

## ONA TILI VA ADABIYOT

1. Qaysi qatordagi fe'llarda nisbat qo'shimchasi mavjud emas?

- A) Ko'ngli vayron bo'lgan qiz yelkalari titrab-titrab yig'lardi.
- B) Baxt oila ostonasidan boshlanishini unutmang!
- C) Yomon qo'shni dushmandan yomon – turgan joyingdan ko'chirib yuborganini sezmay qolasan.
- D) Uning vujudida ham mehr, ham vahshiylik yashiringan edi.

2. Yasovchi asosi shakldoshlik xususiyatiga ega bo'lgan sodda yasama ot qatnashgan gapni toping.

- A) Akasidan tepki yeb xunob bo'lgan Abdumalik kechgacha qovog'ini ochmadi.
- B) Ko'klamga chiqib akangning boshini ikkita qilamiz.
- C) Yozuvchilar ba'zan tushunib bo'lmaydigan darajada injiq bo'lishadi.
- D) Ertakning boshlanmasi tinglovchining diqqatini jalb qilish xususiyatiga ega.

3. Qaysi qatordagi gaplarda yasama so'z ishtirok etgan?

- A) Hamma yagona bir tashvish – kuz tashvishi bilan turib, kuz tashvishi bilan yotardi.
- B) Yana ko'zi ilinayotgan edi, gurs-gurs qadam tovushi eshitildi.
- C) Sinfda shivir-shivir, qog'ozlar shitiri boshlandi.
- D) Asror ham, boshqa bolalar ham Qamariddinning armonini bilishmaydi.

4. Men quyosh yuzlimga, debt un kechalar berdim yurak, Oqibat otganda tong qondir jigar, ketmoqdaman.

Baytdagi sonor tovush bilan tugagan yopiq bo'g'inlar tarkibida nechta til undoshlari mavjud?

- A) 7ta B) 17ta C) 19ta D) 15ta

5. Qaysi qatorda "palak" so'zi qovun urug'I ma'nosida qo'llanilgan?

- A) Poyiga ipakdan palak soldilar, So'ng yuksak bir taxtni etdilar tortiq.
- B) Bir palakdan har xil xamak chiqadi deganlari rost ekan-da.
- C) So'lg'in palakda o'smay qolib ketgan xomaklar yiltillab qolar, goh surmaday qorayib ko'rinardi.
- D) To'rt egat palak ekdim.

6. Kesimi otlashgan so'z bilan ifodalangan gapni belgilang.

- A) Na u dunyoda va na bu dunyoda nimaiki foydali, nimaiki zararli bo'lsa – biladigan bir menman, - da'vo qildi Aql.
- B) Men inson tanasining podshosiman, qon mendan taraydi, jon menda makon quradi, mensiz hayot yo'q, - dedi yurak.
- C) Dunyodagi barcha hodisalarning sirini hech bo'lmasa yuzakiroq bo'lsa ham bilmaslik – bu odamgarchilikdan emas.
- D) Maqsadga erishganlar vaqtdan o'zib keta olganlardir.

7. Sintaktik usul bilan yasalgan uyadosh so'zlar qaysi qatorda berilgan?

- A) Sen shunday baxtga erishginki, katta-kichik, yaxshi-yomon, do'st-dushman hamisha havas bilan qarasin.
- B) Sahnaga qaddi-qomati kelishgan, xushsurat, istarali, did bilan kiyingan bir qiz chiqib keldi.
- C) Ariq bo'yida hamisha, har yoz ikkita jaydari atirgul, pastda namozshomgul, gultojjixo'roz, sadarayhon o'sib yotadi.
- D) Kechalari uyqu yo'q, kunduzlari halovat.

8. Qaysi gapdagi ham ko'p ma'nolilik, ham shakldoshlik xususiyatiga ega bo'lgan qaratqich aniqlovchining uchinchi bo'g'iniga urg'u tushgan?

- A) Siz kabi "matematik"larning ko'pini ko'rganmiz!
- B) Oybek, Hamid Olimjon, G'afur G'ulom kabi akademik ijodkorlar xalq ma'naviyatining boyishiga ulkan hissa qo'shgan.
- C) Yasama kulgi yuzni yoritmas.
- D) Nozimaning burama yoqali ko'ylagi o'ziga yarashib turardi.

9. Alini ko'rsang, mendan salom ayt. Ergashgan qo'shma gap turini aniqlang.

- A) to'ldiruvchi ergash gapli qo'shma gap
- B) kesim ergash gapli qo'shma gap
- C) hol ergash gapli qo'shma gap
- D) ega ergash gapli qo'shma gap

10. Qaysi gapda so'zlovchining quvonch munosabatini ifodalaydigan modal so'z ishtirok etgan?

- A) Ulug' insonlar haqida fikr bildirmoq, ularning hayoti va ijodi haqida mulohaza yuritmoq, darhaqiqat, oson ish emas.
- B) Holbulki, ular shabadaning ko'zida o'tirishar, kenja o'g'il havasga qurgan baland shiypandan chor-atrof kaftdagidek ko'zga tashlanib turardi.
- C) Sen, tug'ishgan ukam, oxiri meni yiqitib, yuzimga oyoq qo'yding-a!
- D) Xayriyat, urinishlarim bekor ketmabdi – farzandlarim el koriga yaraydigan insonlar bo'lib yetishibdi.

11. Ajratilgan izohlovchi berilgan qatorni toping.

- A) Ustozim – Xoliq aka Forishda tug'ilgan.
- B) Axir, uning, Vohidning, ham o'ziga yarasha obro'si, yigitlik g'ururi, izzat-nafsi bor-ku!
- C) Bu iltimosingni tog'amga, Muxtor akamga, ayta olmayman.
- D) Pastlikka – Labzak tomonga tusha boshladik.

12. Tobe gap tarkibida ham, hokim gap tarkibida ham nisbiy so'z mavjud bo'lgan qo'shma gapni aniqlang.

- A) Hurmat qilsang, hurmat ko'rasan.
- B) Ko'z qayerda bo'lsa, mehr ham o'sha yerda bo'ladi.
- C) Shuni bilingki, yomonlik jazosiz qolmaydi.
- D) Yomonning yaxshisi bo'lguncha, yaxshining yomoni bo'l.

13. Uchta ma'noli qismga ajraladigan yasama so'zni aniqlang.

- A) isrofgarchilik B) salomlash
- C) kiyindi D) hamxonam

14. Qaysi gapda harakat nomi bilan ifodalangan ot-kesim mavjud?

- A) Orzu-o'ylarimiz, fikrlarimiz yondosh edi.
- B) Umring davomida imkon qadar muhtojlarga yordamlash.
- C) O'zbekning faxri – kurash.
- D) Maqsad o'qish edi, agar unutmagan bo'lsangiz.

15. Shahrimizning har bir nuqtasi menga kaftdek ma'lum. Ma'no ko'chishi turini aniqlang.

- A) metafora B) metonimiya
- C) sinekdoxa D) ma'no ko'chmagan

16. Yig'loqiliging vajidan sening bunaqa joylarda ishlashing, balki, yaxshimasdir.

Ushbu gapda necha o'rinda fonetik hodisa yuz bergan?

- A) 6ta B) 5ta C) 3ta D) 7ta

17. She'rlarda uchraydigan "o'shak", "bormu", "kelgil" kabi shakllar imlosi qaysi yozuv tamoyiliga asoslangan?

- A) fonetik B) morfologik
- C) shakliy D) tarixiy-an'anaviy

18. Qaysi banddagi gapda til orqa ng tovushi ko'proq qo'llangan?  
 A) Reytingingizni oshirishingiz bizning yangi marralarni zabt etishimizga ta'sir etadi.  
 B) Shuning uchun bunga astoydil kirishing.  
 C) Menga qolsa, ming xil reja tuzgandan barchamizning teng, bahamjihat harakat qilganimiz ma'qul.  
 D) Unutmang, langar tashlangach, kemangizning narxi bugungi narxning yarmicha bo'ladi.
19. Ham fonetik, ham morfologik yozuv qoidasi belgilariga ega so'zni aniqlang.  
 A) borarmish B) ulg'ayibdi  
 C) anglamas D) shahrimdin
20. Sen qaydan bilasan: balki, keng olam  
 Shu mo'jaz qalbimga bo'ylayotgandir.  
 Sen qaydan bilasan: balki, meni ham  
 Kimdir qaydadir jim o'ylayotgandir.  
 Ushbu she'riy parchada olmosh turkumiga mansub so'zlar necha o'rinda qo'llangan?  
 A) 8ta B) 6ta C) 9ta D) 7ta
21. "Zulmat ichra nur" asarida qaysi qahramon "Yaxshi niyat – yorti mol" maqolini ishlatgan?  
 A) Kobuliy B) Mansur C) G'iyosiddin D) G'aribiy
22. Asqad Muxtorning "Yo'l" she'rida quyidagi maqollardan qaysi biri uchraydi?  
 A) Ko'rganing – seniki B) Yurgan – daryo  
 C) Intilganga tole' yor D) She'rda hech qanday maqol uchramaydi
23. Qaysi asar qahramoni davlatni ushlab turguvchi tayanchlarni "Mo'l xazina, yagona shoh, yengilmas lashkar", deya belgilaydi?  
 A) "Avlodlar dovoni" B) "Sohibqiron"  
 C) "Mirzo Ulug'bek" D) "Mahbub ul-qulub"
24. Cho'lponning fikricha, zulm oldida har narsa egilishi mumkin, ammo zulm bilan nimaga ega bo'lish imkonsiz?  
 A) yurtga B) e'tiqodga C) erkin vijdonga D) ko'ngilga
25. Qaysi asarning ikkinchi bo'limi tilni tiyish va odob - axloq haqida?  
 A) "Turkiy guliston yoxud axloq" B) "Mahbub ul-qulub"  
 C) "Hibat ul-haqoyiq" D) "Nasihatlar"
26. Abdulla Oripovning qaysi she'ri yo'lovchiga murojaat bilan boshlanadi?  
 A) "Odamlar" B) "Genetika" C) "Jannatga yo'l" D) "Dorboz"
27. "Kitoblar jangi" asarining muallifiga tegishli ma'lumotni aniqlang.  
 A) Ilk asari "Improvizator" nomi bilan e'lon qilingan.  
 B) Asarlaridan biri "Alanga" mukofotiga sazovor bo'lgan.  
 C) Vilyam Templning saroyida kotib bo'lib ishlagan.  
 D) Asarlaridan biri Gran Pri mukofotiga sazovor bo'lgan.
28. Jo'raxonning vafotiga bag'ishlab yozilgan asarni aniqlang.  
 A) "Sog'indim" B) "O'g'lim, sira bo'lmaydi urush"  
 C) "Sog'inish" D) "Ayrildim"
29. "Turon malikasi" asari muallifi ...ning o'zbek adabiyotidagi ilk namunasini yaratdi.  
 Nuqtalar o'rniga qanday so'zlar bo'lishi kerak?"  
 A) roman-diligiya B) shavqatsiz realizm  
 C) she'riy roman D) kontrast usuli
30. Xalq dostonlarida qaysi qahramon "quralay ko'z" deya ta'riflanadi?  
 A) Zulxumor B) Bahragul C) Xolbeka D) Gulanor

## MATEMATIKA

31. Ifoda qiymatining oxirgi raqamini toping.  
 $2012^{2013} + 2013^{2014} - 1014^{1015}$   
 A) 4 B) 3 C) 7 D) 5
32. Ikkita to'rt xonali sonlardan birining birlar xonasidagi raqami 4 ga kamayadi, o'nlari xonasidagi raqami 7 ga ortadi va minglar xonasidagi raqami 3 ga kamayadi. Ikkinchi sonning birlar xonasidagi raqami esa 3 ga ortdi, yuzlar xonasidagi raqam 4 ga kamaydi, minglar xonasidagi raqami 5 ga ortdi. Bu sonlarning yig'indisi qanday songa o'zgaradi?  
 A) 1669 B) 1586 C) 1677 D) 1661
33.  $\left(1 - \frac{1}{5}\right) \cdot \left(1 - \frac{1}{6}\right) \cdot \left(1 - \frac{1}{7}\right) \cdot \dots \cdot \left(1 - \frac{1}{100}\right)$  ni hisoblang va natijaning  $\frac{5}{2}$  qismini toping.  
 A) 0,01 B) 0,2 C) 0,1 D) 1
34.  $\sqrt{\sqrt{8} - \sqrt{12} - \sqrt{24} + \sqrt{36}}$  ni hisoblang.  
 A)  $1 + \sqrt{3} - \sqrt{5}$  B)  $1 + \sqrt{2} - \sqrt{3}$   
 C)  $3 - \sqrt{2} - \sqrt{3}$  D)  $2 + \sqrt{2} - \sqrt{3}$
35.  $x^3 - \frac{1}{x^3} - 3x + \frac{3}{x} = 64$  Tenglama nechta haqiqiy ildizga ega?  
 A) 0 B) 1 C) 2 D) 4
36.  $(a + 2019)^2 + |b - 2019^{2019}| = 0$  ( $2020 + a$ )<sup>b</sup> ning qiymatini toping?  
 A) 0 B) 1 C) 2019 D)  $2019^{2019}$
37.  $x$  va  $y$  natural sonlar uchun  $x + y = 13$  tenglik o'rinni bo'lsa  $x \cdot y$  ko'paytmaning qabul qilishi mumkin bo'lgan eng katta va eng kichik qiymatlari yig'indisini toping.  
 A) 42 B) 54 C) 72 D) 55
38. Cheksiz kamayuvchi geometrik progressiya hadlarining yig'indisi 72 ga, hadlari kvadratlarining yig'indisi esa 576 ga teng bo'lsa, u holda  $\frac{b_1}{q}$  ni toping.  
 A) 15 B) 15,1 C) 15,2 D) 15,4
39. Funksiyaning aniqlanish sohasini toping.  $y = \sqrt{x^4 - 81} + \frac{1}{\sqrt{-x}} + 17x - 16$   
 A)  $(-\infty; -3]$  B)  $(-\infty; 3]$  C)  $(-\infty; -3)$  D)  $[-3; 3]$
40.  $\sin a = 0,6$  bo'lsa  $\cos(3,5\pi + a)$  ni toping.  
 A) 0,8 B) -0,8 C) 0,6 D) -0,6
41.  $3ctg^2x + 8ctgx + 3 = 0$  tenglamaning  $[0; 2\pi]$  kesmadagi barcha qiymatlari yig'indisini toping.  
 A)  $2\pi$  B)  $3\pi$  C)  $4\pi$  D)  $5\pi$
42.  $\left(\left(1\frac{1}{2} + \frac{4x}{3}\right) : 3\frac{3}{4} - \frac{2}{5}\right) : 8\frac{8}{9} + \frac{1}{4} = 0,33$  Tenglamani yeching.  
 A) 2 B)  $\frac{1}{3}$  C)  $\frac{2}{5}$  D)  $\frac{2}{7}$
43. Uch soatdan birinchisi har 12 daqiqada, ikkinchisi har 18 daqiqada, uchinchisi har 15 daqiqada bong urmoqda. Ularning uchalasi soat 15:00 da birga bong urgan bo'lsa, keyingi birga bong urishi soat nechada sodir bo'ladi?  
 A) 17:20 B) 17:00 C) 18:30 D) 18:00

44. ABC uchburchakning A uchining kordinatasi (0;3) va uchburchakning og'irlik markazi (3;6) nuqtada bo'lsa, BC tomon markazining kordinatalarini toping.

A) (3;4) B) (3;4) C) (4;5) D) (4,5; 7,5)

45.  $\int_{\frac{\pi}{4}}^{\frac{\pi}{2}} \frac{\operatorname{cosec}x + \cos x}{\operatorname{cosec}x} dx$  Aniq integralni hisoblang.

A)  $\frac{\pi}{4}$  B)  $\pi - 1$  C)  $\frac{\pi+1}{4}$  D)  $\pi + 1$

46.  $2\arctg^2 x - \frac{\pi^2}{2} = 0$  tenglamani yeching.

A)  $\arctg 2 + \pi n$   $n \in Z$  B)  $\arctg 2 + 2\pi n$   $n \in Z$

C)  $2\arctg 2 + \pi n$   $n \in Z$

D)  $\emptyset$

47.  $\frac{15}{3} - \frac{7}{10} - \frac{37}{40} - \frac{85}{88} - \frac{151}{154} - \frac{235}{238}$  Hisoblang?

A)  $\frac{17}{34}$  B)  $\frac{2}{17}$  C)  $\frac{15}{34}$  D)  $\frac{2}{34}$

48. 12 sonini uchta butun sonlar yig'indisi ko'rinishida necha xil usulda yozish mumkin?

A) 9 B) 6 C) 12 D) cheksiz ko'p

49. Hisoblang.  $\frac{1}{2} + \frac{2}{2^2} + \frac{3}{2^3} + \frac{4}{2^4} + \dots + \frac{n}{2^n}$

A)  $2 - \frac{n+4}{2^n}$  B)  $2 - \frac{n+2}{2^n}$  C)  $2 + \frac{n+4}{2^n}$  D)  $2 - \frac{n+8}{2^n}$

50. 1,2,2,3,3,3,4,4,4,5,... Ketma-ketlikning dastlabki 100 tasi ning yig'indisini toping.

A) 755 B) 845 C) 927 D) 945

51.  $[-\sqrt{21}] \cdot [\sqrt{21}] \cdot [\sqrt{30+k}] = -160$  bo'lsa,  $k$  ning olishi mumkin bo'lgan butun qiymatlari yig'indisini toping. (bu yerda  $[a]$ -  $a$  sonining butun qismi)

A) 444 B) 1680 C) 714 D) to'g'ri javob yo'q

52. Teng yonli ABC uchburchakda Ava C burchaklar teng, AB:AC=5:3 va AB-AC=3 bo'lsa, uchburchakning perimetrini toping.

A) 19,5 B) 18,5 C) 17,5 D) 16

53. Hisoblang.  $\frac{\sqrt[4]{7^3 \sqrt{54} + 15 \sqrt[3]{128}}}{\sqrt[3]{4^4 \sqrt{32} + \sqrt[3]{9^4 \sqrt{162}}}}$

A) 2/3 B) 1 C) 3/5 D) 1/4

54.  $1^3 + 2^3 + 3^3 + \dots + 100^3$  Sonli ifoda qiymatini 3 ga bo'lgandagi qoldiqni toping

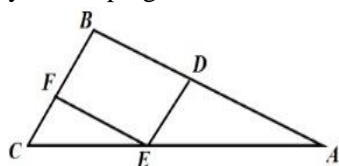
A) 2 B) 0 C) 1 D) Aniqlab bo'lmaydi

55. To'g'ri prizmaning asosi parallelogramdan iborat bo'lib, prizmaning diagonal kesimlarining yuzlari 7 va 10 ga teng bo'lsin Agar diagonal kesimlari o'zaro perpendikulyar bo'lsa, u holda prizmaning yon sirtini toping?

A)  $\frac{\sqrt{199}}{2}$  B)  $\frac{\sqrt{149}}{2}$  C)  $\frac{\sqrt{251}}{2}$  D)  $\frac{71}{2}$

56. Rasmda ABC uchburchak berilgan. Agar DE||BC va EF||AB bo'lib,

$S_{ADE} = 32$ ,  $S_{EFC} = 30$  bo'lsa, BDEF to'rtburchakning yuzini toping.



A)  $18\sqrt{22}$  B)  $16\sqrt{15}$  C)  $16\sqrt{26}$  D)  $18\sqrt{14}$

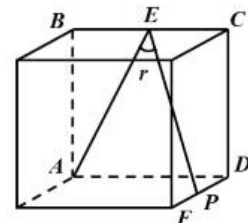
57. Agar  $\log_x y = 2$ ,  $\log_y z = 3$  va  $\log_z t = 4$  bo'lsa  $\log_x \left( \frac{x^4 \cdot z^3 \cdot t^2}{y^{15}} \right)$  ning qiymatini toping?

A) 15 B) 30 C) 32 D) 40

58.  $x + \sqrt{x + \frac{1}{2}} + \sqrt{x + \frac{1}{4}} = 2$  tenglamaning eng kichik ildizini toping.

A)  $2 - 2\sqrt{2}$  B)  $2 - \sqrt{2}$  C)  $\sqrt{2} - 1$  D) 1

59. Shaklda berilgan kub uchun BE = EC, FP = PD bo'lsa,  $\cos \alpha$  ni toping.



A)  $\frac{10\sqrt{3}}{33}$  B)  $\frac{\sqrt{30}}{10}$

C)  $\frac{\sqrt{10}}{30}$  D)  $\frac{\sqrt{30}}{30}$

60. Agar  $\log_3 25 = a$ ,  $\log_{25} 8 = b$  bo'lsa,  $\log_2 3$  ni a va b orqali ifodalang.

A)  $\frac{ab}{3}$  B)  $\frac{1}{3ab}$  C)  $\frac{3}{ab}$  D)  $\frac{3ab}{2}$

## ENGLISH

61. Choose the answer which correctly completes the sentence.

Some people believe that ... men and ... women think differently.

A) the / the B) the / - C) - / - D) - / the

62. Choose the answer which correctly completes the sentence.

Soap is good ... things because of the shape of its molecules.

A) to wash B) for washing C) washed D) to washing

63. Choose the answer which correctly completes the sentence.

Let me ... your success.

A) to congratulate you in C) congratulate you on  
B) congratulate on you D) congratulate you with

64. Choose the answer which correctly completes the sentence.

He needed ... for a drink, but kept ...

A) to stop / running C) stopped / muse  
B) stop / admonishing D) to stop / heeding

65. Choose the answer which correctly completes the sentence.

He said "We still don't believe you." He said ...

A) they still doesn't believe me C) I still don't believe him

B) they still hadn't believe me D) they still wouldn't believe me

66. Choose the answer which correctly completes the sentence.

... the great distances involved, it is hard to see ... details.

A) Because of / any B) Because / some  
C) Since / any D) Due to that / some

67. Choose the answer which correctly completes the sentence.

Air conditioner wants ... immediately.

A) to repair B) repairing C) repaired D) to be repairing

68. Choose the answer which correctly completes the sentence.  
It ... 50 years for the climate stabilize.  
A) will take probably B) will always take C) takes always  
D) will probably take
69. Choose the answer which correctly completes the sentence.  
What Anvar ... houses.  
A) does is to build B) did was built  
C) do is builds D) does is builds
70. Choose the answer which correctly completes the sentence.  
I prefer ... to the library ... to the disco.  
A) to go / than / go C) going / than / go  
B) going / to / go D) to go / rather than / go
71. Choose the answer which correctly completes the sentence.  
Five hundred thousand pounds ... for me ... in a week.  
A) isn't enough / living C) are enough / to leave  
B) are enough / living D) is enough / to leave
72. Choose the answer which correctly completes the sentence.  
You should get your skirt ....  
A) washed B) wash C) to wash D) washing
73. Choose the answer which correctly completes the sentence.  
The suggestion ... by Congress.  
A) was refused B) was vetoed  
C) was rejected D) was denied
74. Choose the answer which correctly completes the sentence.  
We walked to the next beach to ... from the crowds.  
A) get away B) get on C) get down D) get back
75. All of the words are singular, EXCEPT one.  
A) radius B) oasis C) offspring D) millennium
76. Choose the answer which correctly completes the sentence.  
Let him take a nap, ...?  
A) will you B) shall we C) don't you D) do you
77. Choose the answer which correctly completes the sentence.  
- Must she mop the floor now?  
- No, ....  
A) she mustn't B) she doesn't clean  
C) she needn't D) she must
78. Choose the answer which correctly completes the sentence.  
The owners of the shop ... the door unlocked yesterday.  
A) should have left B) must leave  
C) ought not to have left D) had to have left
79. Choose the answer which correctly completes the sentence.  
The window was broken ... a hammer.  
A) with B) by C) from D) along
80. Choose the answer which correctly completes the sentence.  
... see Munira, ... her this message?  
A) Should you / will you give  
B) When should you / do you give  
C) Will you / do you give  
D) will you / you give
81. Choose the answer which correctly completes the sentence.

- Jahongir ran ... an interesting article about fashion while he was reading the newspaper.  
A) down B) into C) across D) after
- Read the text. Then choose the correct answer to questions 82-84.  
The first murder ever committed in the United States occurred in September 1630, shortly after the Pilgrims arrived in Massachusetts. John Billington was the father of two sons, one of the first to settle in the new Plymouth Colony near what is today Boston, and one of the people who signed the Mayflower Compact—and he was also the colony's first murderer.  
Billington, in fact, was the first person to commit any crime in the colony, as far as we know today. He was also the first to be executed by the state in the New World. Billington's crime was to shoot a man named John Newcomen, for reasons which are lost to history.  
But Billington's problems had not begun on the soil of North America. He and his sons had nearly caused a mutiny aboard the Mayflower during the arduous trip across the ocean. One of his sons, in fact, fired his gun aboard the Mayflower—near an open keg of gunpowder! The flash from the gun could easily have ignited the powder, which would probably have sunk the ship. Once in Plymouth Colony, Billington's behavior did not improve. He refused to serve any form of military duty under the leadership of Miles Standish, a duty that was seen by the colonists as part of every man's responsibilities in the New World. He was later implicated in a plot to overthrow the entire leadership of Plymouth Colony, but a lack of evidence prompted the town's leaders to let him go free. In the end, Billington's rebellious and angry nature caught up with him. He was found guilty of the murder of John Newcomen, and died in disgrace on the gallows.
82. Which of the following is NOT true of John Billington, according to the passage?  
A) He had two sons.  
B) He served in the military under Miles Standish.  
C) He tried to lead a mutiny.  
D) He attempted to overthrow the government.
83. Why didn't the leaders of Plymouth Colony punish Billington for rebelling against their authority?  
A) He was not guilty.  
B) Billington was Miles Standish's nephew.  
C) He had two sons who needed him.  
D) They didn't have enough evidence.
84. A good title for this passage would be  
A) A History of Plymouth Colony.  
B) The Injustices of Miles Standish.  
C) America's First Murderer.  
D) Early American Legal Battles.
- Read the text. Then choose the correct answer to questions 85-87.  
1) The Woodstock Music and Art Fair—better known to its participants and to history simply as “Woodstock”—should have been a colossal failure. 2) Just a month prior to its August 15, 1969 opening, the fair's organizers were informed by the council of Walkkill, New York, that permission to hold the festival was withdrawn. 3) Amazingly, not only was a new site found, but word spread to the public of the fair's new location. 4) At the new site, fences that were supposed to facilitate ticket collection never materialized, and all attempts at gathering tickets were abandoned. 5) Crowd estimates of 30,000 kept rising; by the

end of the three days, some estimated the crowd at 500,000. 6) Then, on opening night, it began to rain. 7) Off and on, throughout all three days, huge summer storms rolled over the gathering. 8) In spite of these problems, most people think of Woodstock not only as a fond memory but as the defining moment for an entire generation.

85. Which of the following would be the most appropriate title for this passage?

- A) Backstage at Woodstock
- B) Woodstock: From The Band to The Who
- C) Remembering Woodstock
- D) Woodstock: The Untold Story

86. Which of the following numbered sentences of the passage best represents an opinion rather than a fact?

- A) sentence 1
- B) sentence 2
- C) sentence 3
- D) sentence 4

87. Why is the word amazingly used in sentence 3?

- A) The time in which the site move was made and the word sent out was so short.
- B) The fair drew such an unexpectedly enormous crowd.
- C) There was such pressure by New York officials against holding the fair.
- D) The stormy weather was so unfavorable.

Read the text. Then choose the correct answer to questions 88-90.

The coconut is an unusual food for many reasons. It is technically a seed, produced by the coconut palm tree, and as such is one of the largest edible seeds produced by any plant. Its unusual contents also make it unique in the seed world—the interior consists of both “meat” and “water.” The meat is the white pith with which we are all familiar, as it is used extensively for cooking and flavorings; the coconut water is a white liquid that is very sweet and thirst-quenching.

Portuguese explorers gave the nut its name in the 15th century, referring to it as coco, meaning “ghost” in their language. The three dimples and the hairy texture reminded them of a ghost’s face, and the tree has retained that name ever since.

The coconut has many varied uses. It is used to make margarine, as well as various cooking oils, and these cooking oils are used by fast-food restaurants around the world to make such diet staples as French fries. The coconut fluid is a favorite drink in hot climates, providing a cool and refreshing beverage right off the tree. This water is also used by manufacturers of various sports drinks because of its isotonic electrolyte properties. Even the shell itself has many uses, including cattle food and fertilizer.

Yet the coconut is also useful in many ways that have nothing to do with food. Coconut oil is used for cosmetics, medicines, and can even be used in place of diesel fuel. Dried coconut shells are used in many countries as a tool, such as a buffer for shining wood floors. The shells are also used for shirt buttons, and are commonly found on Hawaiian clothing. They are even used for musical instruments and bird houses!

And all these are only some of the uses found for the coconut fruit. The coconut palm tree, which produces the nut, also produces countless useful items. It’s no wonder that the coconut palm has been called “the tree of life.”

88. The coconut earned the nick name “ghost” because

- A) of its pale color.
- B) it resembles a face.
- C) it is round.
- D) of its smell.

89. What is the main focus of this passage?

- A) the history of coconuts
- B) coconut trees have many uses
- C) how cooking oil is made
- D) Portuguese discoveries

90. The passage implies that

- A) coconut palms are a valuable plant.
- B) coconut oil is the best way to cook.
- C) Portuguese explorers loved coconuts.
- D) coconut palms are good shade trees.

## FIZIKA

1. O'tkazgichdagi elektr maydon kuchlanganligi 2 V/m, vaqt birligi ichida ajralib chiqayotgan Joule issiqligining zichligi  $0,8 \mu\text{W}/\text{m}^3$ . O'tkazgichdagi tok zichligi ( $\mu\text{A}/\text{m}^2$ ) nimaga teng?

A) 0,2 B) 4 C) 0,4 D) 5

2. Olmosning zichligi  $3500 \text{ kg}/\text{m}^3$  ekanligi ma'lum. Agar  $0,8 c$  ( $c$  - yorug'lik tezligi) tezlikda uchayotgan kosmik kema uchiruvchi optik va boshqa asboblardan Yerdagi olmosning zichligini o'lchasa qanday natija ( $\text{kg}/\text{m}^3$ ) oladi?

A) 7670 B) 4630 C) 5830 D) 9720

3. Lazerning kuchaytirgich optik elementining uzunligi 20 sm, uning uchlari ko'zguga aylantirilgan bo'lib, nur uning ichida borib keladi. Agar bu muhitning sindirish ko'rsatkichi 1,5 bo'lsa, nur 0,5 ms davomida kuchaytirgich bo'ylab necha marta borib keladi?

A)  $2 \cdot 10^4$  B)  $3 \cdot 10^5$  C)  $2,5 \cdot 10^5$  D)  $2,5 \cdot 10^8$

4. Zarraning harakati jadval ko'rinishida berilgan. Tezlik va tezlanish ta'rifi qanday ko'ra zarraning o'rtacha tezlanishini toping ( $\text{m}/\text{s}^2$ ).

t (s)	1	1,1	1,2
X (m)	0	-1	1

A) 280 B) 500 C) -75 D) 300

5. Pokiston poytaxti Islomobod shahrining geografik koordinatalari  $33,8^\circ$  shimoliy kenglik,  $73^\circ$  sharqiy uzoqlikdan iborat. Shaharning yer o'qi atrofida aylanma harakat tezligi ( $\text{m}/\text{s}$ ) topilsin. Ekvator uzunligi 40 ming km.  $T=86400 \text{ s}$ .  $\sin(33,8^\circ) = 0,56$ ,  $\cos(33,8^\circ) = 0,83$

A) 384 B) 423 C) 232 D) 460

6. Biror kichik sayyoraning radiusi Yernikidan 3 marta kichik. Massasi 16 marta kichik. U sayyoradagi erkin tushish ( $\text{m}/\text{s}^2$ ) tezlanish qanday?  $g = 9,8 \text{ m}/\text{s}^2$

A) 6,6 B) 6,1 C) 4,8 D) 5,5

7. m massali jism Yer sirtidan 5R balandlikdan erkin tushmoqda. (R Yerning radiusi). Jismning 4,5 R balandlikdagi kinetik energiyasi nimaga teng?

g - Yer sirtidagi erkin tushish tezlanish

A)  $mgR/66$  B)  $mgR/30$  C)  $mgR/12$  D)  $mgR/18$

8. Massiv gorizontall platforma vertikal yo'nalishda 1 sm amplituda va 100 rad/s siklik chastota bilan harmonik tebranmoqda. Platformaga ko'p sharchalar 60 sm/s tezlik bilan kelib tushmoqda. Sharchalarning platforma bilan to'qnashuvi elastik bo'lsa, to'qnashuvdan keyin sharchalar qanday maksimal tezlikka ( $\text{sm}/\text{s}$ ) ega bo'ladi?

A) 160 B) 260 C) 220 D) 140

9. Idishga suv va suvga aralashmaydigan zichligi  $100 \text{ kg}/\text{m}^3$  bo'lgan suyuqlik quyilgan. Ularning chegarasida zichligi  $400 \text{ kg}/\text{m}^3$  bo'lgan buyum to'la botgan holda suzib yuribdi.

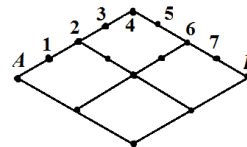
Buyum hajmining qanday ulushi suvga kirib turibdi?

A) 0,39 B) 0,27 C) 0,33 D) 0,21

10. 12 dona bir xil o'tkazgich olinib, ulardan elektr zanjir tuzilgan. Zanjirning A nuqtasiga +3V potensial ulangan. Agar 1 nuqta potentsiali 5 V bo'lsa, B nuqtaning potentsiali (V) nimaga teng?

A) 10 B) 12

C) 15 D) 8



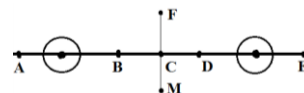
11. Normal sharoitda geliy gazining ( $4 \text{ g}/\text{mol}$ ) zichligi  $\text{g}/\text{m}^3$  qanday?  $V_{n,sh}=22,4 \text{ litr}/\text{mol}$ .

A) 150 B) 167 C) 190 D) 179

12. To'g'ri chiziq, parallel rasm tekisligiga tik ikki o'tkazgichdan teng toklar bir tomonga (bizga yo'nalgan) oqmoqda. A nuqtadagi magnit induksiyasi qanday yo'nalgan?

A) pastga B) yuqoriga

C) chapga D) o'ngga



13. Yopiq idishda turgan ( $M_1=40 \text{ g}/\text{mol}$ ) argon molekularining ilgirilanma harakat o'rtacha kvadratik tezligi  $1000 \text{ m}/\text{s}$  bo'lsa, shu idishdagi karbonat angidrid ( $M_2=44 \text{ g}/\text{mol}$ ) molekularining ilgirilanma harakat o'rtacha kvadratik tezligi ( $\text{m}/\text{s}$ ) nimaga teng.

A) 950 B) 805 C) 1290 D) 1130

14. Qanday shart bajarilganda moddiy nuqta aylana bo'ylab tekis harakatni namoyon etadi?  $a_n$  - normal tezlanish,  $a_t$  - tangensial tezlanish.

A)  $a_n = 0$ ,  $a_t = \text{const} < 0$  B)  $a_n = 0$ ,  $a_t = 0$

C)  $a_n = 0$ ,  $a_t = \text{const} \leq 0$  D)  $a_n = \text{const}$ ,  $a_t = 0$

15. Chana balandligi 2 m, asosi 11 m bo'lgan tepalikdan tushdi va tepalik asosidan 39 m gorizontall yo'l bosib o'tib to'xtadi. Ishqalanishni butun yo'l davomida bir xil deb hisoblab, ishqalanish koeffitsiyentini toping.

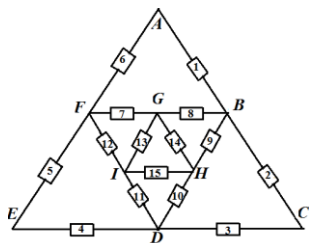
A) 0,04 B) 0,08 C) 0,1 D) 0,12

16. Moddiy nuqta tekislikda o'zaro perpendikulyar bo'lgan ikkita garmonik harakatda ishtirok etmoqda. Ularning davrlari mos holda 3 s va 4 s.  $t_1=5 \text{ s}$  paytda moddiy nuqta muvozanat nuqtasidan o'tdi. Qanday  $t_2$  vaqt momentida (s) moddiy nuqta muvozanat nuqtasiga ikkinchi marta qaytib keladi?

A) 11 B) 6 C) 17 D) 12

17. E va F nuqtalar orasidagi umumiy qarshilik qiymati ( $\Omega$ ) qaysi oraliqda yotadi?  $R_1 = R_2 = R_3 = R_4 = R_5 = R_6 = 94,5 \Omega$ .  $R_{13} = R_{14} = R_{15} = 1214 \Omega$ .

- A) [2325; 22325]  
 B) [94,5; 214]  
 C) [214; 2325]  
 D) (0; 94,5)



18. Gorizontga nisbatan qiya o`rnatilgan diametri 1 cm bo`lgan quvurning uchidan yuqoriga qarab neft oqib chiqmoqda. Uning vertikal tezligi 30 m/s, gorizont tezligi 1 m/s. 45 m balandlikda neft oqimining diametri (sm) qanday?  
 A) 5,5 B) 6 C) 4,5 D) 4

19. Magnit kirituvchanlik ( $\mu$ ) va qabul qiluvchanlik ( $\chi$ ) orasidagi bog`lanishni ko`rsating.  
 A)  $\mu=1-\chi$  B)  $\mu=\chi$  C)  $\mu=1+\chi$  D)  $\mu=\chi^2$

20. Qo`zg`almas blok orqali ip o`tkazilib, uning uchlariga 1 kg va 3 kg yuklar osilgan. Ipnig tarangligi (N) topilsin.  
 A) 18 B) 10 C) 12 D) 15

21. Tabiiy yorug`lik nurlari simob (1), ebonit (2), oltin (3), suv (4), sirtidan burchak ostida qaytmoqda. Qaytgan nurlarning qaysilari qutblanmagan bo`ladi?  
 A) 2, 3 B) 1, 3 C) 2, 4 D) 1, 4

22. Sterjen  $\sigma = 0,8E$  kuchlanganlik ta`sirida cho`zilmoqda, bunda E – shu jismning Yung moduli. Cho`zilishni absolyut elastik deb hisoblab, sterjenning necha marta o`zgarganini hisoblang.  
 A) 9,1 B) 1,8 C) 8,1 D) 7,2

23. 60 m uzoqlikdagi daraxt  $1^\circ$  burchak ostida ko`rinmoqda. Daraxtning balandligi (m) qanday?  
 $\pi = 3, \sin \alpha = \alpha$  (rad)  
 A) 1,0 B) 2,6 C) 2,3 D) 2,4

24. Botiq linzaning optik kuchi 5 dptr, buyum undan 15 sm masofada turibdi. Linza hosil qilgan tasvirdan buyumgacha bo`lgan masofani (sm) toping.  
 A) 45/7 B) 75 C) 64 D) 81

25. Sferik kondensator elektr sig`imini hisoblovchi formulani ko`rsating.  
 A)  $C = \frac{4\pi\epsilon\epsilon_0 Rr}{R+r}$  B)  $C = \frac{4\pi\epsilon\epsilon_0 r}{R-r}$   
 C)  $C = \frac{4\pi\epsilon\epsilon_0 Rr}{R-r}$  D)  $C = \frac{4\pi\epsilon\epsilon_0 S}{d}$

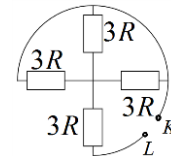
26. Jism koordinatasi A (-1; -3;-6) bo`lgan nuqtadan koordinatasi B (0;0;0) bo`lgan nuqtaga 8 s davomida undan keyin esa C (1;3;6) nuqtaga 2 s davomida ko`chdi. Jismning butun yo`ldagi o`rtacha tezligining o`rtacha ko`chish tezligiga nisbati qanday?  
 A) 1/2 B) 2 C) 1/3 D) 1

27. Kvarklar qanday o`zaro ta`sirlarda ishtirok etadi?  
 A) elektromagnit, gravitatsion

- B) elektromagnit, gravitatsion, kuchli  
 C) elektromagnit, gravitatsion, kuchli, kuchsiz  
 D) gravitatsion

28. Ko`p atomli gaz molekularining erkinlik darajasi  $i = 6$ . O`zgarmas hajmda shu gazning molyar issiqlik sig`imini aniqlang.  
 A) 1,5R B) 4R C) R D) 3R

29. Quyida keltirilgan sxemadan foydalanib K va L nuqtalar orasida umumiy qarshilikni aniqlang



- A) 9R B) 10R C) 4R D) 3R

30. Mezonlar qanday zarralardan tashkil topgan?  
 A) glyuonlardan  
 B) kvarklardan  
 C) kvark va antikvarkdan  
 D) W va Z bozonlardan.



# Kimyo

61. Quyida berilganlardan xalkogenlarni tanlab ko'rsatilgan javobni aniqlang.  
1) Cl<sub>2</sub> 2) S 3) P 4) Cr 5) O<sub>2</sub> 6) Br<sub>2</sub>  
A) 1; 6  
B) 2; 4; 5  
C) 2; 5  
D) 3
62. Quyida berilgan qaysi qatorda molekulyar kristall panjaraga ega bo'lgan moddalar keltirilgan.  
1) NaCl; H<sub>2</sub>O; I<sub>2</sub>; SO<sub>4</sub><sup>2-</sup>  
2) Olmos; oq fosfor; "quruq muz"  
3) Oq fosfor; "quruq muz"; suv  
4) Mg; NaCl; Br<sub>2</sub>  
A) 1  
B) 2  
C) 3  
D) 4
63. Qo'zg'almagan holatida elektron konfiguratsiyasi ... 4s<sup>2</sup>, 3d<sup>5</sup> ga teng bo'lgan element atomining tashqi pog'onasida nechta elektron mavjud?  
A) 2  
B) 5  
C) 7  
D) 8
64. Tarkibida 2 ta s – sp<sup>3</sup> orbitallar bog'lanishiga ega bo'lgan molekulanani aniqlang?  
A) H<sub>2</sub>CO<sub>3</sub>  
B) HCOOH  
C) C<sub>2</sub>H<sub>2</sub>  
D) BeH<sub>2</sub>
65. Quyidagi yadro reaksiyalar natijasida hosil bo'lgan X va Y elementlar o'zaro izoton bo'lsa, z ni aniqlang?  
1)  ${}_{83}^{210}\text{Bi} \rightarrow 5n + 3\text{B}^- + X$ ; 2)  ${}_{90}^{224}\text{Th} \rightarrow zn + 3\text{B}^+ + Y$   
A) 12  
B) 5  
C) 18  
D) 14
66. 11,2 litr gaz 91 K (Kelvin) harorat va 101,325 kPa bosimda 42 g massa keladi. Noma'lum gaz molyar massasini (g/mol) aniqlang?  
A) 34  
B) 28  
C) 30  
D) 32
67. Quyida berilgan qatorda qanday xususiyatlar kamayib boradi?  
 $I^- \rightarrow Br^- \rightarrow Cl^- \rightarrow F^-$   
A) Kimyoviy faolligi; tashqi pog'onadagi elektronlar soni  
B) Kimyoviy faolligi; ion radiusi  
C) Kimyoviy faolligi.  
D) Tashqi pog'anadagi elektronlar soni.
68. 70°C temperaturada ma'lum gazlar reaksiyasi tezligi 40°C temperaturaga nisbatan 1,75 mol/l · min<sup>-1</sup> ga farq qiladi. Reaksiyaning 50°C dagi tezligini (mol/l · min<sup>-1</sup>) aniqlang. r = 2  
A) 0,4  
B) 0,5  
C) 0,25  
D) 1,0
69. Au ni eritish uchun sarflanadigan nitrat kislotasi, xlorid kislotadan 0,4 molga farq qilsa, natijada olingan AuCl<sub>3</sub> miqdorini (mol) aniqlang?  
A) 0,2  
B) 0,3  
C) 0,4  
D) 0,1
70. Ikki negizli qaysi kislotasi ekvivalent massasi 31 g-ekv ga teng bo'ladi.  
1) H<sub>2</sub>SO<sub>3</sub> 2) H<sub>2</sub>SiO<sub>3</sub> 3) H<sub>2</sub>CrO<sub>4</sub> 4) H<sub>2</sub>CO<sub>3</sub>  
A) 1  
B) 2  
C) 3  
D) 4
71. 11,2 litr (n,sh) hajmdagi gaz modda tarkibida Avogadro sonidan 1,5 marta ko'p atom mavjud bo'lsa, noma'lum gazni aniqlang?  
1) NH<sub>3</sub> 2) CO<sub>2</sub> 3) CO 4) C<sub>2</sub>H<sub>4</sub>  
A) 1  
B) 2  
C) 3  
D) 4
72. MnO<sub>4</sub><sup>2-</sup> ionidagi marganezning oksidlanish darajasini aniqlang?  
A) +4  
B) +6  
C) +7  
D) +2
73. Vodorod atomi qaysi birikmasida oksidlovchi bo'lishini aniqlang.  
A) NaH; CaH<sub>2</sub>  
B) H<sub>2</sub>; H<sub>2</sub>O; HCl  
C) NaH; CaH<sub>2</sub>; H<sub>2</sub>  
D) H<sub>2</sub>O; HCl
74. K<sup>+</sup> ioni tarkibidagi elektronlar va neytronlar sonini aniqlang?  
A) 18; 20  
B) 19; 20  
C) 18; 19  
D) 19; 19
75. Pirometallurgiya usulida 186 g FeO va MeO aralashmasidan metallarni ajratib olish uchun 56 litr (n, sh) vodorodning 20% i temir (II) oksidga sarflansa, noma'lum metalni aniqlang?  
A) Ni  
B) Mn  
C) Cu  
D) Zn
76. Molyar konsentratsiyalari nisbati 1 : 3 bo'lgan ikki eritmada umumiy erigan modda miqdori 12,8 mol. Agar ikkala eritma hajmiy nisbati mos ravishda 1 : 5 bo'lsa,



- konsentratsiyasi kichik eritmada erigan modda miqdorini (mol) aniqlang?
- A) 1,8  
B) 2,8  
C) 1,2  
D) 0,8
77.  $\text{Cu}(\text{NO}_3)_2$  eritmasi ko'mir elektrodlar ishtirokida x faradey tok bilan to'liq elektroliz qilindi. Elektroliz natijasida katod massasi 80% ga ortdi. Ajratib olingan katod 11,5 mol sulfat kislota (konsentrlangan) bilan to'liq reaksiyaga kirishdi. x ni aniqlang.
- A) 0,75  
B) 1,5  
C) 2,0  
D) 1,0
78. Sulfat kislotaning suvdagi eritmasida  $\text{H}^+$  va  $\text{SO}_4^{2-}$  ionlarining mol-yarliklari (mol/l) mos ravishda 0,5; 0,1 bo'lsa, eritmadagi  $\text{HSO}_4^-$  ioni molyarligini (mol/l) aniqlang? (suvning dissotsiyala-nishi hisobga olinmasin)
- A) 0,1  
B) 0,3  
C) 0,6  
D) 0,4
79. 20°C haroratda 2 M li to'yingan eritmaning zichligi 1,12 g/ml ga teng. Ushbu eritmada erigan moddani aniqlang? ( $S_{20^\circ\text{C}} = 40$ )
- A) NaOH  
B)  $\text{CuSO}_4$   
C)  $\text{KHCO}_3$   
D)  $\text{CH}_3\text{COONa}$
80.  $\text{Cu}_3\text{Ag}$  tarkibli qotishma 2,8 mol konsentrlangan nitrat kislodata to'liq eridi. Qotishma massasini (g) aniqlang?
- A) 30  
B) 60  
C) 120  
D) 40
81.  $\text{CO}_3^{2-}$ ;  $\text{PO}_4^{3-}$ ;  $\text{Cl}^-$ ;  $\text{SO}_4^{2-}$  ushbu ionlar mavjud bo'lgan eritmalarda qaysi ion(lar) mavjud bo'ladi.
- A)  $\text{Ag}^+$   
B)  $\text{Ba}^{2+}$   
C)  $\text{Fe}^{3+}$ ;  $\text{NH}_4^+$   
D)  $\text{K}^+$
82. Birlamchi uglerod atomlari 4 ta, ikkilamchi uglerod atomlari 2 ta bo'lgan alkanni aniqlang?
- A) 2,3-dimetil butan  
B) 2,2-dimetil propan  
C) 3 – metil pentan  
D) 3,3 – dimetil pentan
83. Qaysi modda bromli suvni rangsizlantirmaydi.
- A) Divinil  
B) Toluol  
C) n-butan  
D) asetelin
84. 100 g 64% li  $\text{CH}_3\text{OH}$  ning suvdagi eritmasiga mo'l natriy metali qo'shildi. Natijada olingan gaz miqdorini (mol) aniqlang?
- A) 2,0  
B) 1,0  
C) 0,5  
D) 1,5
85. Ketonlar vodorod bilan qaytarilganda qanday modda olinadi.
- A) Birlamchi spirt  
B) Ikkilamchi spirt  
C) Uchlamchi spirt  
D) Monokarbon kislota
86. 0,2 mol toluol nitrolanish reaksiyasi natijasida 7,2 g suv ajralsa, toluol halqasidagi o'rin almashgan vodorod atom(lar) sonini aniqlang?
- A) 1  
B) 4  
C) 3  
D) 2
87. Qanday massadagi (g) moy kislota o'yuvchi kaliy ishqor bilan reaksiya qilinganda,  $1,75 \cdot N_{(A)}$  vodorod atomi saqlagan tuz hosil bo'ladi.
- A) 44  
B) 22  
C) 88  
D) 17,6
88. 1 molekula trifenilamin tarkibidagi vodorod atomlar soni necha molekula glitsin aminokislotasi tarkibidagi vodorod atomlari soniga teng?
- A) 1  
B) 3  
C) 2  
D) 1,5
89.  $5 \cdot N_{(A)}$  molekuladan iborat maltoza suv bilan to'la gidrolizlandi. Natijada hosil bo'lgan monosaxaridlar miqdorini (mol) aniqlang?
- A) 10,0  
B) 5,0  
C) 0,2  
D) 9,0
90. Etelin to'liq polimerlanishi natijasida molekulyar massasi 11 200 ga teng bo'lgan makromolekula olindi. Etelinni polimerlanish darajasini aniqlang?
- A) 500  
B) 400  
C) 600  
D) 800