

1. 4 hajm X_m va 12 hajm Y_n gaz to'liq reaksiyaga kirishib, 8 hajm XY_3 gaz hosil qiladi, m va n qiymatlarini aniqlang.

A) 2; 2 B) 2; 4 C) 6; 4 D) 2; 6

2. n – ni aniqlang.

Polime r	Makromolekuladag i uglerodning sp^2 gibrid orbitallar soni	Makromolekuladag i kislorod atomlari soni
Lavsan	96000	n

A) 12000 B) 6000 C) 16000 D) 36000

3. $NaOH + Cl_2 \xrightarrow{t^o} NaCl + H_2O + X$

quydagi ma'lumotlarning qaysilari X uchun xos?

1. Xlor +1 oksidlanish darajasiga ega 2. Xlor +5 oksidlanish darajasiga ega

3. Javel suvi deyiladi 4. Gipoxlarit kislota tuzi 5.

Xlorit kislota tuzi 6. Xlorat kislota tuzi

A) 1,3,4 B) 2,3,6 C) 2,6 D) 1,4

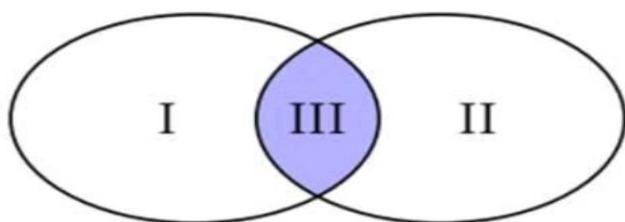
4. 0,1 mol aminosirka kislotasidan murakkab efir olish uchun 4% li metanol eritmasidan necha ml kerak. Metanol eritmasining zichligi $0,8 \text{ g/sm}^3$ ga teng.

A) 200 B) 150 C) 80 D) 100

5. Eyler – Venn diagrammasi asosida o'ziga xos va umumiy xususiyatlarni aniqlang.

Uchlamchi butil spirt

ikkilamchi butil



1. Molekulasida 11 ta qutbli kovalent bog' mavjud.

2. CuO okisdi bilan oksidlanadi

3. Molekulasida asimmetrik uglerod atomi bor

4. HCOOH bilan murakkab efir hosil qiladi.

A) I-2; II-1, 3; III-4

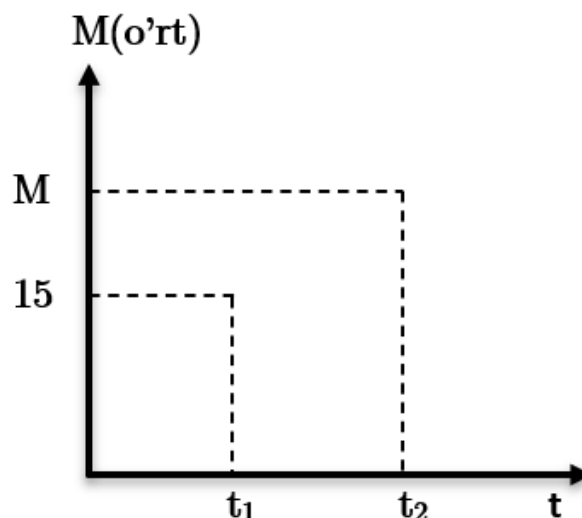
B) I-3; II-2; III-1, 4

C) I-4; II-3; III-1, 2

D) I-2; II-3; III-1, 4

6. Hajmi 3 litr bo'lgan idishda N_2 va H_2 reaksiyaga kirishdi. Grafikda t_1 da boshlang'ich gazlarning t_2 da esa muvozanat holidagi gazlarning o'rtacha molyar massalari berilgan. Muvozanat holidagi gaz molekullari soni

dastlabki gaz molekullari sonidan 2 marta kam. M- ni hisoblang.



A) 22 B) 18 C) 20 D) 23

7. Xlorsirka kislotasining 60,48 grammi ammiyak bilan ta'sir etirilganda 38,4 gramm glitsin olindi. Bu reaksiyaning unumini (%) hisoblang.

A) 20 B) 80 C) 40 D) 60

8. X spirtining optik izomeri mavjud va uglerod soni eng kam bo'lgan to'yingan bir atomli spirtidir. Y moddasi esa X ning izomeridir lekin qutbsiz bog'lar soni X dagidan kamdir. Har ikki molekulada jami nechta qutbli bog' mavjud?

A) 21 B) 22 C) 23 D) 24

9. $N_2 + 3H_2 \rightarrow 2NH_3$ reaksiya tezligi N_2 ga nisbatan $0,6 \text{ mol/l} \cdot \text{min}$. 1 litrli idishda $x \text{ mol } N_2$ va 12 mol H_2 o'rtasidagi reaksiyada 5 daqiqadan so'ng dastlabki Agar moddalarning konsentratsiyasi bir xil bo'lsa, x ni hisoblang.

A) 10 B) 5 C) 4 D) 6

10. $m_1 + m_2 = 48$ bo'lsa, X ni nisbiy atom massasni aniqlang

$XO + H_2SO_4 \longrightarrow XSO_4 + H_2O$		
Modda	Massasi(g)	Reaksiyda natijasida olingan suvning massasi (g)
XO	m_1	3,6
XSO_4	m_2	

A) 23 B) 65 C) 40 D) 24

11. Agar nisbiy molekulyar massalari bir xil bo'lgan to'yingan bir asosli karbon kislota va to'yingan ikki atomli spirtidan olingan 29,6 gramm murakkab efir bilan reaksiyaga kirishish uchun 200 gramm 8% li

NaOH eritmasi sarflangan bo'lsa, olingan tuzning massasini (grammda) hisoblang.

A) 5.4 B) 18.4 C) 17.2 D) 27.2

12. AB-tuzning gidrolizlanishi jarayonida aralashmaga kislotaga qo'shsak, gidroliz zaiflashadi (A-metall, B-kislotaga qoldig'i)

AD-tuzning gidrolizi haqida qaysi fikr to'g'ri (AD tuzi suvda yaxshi eriydi)

1. Probirkaga lakmus qog'ozini solsak, u ko'k rangga aylanadi
2. Muhitga lakmus qog'ozini qo'ysak, u qizil rangga aylanadi
3. anionga bo'yicha gidrolizlanadi
4. kationiga bo'yicha gidrolizlanadi
5. Anion va kationga qarab gidrolizlanadi
6. gidrolizlanmaydi

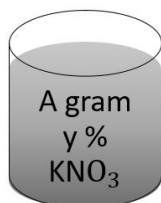
A) 1,3 B) 2,4 C) faqat 6 D) faqat 5

13. N.sh gaz holatda bo'lgan C_aH_b sikloalkan, C_mH_n Alkin ekanligi ma'lum bo'lsa, $(m+n):(a+b)$ nisbatni aniqlang.

Formulasi	N.sh dagi zichligi (g/l)
C_aH_b	1,875
C_mH_n	$\approx 1,161$

A) 5:12 B) 9:4 C) 4:9 D) 4:7

14. Idishda ko'rsatilgan eritmada 100 g suv bug'latilsa 3y % li eritma hosil bo'ladi. Agar dastlabki eritmaga 10 g tuz qo'shsak 1,25y % li eritma hosil bo'ladi. Shunga ko'ra idishdagi eritmaning massasini 2 marta kamayguncha suv bug'latilsa necha foizli eritma hosil bo'ladi?



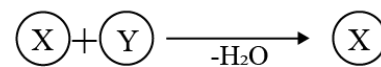
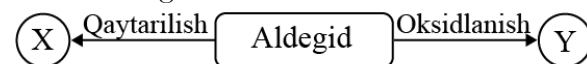
A) 37,5 B) 35 C) 18,75 D) 40

15. Reaksiyalar davomida necha mol vodorod gazi ajralib chiqadi?

Metallar	Ortiqcha suv bilan aralashtirilgan miqdorlari	Olingan eritmaga K_2CO_3 qo'shilganda hosil bo'lgan cho'kma miqdori
Na Ca	0,6 mol	0,36 mol

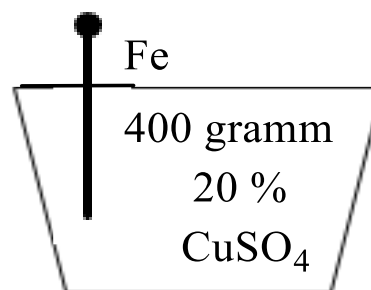
A) 0,12 B) 0,36 C) 0,24 D) 0,48

16. X bilan Y moddalari aldegidning vodorod bilan va $Cu(OH)_2$ bilan reaksiyasidan olingan organik moddalardir. Z moddasining nisbiy molekular massasi 88 bo'lsa javoblardan qaysi biri X moddasining izomeridir?



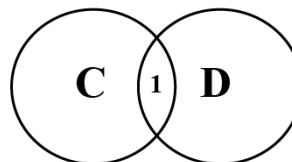
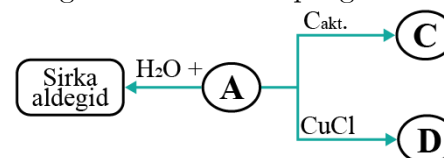
- A) dimetil oddiy efiri
B) dietil oddiy efiri
C) metiletil oddiy efiri
D) metilpropil oddiy efiri

17. Rasmda ko'rsatilgan eritmaga 40 g temir plastinkasi tushirildi. Eritmadagi tuzning yarmi reaksiyaga kirishgach, metall plastinkasi olib quritildi. Reaksiyadan keyingi plastinka massasi necha foizga ortganini hisoblang.



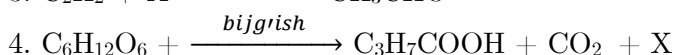
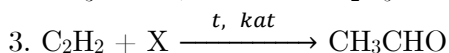
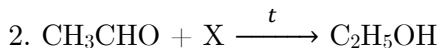
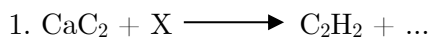
A) 50% B) 15% C) 20% D) 5%

18. A alkinning reaksiyalari natijasida C va D mahsulotlari olindi. Bung asosan 1-nuqtaga mos bo'lgan ifodalarni aniqlang.



1. Oddiy formulasi CH dir
 2. Molekulasidagi bog'lanishda uglerodning 6 ta gibridlanmagan orbitali sarflangan
 3. C_nH_{2n-6} formulaga ega
 4. Molekulasidagi barcha uglerodlar bir xil gibridlanishga ega
 5. Bromli suvni rangsizlantiradi
 6. 1 moli 3 mol xlor bilan birikish reaksiyasiga kirishadi
- A) 1, 2, 4, 5
B) 1, 2, 6
C) 3, 4, 5
D) 2, 4, 5, 6

19. Qaysi reaksiyada X modda vodorodga to'g'ri keladi.



A) 1, 3 B) 2, 4 C) 1, 4 D) 1, 2

20. HX, HY, HZ yo'nalishda kislota molekulasida bog' qutibligi kamaydi. Shunga asosan X, Y, va Z galogenlari haqida to'g'ri ma'lumotni aniqlang.

1. Agar Z suyuq bo'lsa, Y (n.sh) gaz

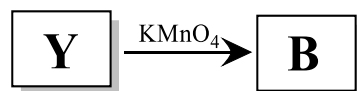
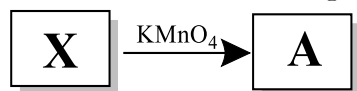
2. Agar Z suyuq bo'lsa, X- ioni Ag^+ inoni bilan cho'kma hosil qilmaydi.

3. Agar Z- ioni Ag ioni bilan sariq cho'kma hosil qilsa, galogen X uglerod bilan reaksiyaga kirishi mumkin

4. Agar X uglerod va oltingugurt bilan reaksiyaga kirishadi, Z oltingugurt bilan reaksiyaga kirishmaydi.

A) 1,3 B) 2,4 C) 1,3,4 D) 1,2,3

21. A va B organik moddalarni polikondensatslash orqali lavsan tolasi olinadi. Bog' hosil bo'lishida Y sistema molekulasida 2 ta gibrid bo'lmagan uglerod orbitallari ishtirok etadi. X molekulasidagi gibrid orbitallar sonini hisoblang.

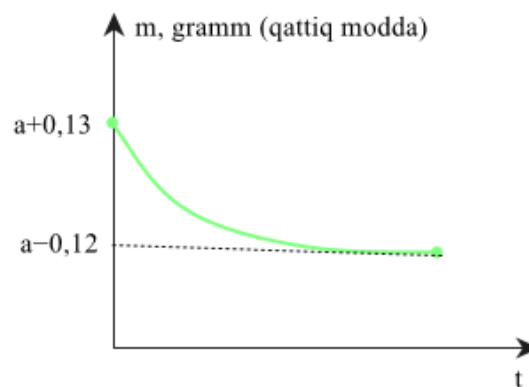


A) 30 B) 26 C) 20 D) 27

22. Cu va Pb dan iborat 5 mol aralashma qattiq sulfat kislota bilan reaksiyaga kirishganda 2 mol o'rta tuz hosil bo'lgan bo'lsa reaksiya uchun olingan kislota molini aniqlang.

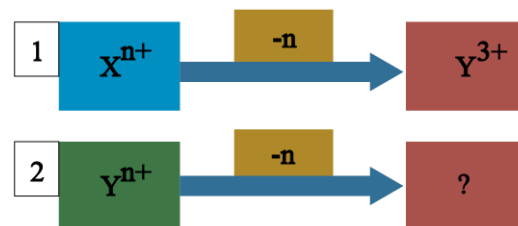
A) 8 B) 10 C) 12 D) 13

23. Tarkibida 80% CuO saqlagan ruda vodorod yordamida qaytarilish seximasi keltirilgan bo'lsa, dastlabki ruda massasini gramda aniqlang? (vodorod CuO ning 50% ni qaytarishga yetarli deb oling)



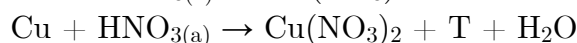
A) 3,125 B) 0,25 C) 0,125 D) 2,5

24. Birinchi jarayondan keyin ikkala ionning zaryadi tenglashdi. Bunga ko'ra, ikkinchi jarayondan keyin Y ning zaryadini toping.



A) Y^0 B) Y^{1+} C) Y^{2+} D) Y^{3-}

25. $\text{C} \rightarrow \text{D}$ o'zgarishda azot oksidlansa, berilgan uchinchi reaksiyada 1-mol mis reaksiyaga kirishgan vaqtda ajralgan gazning hajmini toping. (a va b kislotaning suyultirilgan va konsentrlangan bo'lishi ko'rsatilgan).



A) 67,2

B) 44,8

C) 8,96

D) 22,4

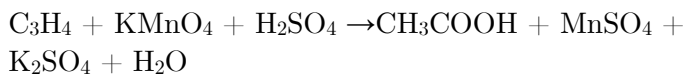
26. Ca va Ag dan iborat 40 gram aralashmaga HCl qo'shilganda muayyan miqdor vodorod gazi hosil ajraldi. Shunday miqdor vodorod Ca bilan reaksiyasiga kirishganda aralashma massasi 2 foizga ortadi. Bunga asosan arashma tarkibidagi kumushning massa ulushini aniqlang. $A_r(\text{Ca}) = 40$, $A_r(\text{Ag}) = 108$

A) 25% B) 60% C) 75% D) 80%

27. 392 g 20%li xrom (III) –sulfat eritmasi elektroliz qilinganda hosil bo'lgan eritma massasi 373,2 g ni tashkil etdi va inert elektrodalarda 10,08 litr (n.sh.) gaz ajraldi. Elektroliz jarayonida hosil bo'lgan kislota massasini (g) hisoblang.

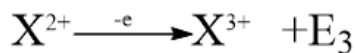
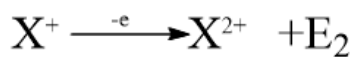
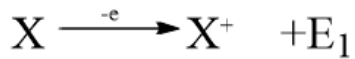
A) 58,8 B) 39,2 C) 44,1 D) 29,4

28. Reaksiya mahsulotlarining koeffitsientlari
yig'indisini toping



A)29 B) 28 C) 30 D)31

29. Ionlanish energiyalarini solishtiring.



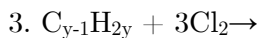
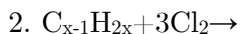
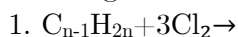
A) $E_1 > E_2 > E_3$

B) $E_2 > E_3 > E_1$

C) $E_3 > E_2 > E_1$

D) $E_1 > E_3 > E_2$

30. Har uchala reaksiyada, xlor birinchi reaksiyada 75%, ikkinchi reaksiyada 50%, uchinchi reaksiyada 37,5% vodorod bilan to'liq tasirlashadi. Har uchala reaksiyada olingan uglevodorod molekularida nechta gibrid orbital bor?



A) 20 B) 24 C) 28 D) 16