaning massa ulushini (%) va inert elektrodalarda ajralib chiqqan moddalar va ularning massasini aniqlang.

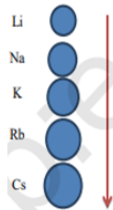
- 3,15 ; katod 43,6 g Ag; anod 6 g O<sub>2</sub>
- 3,36 ; katod 43,2 g Ag ; anod 6,4 g O<sub>2</sub>
- 6,7 ; katod 43,2 g Ag va 0,4 g H<sub>2</sub> ; anod 3,2 g O<sub>2</sub>
- 4,48; katod 43,6 g Ag va 0,4 g H<sub>2</sub> ; anod 3,2 g O<sub>2</sub>

11. Quyidagi jadvalda berilgan X<sub>2</sub>Y<sub>3</sub> moddani molyar massasini aniqlang.

Modda formulasi	Protonlar soni yig'indisi
XY	33
X <sub>2</sub> Y <sub>3</sub>	74

- 102
- 152
- 160
- 158

12. Quyida berilgan qatordagi elementlar xossalarini qanday o'zgarishi bilan moslab juftlang.



A) Ortadi B) Kamayadi C) Ozgarmaydi	1. Ionlanish potentsiali 2. Elektrmanfiylik 3. Metallmaslik xossalari 4. Metallik xossalari 5. Atom radiusi 6. Tashqi qavatdagi elektronlar soni 7. Elektron qavatlar soni
---	--

- A-4, 5, 7; B- 1, 2, 3; C – 6
- A-4, 5; B- 1, 2, 3; C – 6, 7
- A-5, 7; B- 1, 2, 3; C – 4, 6
- A-1, 4, 5, 7; B- 2, 3; C – 6

13. IV guruh elementining yuqori oksidi tarkibida 13,33% kislorod bo'lsa, elementni toping.

- Ge
- Si
- Sn
- Pb

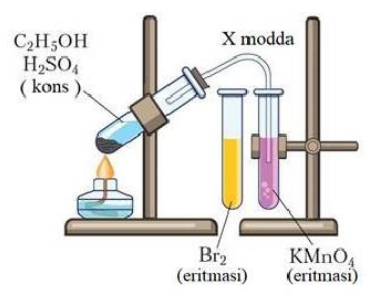
14. Donor akseptor bog'lanishdagi moddalarni aniqlang. 1. NO<sub>2</sub>

2. N<sub>2</sub>O<sub>5</sub>
3. NO
4. N<sub>2</sub>O<sub>3</sub>
5. CO<sub>2</sub>
6. CO
7. NH<sub>3</sub>
8. NH<sub>4</sub>NO<sub>3</sub>

- 2, 3, 5, 6, 7
- 1, 2, 4, 6, 8
- 3, 4, 6, 7, 8
- 1, 2, 5, 7, 8

15. Quyidagi reaksiya asosida hosil bo'ladigan X moddani ma'lum miqdoriga HBr ta'sir ettirildi va so'ngra Na metalli qo'shilganda hosil bo'lgan moddani aniqlang.

(X modda bromli suv va kaliy permanganat eritmasini rangsizlantiradi)

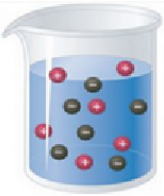
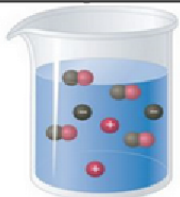



- C<sub>2</sub>H<sub>5</sub>Na
- C<sub>4</sub>H<sub>10</sub>
- C<sub>2</sub>H<sub>5</sub>Br
- C<sub>2</sub>H<sub>6</sub>

16. Neonga nisbatan zichligi 2,2 bo'lgan oksid befarq oksid bo'lsa, uning 2 molidagi jami atomlar sonini toping.

- 4·N<sub>A</sub>
- 3·N<sub>A</sub>
- 12·N<sub>A</sub>
- 6·N<sub>A</sub>

17. Quyidagi berilgan rasmlarga mos moddalarni topib juftlang.

<p>A.</p> 	<ol style="list-style-type: none"><li>1. <math>\text{AgNO}_3</math></li><li>2. <math>\text{NaCl}</math></li><li>3. <math>\text{Mg}(\text{OH})_2</math></li><li>4. <math>\text{H}_2\text{SO}_3</math></li><li>5. <math>\text{Cu}(\text{OH})_2</math></li><li>6. <math>\text{BaSO}_4</math></li><li>7. <math>\text{Ag}_3\text{PO}_4</math></li><li>8. <math>\text{HF}</math></li><li>9. <math>\text{K}_2\text{SO}_4</math></li></ol>
<p>B.</p> 	
<p>C.</p> 	

A-1,4,9; B-3,5,7; C- 2,6,8

A-1,2,9; B-3,4,8; C- 5,6,7

A-1,3,9; B-2,5,8; C- 4,6,7

A-1,2,9; B-3,4,7; C- 5,6,8

Kimyo



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30  
31 32 33 34 35 36 37 38 39 40

18. Ma'lum bir reaksiyada vodorodning sarflanish tezligi  $5 \text{ mol/l}\cdot\text{min}$ . 2 litrli idishda shu reaksiya olib borilganda, vodorodning massasi 80g dan 20g gacha kamaygan bo'lsa, reaksiyaning sekunldardagi davomiyligini aniqlang.

210

120

180

160

19. Tarkibida kislorod atomini saqlaydigan moddalarni ko'rsating.

- 1) fosgen;
- 2) kinovar;
- 3) kuprit;
- 4) malaxit;
- 5) xalkozin; ; 6) karborund.

- 1, 2, 4
- hammasi
- 1, 3, 6
- 1, 3, 4

20. Quyidagi sxemadan X va Y moddalarini toping?



- 1) H<sub>2</sub>O;            4) Fe;
- 2) NaCl;           5) HCl.
- 3) Cl<sub>2</sub>;

- X - 3; Y - 5
- X - 4; Y - 3
- X - 5; Y - 4
- X - 2; Y - 3

21. <sup>Y</sup>C izotopi hosil qilgan uglerod (IV) oksidining molyar massasini aniqlang.

Izotoplar	<sup>X</sup> C	<sup>Y</sup> C
Proton	6	6
Neytron	6	8
Elektron	6	6

- 45
- 44
- 47
- 46

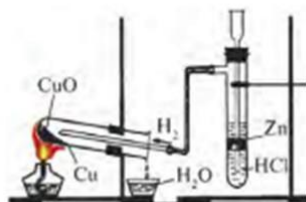
22. Quyidagi berilgan fikrga "To'g'ri" yoki "Noto'g'ri" deb javob bering. Suvning ion ko'paytmasi 10<sup>-10</sup> ga teng.

- To'g'ri
- Noto'g'ri

23. Ham kation , ham anion bo'yicha gidrolizlanadigan tuzni aniqlang.

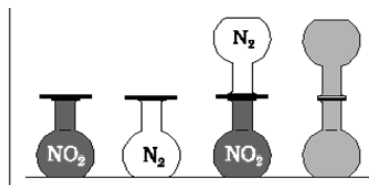
- $Al_2S_3$
- $CuSO_4$
- $Na_2SO_3$
- $KNO_3$

24. Quyida rasmda ko'rsatilgan tajriba asosida 36,5 g 20%li HCl eritmasiga 13 g Zn ta'sir ettirildi, ajralib chiqqan gaz CuO ustidan o'tkazilganda, hosil bo'lgan qattiq qoldiqning massasini (g) hisoblang.



- 6,4
- 6,5
- 13
- 12,8

25. Quyidagi rasm asosida berilgan fikrlarni izohlang.



Ikkita kolba olib, birinchisini  $N_2$ , ikkinchisini  $NO_2$  bilan to'ldirildi. Kolbalarni bir-biriga rasmda ko'rsatilganidek

qo'yildi. Bunda og'ir bo'lgan qo'ng'ir rangli gaz  $NO_2$  solingan kolba pastga, rangsiz gaz  $N_2$  solingan kolba yuqoriga qilib o'rnatildi. Biroz vaqt o'tgandan keyin ikkala kolbaning ham ichi bir xil, ya'ni qo'ng'ir rangga aylandi. Bu hodisani kimyoviy hodisa deb hisoblasak bo'ladimi?

- Yo'q, bu gazlarning issiqlik harakati, ya'ni xaotik harakati hisoblanadi.
- Ha, gazlar bir-biri bilan aralashib reaksiyaga kirishadi, bu kimyoviy jarayon hisoblanadi.

26.  $C_9H_{12}$  tarkibga ega bo'lgan aromatik uglevodorodning izomerlar sonini toping.

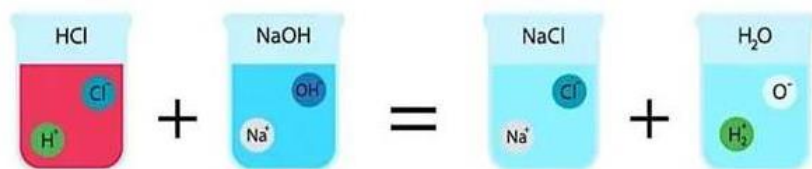
- 8
- 9
- 7
- 6

27. Quyidagi reaksiyalarda ishtirok etgan X moddani aniqlang.

Reaksiya sxemasi	X modda
1) fenol + X $\rightarrow$ 2,4,6-tribromfenol	a) $HNO_3$
2) glitserin + X $\rightarrow$ trinitroglitserin	b) $CuO$
3) metanol + X $\rightarrow$ formaldegid	c) $NH_4NO_3$
4) asetilen + X $\rightarrow$ asetaldigid	d) $Br_2$ (suvli eritmasi)
	e) $HBr$
	f) $H_2O$ ( $Hg^{2+}$ )

- 1-e, 2-a, 3-b; 4-f
- 1-d, 2-c, 3-f; 4-b
- 1-e, 2-c, 3-b; 4-f
- 1-d, 2-a, 3-b; 4-f

28. Quyidagi reaksiya turini aniqlang.



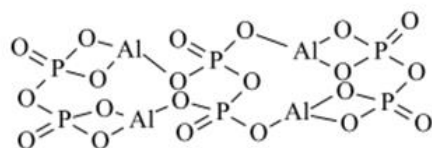
- Parchalanish
- Eterifikatsiya
- Neytrallanish
- Oksidlanish-qaytarilish

29. Quyida berilgan moddalarning suv bilan reaksiyaga kirishishidan hosil bo'ladigan mahsulotlarni juftlab ko'rsating.

Modda nomi	Reaksiya mahsuloti
a) buten-1	1) butanal
b) butin-1	2) butanol-1
c) buten-2	3) butanol-2
d) butin-2	4) butanon
	5) butandiol-1,2
	6) butan kislota

- a-2, b-4, c-5; d-6
- a-3, b-4, c-3; d-4
- a-3, b-3, c-4; d-5
- a-2, b-4, c-3; d-4


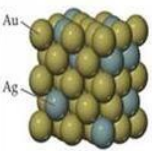
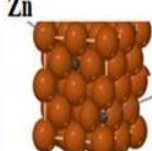
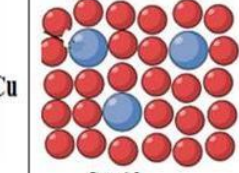
30. Quyida tuzilishi berilgan tuzni ekvivalentini toping.



- 52,5
- 122
- 157,5
- 210



31. Quyida rasmlari berilgan qotishmalarni ularning turlari bilan moslab juftlang.

A) Gomogen B) Geterogen C) Intermetall			
1.  Cu - Ni	2.  Au Ag	3.  Zn Cu	4.  Sn-Al

- A-1,2; B- 3; C - 4
- A-1; B- 2, 4; C - 3
- A-2; B-1, 3; C - 4
- A-1,2; B- 4; C - 3

32. Spirt lampasi alangasining yuqori qismi qanday tuzilgan?



- Chetlari xira, issiq bo'lmagan qismi
- Ravshan, issiq qismi
- Chetlari xira, eng issiq qismi;
- Juda xira, issiq bo'lmagan qismi

33. Quyida berilgan tuzlardagi  $\sigma$  va  $\pi$  bog'lar soni yig'indisi to'g'ri berilgan qatorni ko'rsating.

- |                          |        |
|--------------------------|--------|
| 1) alyuminiy sulfat;     | a) 42; |
| 2) kaliy digidrofosfat;  | b) 12; |
| 3) alyuminiy pirofosfat; | c) 24; |
| 4) kalsiygidroksosulfat. | d) 8   |

- 1-a; 2-d; 3-c; 4-b
- 1-c; 2-d; 3-b; 4-a
- 1-b; 2-d; 3-a; 4-c
- 1-c; 2-d; 3-a; 4-b

34. Qaysi oksid kislota va asos bilan reaksiyaga kirishadi?

- CO<sub>2</sub>
- Na<sub>2</sub>O
- Mn<sub>2</sub>O<sub>7</sub>
- ZnO

35. 0,5 mol alyuminiy karbidi gidrolizi natijasida ajralib chiqadigan gaz hajmini toping?

- 22,4
- 44,8
- 33,6
- 67,2

36. Quyida berilgan xossalar qaysi kislota tegishli ekanligini juftlab ko'rsating.

1) Bu kislota kuchsiz va beqaror bo'lib faqat suvli eritmalardagida mavjud bo'ladi. U lakmusni boshqa kuchli kislotalarga o'xshab qizil tusga kiritmasdan, pushti rangga bo'yaydi.

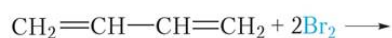
2) Bu kislota toza holatda rangsiz, hidsiz, og'ir moysimon suyuqlik. 96 %li konsentrlangan bu kislota zichligi 1,84 g/cm<sup>3</sup> ga teng. U suvda eritilganda juda ko'p issiqlik ajralib chiqadi. Shuning uchun bu kislota suvda eritishda juda ehtiyot bo'lish kerak.

3) Bu kislota toza holatda rangsiz, o'tkir hidli suyuqlik bo'lib hisoblanadi. Konsentrlangan holatda mis metalli bilan ta'sirlashganda qo'ng'ir rangli gaz hosil qiladi.

a) HCl; b) H<sub>2</sub>CO<sub>3</sub>; c) H<sub>2</sub>SO<sub>4</sub>; d) H<sub>2</sub>SiO<sub>3</sub>; e) HNO<sub>3</sub>


- 1-b; 2-e; 3-c
- 1-d; 2-c; 3-e
- 1-b; 2-c; 3-e
- 1-d; 2-a; 3-e

37. Quyidagi reaksiya natijasida hosil bo'lgan moddani toping.



- 2,2,3,3-tetrabrombutan
- 2,3-dibrombutan
- 1,2,3,4-tetrabrombutan
- 1,4-dibrombutan

38. Quyidagi jadvalda siklogeksan uchun berilgan barcha ma'lumotlar to'g'rimi?

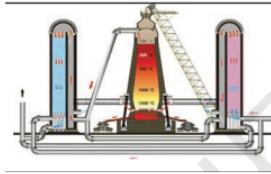
Formulasi	Gibrid orbitallar soni	Qutbsiz bog'lar soni	Suv bilan reaksiyasi	Bromli suvga ta'siri	Cl <sub>2</sub> bilan reaksiyasi
	24	6	Sodir bo'lmaydi	rangsizlantirmaydi	geksaxloran hosil bo'ladi

- Ha
- Yo'q

39. Quyida berilgan ma'lumotlarning barchasi to'g'ri yoki noto'g'riligini aniqlang.

Cho'yan balandligi 31 m bo'lgan domna pechlarida olinadi. Domna pechining tepasidagi teshigi -furma, yuqori yarmi – gorn , eng keng o'rta qismi –

shaxta , pastki qismi – raspar , gorning tepasidagi teshiklar – koloshnik hisoblanadi.



- Noto'g'ri
- To'g'ri

40. Atomli kristall panjaradagi moddalarni aniqlang.

- |              |           |                 |
|--------------|-----------|-----------------|
| 1. Mis       | 5. Yod    | 9. Qizil fosfor |
| 2. Olmos     | 6. Galit  | 10. Gematit     |
| 3. Karborund | 7. Grafit | 11. Oq fosfor   |
| 4. Quruq muz | 8. Korund | 12. Kvars       |

- 1, 2, 5, 8
- 4, 5, 10, 11
- 2, 7, 9, 12
- 6, 7, 8, 9

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