.

O‘ZBEKISTON RESPUBLIKASI VAZIRLAR MAHKAMASI
DAVLAT TEST MARKAZI

REPITISION TEST TOPSHIRUVCHILAR UCHUN

SAVOLLAR KITOBI

ABITURIYENT: _____ _____
F.I.O. Imzo

ABITURIYENT DIQQATIGA!
Test topshiriqlarini yechishdan avval savollar kitobini varaqlab, unda har bir fan bo‘yicha 36 ta savol mavjudligini tekshiring. Agar savollar soni kamligi aniqlansa yoki savollar savollar kitobi raqami bilan javoblar varag‘i raqami bir xil bo‘lmasa, darhol auditoriya rahbariga ma’lum qiling.

Savollar kitobida abituriyentning familiyasi, ismi, otasining ismi xato to‘ldirilgan yoki to‘ldirilmagan, va imzosi qo‘yilmagan hollarda e’tirozi ko‘rib chiqilmaydi.

Kitob tipi: 55 (636624)

FANLAR:

Blok 1: Matematika (informatika bilan)
Blok 2: Fizika
Blok 3: Ingliz tili

Savollar kitobi raqami: 1000076

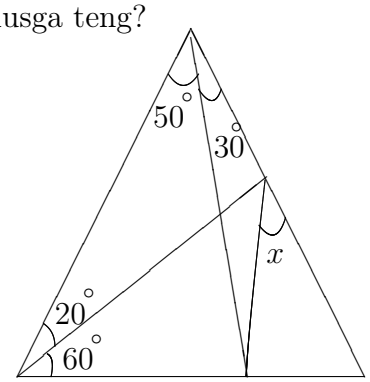
Toshkent – 2014

MATEMATIKA (INFORMATIKA BILAN)

1. Omonatchi bankga 25000 so‘m pul qo‘ydi. Oradan 3 yil o‘tgach, u o‘ziga tegishli hamma pulni qaytarib oldi. Agar bank yiliga 5% foyda to‘lasa, omonatchi bankdan necha so‘m pul olgan?
   A) *59490,235* B) *28000,125* C) *27941* D) *28940,625*

2. $2^{x+4} + 3 \cdot 2^{x-2} \geq 67$ tengsizlikni yeching.
   A) $[2; \infty)$
   B) $(-\infty; 2)$
   C) $[3; \infty)$
   D) $[4; \infty)$

3. Quyidagi rasmda berilganlarga ko‘ra x necha gradusga teng?



   A) *40* B) *50* C) *45* D) *30*

4. Agar arifmetik progressiyada $s_{2n} = 2013$, $S_{3n} = 2001$ bo‘lsa, S_n ni toping.
   A) *1346* B) *1350* C) *1354* D) *1344*

5. $2x^2 + 5y^2 - 4xy - 2y - 4x + 5 = 0$ tenglamani qanoatlantiruvchi nechta $(x,\ y)$ juftlik mavjud?
   A) *1 ta* B) *2 ta* C) *mavjud emas* D) *3 ta*

6. Muntazam o‘nikkiburchakning bitta ichki burchagini hisoblang.
   A) *150°* B) *145°* C) *135°* D) *140°*

7. Rombning tomoni $10\sqrt{3}$ ga, o‘tmas burchagi $120°$ ga teng. Rombga ichki chizilgan doiraning yuzini hisoblang.
   A) *56,25π* B) *52,25π* C) *48,75π* D) *58,6π*

8. $|x| - |x - 2| = 2$ tenglamani yeching.
   A) $[2; \infty)$ B) $\{-2\}$ C) $\{2\}$ D) $(2; \infty)$

9. $x^2 + y^2 + 8x - 2y - 8 = 0$ aylana va $x + y = 4$ to‘g‘ri chiziqning kesishish nuqtalarini toping.
   A) $(2; 1)$, $(-2; 1)$ B) $(0; 4)$, $(-1; 5)$
   C) $(3; 2)$, $(5; -1)$ D) $(4; 9)$, $(-5; 1)$

10. $\dfrac{(x^2 + x + 1)x^2}{x^2 - 5x + 6} < 0$ tengsizlikni yeching.
   A) $[2; 3]$
   B) $(-\infty; 2] \cup [3; \infty)$
   C) $(-\infty; 2]$
   D) $(2; 3)$

11. $\dfrac{x^2 - (m-4)\,x - 4m}{x^2 + (1-m)\,x - m}$ ni hisoblang.
   A) $\dfrac{x+4}{x+1}$ B) $\dfrac{x-1}{x+2}$ C) $\dfrac{x-4}{x-2}$ D) $\dfrac{x-4}{x-1}$

12. Geometrik progressiyada $b_9 \cdot b_{19} = 9$ ga teng, $b_1 \cdot b_{27} + 1$ ni toping.
   A) *4* B) *2* C) *10* D) *5*

13. Silindrga muntazam uchburchakli prizma ichki chizilgan, prizmaga esa silindr ichki chizilgan bo‘lsa, katta silindr hajmi kichik silindr hajmidan necha marta katta bo‘ladi?
   A) *6* B) *4* C) *2* D) *3*

14. 5^{200} sonini 24 ga bo‘lganda qoladigan qoldiqni aniqlang.
   A) *3* B) *23* C) *1* D) *15*

15. Oltiburchakli muntazam prizma eng katta diagonal kesimining yuzi Q, prizmaning qarama-qarshi yon yoqlari orasidagi masofa b bo‘lsa, prizmaning hajmini hisoblang.
   A) $\dfrac{bQ}{2}$ B) $\dfrac{4bQ}{3}$ C) $\dfrac{3bQ}{4}$ D) $\dfrac{3bQ}{2}$

16. $sinx = [x]$ tenglamani yeching. (Bu yerda $[x]-$ butun qism.)
   A) $0,\ \dfrac{\pi}{2},\ \pi$
   B) $x = \pi k;\ x = \dfrac{\pi}{2} + \pi k;\ k \in Z$
   C) 0 va $\dfrac{\pi}{2}$
   D) $\emptyset$

17. $y = \sqrt{x^2 - 6x + 9} + \sqrt{x^2 + 8x + 16}$ funksiyaning qiymatlar sohasi topilsin.
A) $[0;\ \infty)$ B) $[1;\ \infty)$ C) $(-\infty;\ \infty)$ D) $[7;\ \infty)$

18. Yuzi 120 sm^2, diagonali esa 17 sm bo‘lgan to‘g‘ri to‘rtburchakning tomonlarini (sm) toping.
A) *12; 10* B) *15; 8* C) *16; 12* D) *30; 4*

19. $log_2(x-1) - log_2(x+1) + log_{\frac{x+1}{x-1}}2 > 0$ tengsizlikni yeching.
A) $x > 3$ B) $x > 4$ C) $x < 3$ D) $x > 6$

20. $\vec{a}(3;\ 1;\ 2)$ vektorga perpendikular hamda $(4;\ 6;\ -6)$ nuqtadan o‘tuvchi tekislikning koordinata o‘qlarida ajratgan kesmalar uzunliklari yig‘indisini toping.
A) *12* B) *10* C) *22* D) *11*

21. ABC uchburchak berilgan. AB to‘g‘ri chiziqqa parallel tekislik bu uchburchakning AC tomonini A_1 nuqtada, BC tomonini B_1 nuqtada kesib o‘tadi. AB=15 sm, $AA_1 : AC = 2 : 3$ bo‘lsa, A_1B_1 kesma uzunligini (sm) toping.
A) *3* B) *5* C) *4* D) *2*

22. $\dfrac{0,725 + 0,6 + \dfrac{7}{40} + \dfrac{11}{20}}{0,128 \cdot 6\dfrac{1}{4} - 0,0345 : \dfrac{3}{25}} \cdot 0,25$ ni hisoblang.
A) *2* B) *1* C) *1/2* D) *4*

23. Agar arifmetik progressiyada $S_{13} = 52$ bo‘lsa, a_7 ni toping.
A) *5* B) *8* C) *3* D) *4*

24. $f(x) = cos2x + e^x$, $f'(x)-?$
A) $-sin2x + e^x$ B) $sin2x + e^x$
C) $-2sin2x + e^x$ D) $-sinx + e^x$

25. $\sqrt{5x-1} + \dfrac{6}{\sqrt{5x-1}} = \sqrt{5x+15}$ tenglamaning katta ildizi m va ildizlarining soni n bo‘lsa, $m + n$ ni toping.
A) *8* B) *4* C) *6* D) *3*

26. Radiuslari 2 va 3 ga teng bo‘lgan aylanalar bir-biriga tashqi ravishda urinadi. Ularning ikkalasi uchinchi aylanaga ichki ravishda urinsa va markazlari bitta to‘g‘ri chiziqda yotsa, tashqi aylananing ichki aylanalardan bo‘sh qolgan sohasi yuzini toping.
A) 6π B) 9π C) 12π D) 4π

27. $\int\limits_{\frac{\pi}{4}}^{\pi} 8\cos^2 x \cdot \sin 2x dx$ integralni hisoblang.
A) *2* B) *-3* C) *1* D) *3*

28. To‘g‘ri burchakli uchburchakning gipotenuzasi c ga, unga ichki chizilgan aylana radiusi r ga teng bo‘lsa, uchburchakning yuzini toping.
A) $r^2 + c^2$ B) $c^2 + cr$ C) $2cr$ D) $r^2 + cr$

29. $\sqrt[4]{\sqrt[3]{25}} \cdot \sqrt[6]{5^5}$ ni hisoblang.
A) $\sqrt[3]{5}$ B) $5\sqrt[6]{5}$ C) *5* D) $5\sqrt[12]{5}$

30. Agar ABC o‘tkirburchakli uchburchakda AB=0,7; BC=0,9; $sinB$=0,8 bo‘lsa, uchinchi tomonning kvadratini toping.
A) *0,541* B) *0,519* C) *0,544* D) *0,543*

31. Agar kitobdagi axborot hajmi 7 Kbayt bo‘lsa, uni nechta “Axborot” so‘zi bilan almashtirish mumkin?
A) *1024* B) *2048* C) *2000* D) *14336*

32. Protsessorlardan ma’lumotlarni baytlarda olib, qurilmalarga bitlarda uzatadigan port turini aniqlang.
A) *parallel* B) *ketma-ket* C) *slot* D) *shina*

33. Nomi S harfidan boshlanuvchi va faqat to‘rtta belgidan iborat ixtiyoriy kengaytmali fayllar qanday belgilanadi?
A) *S* * *.** B) *S????.?* C) *S????.** D) *S*.**

34. MS Excelning A5:C12 katakchalar blokida nechta katakcha bor?
A) *22 ta* B) *18 ta* C) *21 ta* D) *24 ta*

35. Axborot uzatish jarayonida quyidagi qismlardan qaysi biri bo‘lishi shart?
1) Axborot qabul qiluvchi 2) Axborot manbai
3) Axborot uzatish vositasi
A) *1, 2, 3* B) *1* C) *1, 2* D) *1, 3*

36. Paskal dasturi lavhasidagi natijani aniqlang.
begin X:=2; p:=1; 1:P:=P*(2*x-2); X:=X+3; if X<=6 then goto 1; writeln(P); end.
A) *16* B) *20* C) *2* D) *24*

FIZIKA

1. Massasi 12 kg bo‘lgan tinch turgan jismga 8 s davomida 6 N kuch ta’sir qilgan bo‘lsa, jismning olgan tezlanishi a, shu vaqtda erishgan tezligi υ_t, o‘tgan yo‘li S ni toping.

   A) a=*25 m/s*^{2}; υ_t=*4 m/s*; S=*2 m*

   B) a=*0,5 m/s*^{2}; υ_t=*4 m/s*; S=*16 m*

   C) a=*0,5 m/s*^{2}; υ_t=*2 m/s*; S=*4 m*

   D) a=*4 m/s*^{2}; υ_t=*0,5 m/s*; S=*2 m*

2. Massasi 15 kg bo‘lgan chanani bola 45° yo‘nalishdagi kuch bilan tortib bormoqda. Qor bilan chana orasidagi ishqalanish koeffitsienti 0,02 ga teng bo‘lsa, chana tekis harakat qilishi uchun bola qanday kuch (N) bilan tortish kerak?

   A) *3* B) *2,1* C) *4,0* D) *4,2*

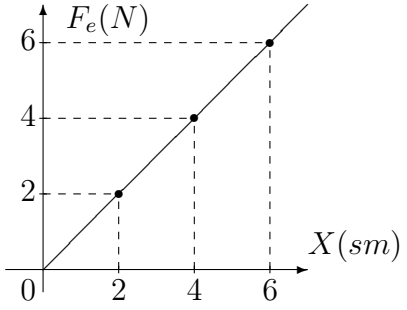
3. Tutash idishga simob (ρ_{sm}=13600 kg/m^3) quyildi, uning ustidan bitta idishga 20 sm balandlikda kerosin (ρ_k=800 kg/m^3) quyildi. Ikkinchisiga 48 sm balandlikda moy (ρ_m=900 kg/m^3) quyildi. Ikkala idishdagi simob sathlarining farqini (sm) aniqlang.

   A) *4,0* B) *2,0* C) *4,4* D) *1,0*

4. Elektron nur trubkasida katod spiralining temperaturasi kamayishi bilan to’yinish toki qanday o’zgaradi?

   A) *avval ortib so’ngra kamayadi* B) *ortadi*
   C) *kamayadi* D) *o’zgarmaydi*

5. Grafikdan foydalangan holda elastiklik kuchining bajargan ishini toping.



   A) *0,08* B) *0,8* C) *0,2* D) *0,18*

6. Yerni radiusi 6380 km bo‘lgan shar deb hisoblab, 1 kg massali jism vaznining jismni qutbdan ekvatorga ko‘chirilgandagi o‘zgarishini (N) aniqlang.

   A) *-0,043* B) *-0,26* C) *-0,034* D) *0,34*

7. Vodorod atomining massasi elektron massasidan necha marta katta?

   A) $\approx 16 \cdot 1840$ B) ≈ 1840 C) ≈ 1
   D) $\approx 10^5$

8. Prujinaga mahkamlangan shar muvozanat vaziyatidan chiqarib qo‘yib yuborildi. Prujina muvozanat vaziyatidan amplitudaning yarmigacha (υ_1) va to‘rtdan bir qismigacha (υ_2) uzoqlashgan nuqtalardagi tezliklari nisbati υ_1/υ_2 ni toping. Tebranishlar kosinus qonuni asosida ro‘y bermoqda. $sin30^\circ = 1/2$; $sin82^\circ = 0,99$; $sin60^\circ = \sqrt{3}/2$; $sin75^\circ = 0,96$

   A) $\sqrt{3}/2$ B) $2\sqrt{5}$ C) *2* D) $\sqrt{5}/5$

9. Loshmidi sonini belgilang.

   A) $2,7 \cdot 10^{25}\ m^{-3}$ B) $2,3 \cdot 10^{25}\ m^{-1}$
   C) $2,3 \cdot 10^{25}\ m^{-3}$ D) $2,7 \cdot 10^{25}\ m^{-1}$

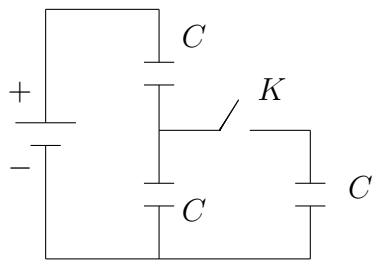
10. Tinch holatidan boshlab tekis tezlanuvchan harakat qilayotgan jismning 6-sekundda bosib o‘tgan yo‘li 2-sekundda bosib o‘tgan yo‘lidan necha marta farq qiladi?

    A) *11/3* B) *9* C) *11/7* D) *11/5*

11. Bir atomli gazning hajmi 3,6 marta kamayganda bosimi 20% ga ortgan bo‘lsa, uning ichki energiyasi necha marta o‘zgargan?

    A) *4 marta kamaygan* B) *5 marta kamaygan*
    C) *3 marta kamaygan* D) *2 marta kamaygan*

12. Quyidagi sxema bo‘yicha K kalit ochiq paytidagi q zaryad kalit yopilgandan keyin nimaga teng bo‘ladi? Ikkala holda ham kuchlanish o‘zgarmas deb hisoblang.



    A) *3q* B) *4q* C) *3q/4* D) *4q/3*

13. Elementlari ketma-ket ulangan zanjirning o‘zgaruvchan tokka nisbatan to‘liq qarshiligi $\sqrt{R^2+(\omega L-1/\omega C)^2}$ ga teng. Chastota ω rezonans chastotaga nisbatan ikki marta katta bo‘lsa, bu qarshilik nimaga teng?

A) $\sqrt{R^2+\left(\frac{3L}{2C}\right)^2}$

B) $\sqrt{R^2+\left(\sqrt{\frac{C}{L}}-\sqrt{\frac{L}{C}}\right)^2}$

C) $\sqrt{R^2+\left(\sqrt{\frac{C}{L}}+\sqrt{\frac{L}{C}}\right)^2}$

D) $\sqrt{R^2+\left(2\sqrt{\frac{C}{L}}+\frac{1}{2}\sqrt{\frac{L}{C}}\right)^2}$

14. Birinchi o‘tkazgichning uzunligi 2 m, ko‘ndalang kesim yuzasi 2 mm^2, ikkinchi o‘tkazgichning uzunligi 4 m, ko‘ndalang kesim yuzasi 1 mm^2. Bu o‘tkazgichlarning qarshiliklari R_1 va R_2 qanday munosabatda bo‘ladi?

A) $R_1=4R_2$ B) $R_2=2R_1$ C) $R_2=4R_1$
D) $R_1=R_2$

15. Sochuvchi linzadan $d=2F$ masofada turganda tasvir qanday ko‘rinishda bo‘ladi?

A) *mavhun, kichiklashgan*
B) *haqiqiy, kattalashgan*
C) *haqiqiy, kichiklashgan*
D) *mavhun, kattalashgan*

16. Quyoshdan Yergacha bo‘lgan masofa $150\cdot10^6$ km bo‘lsa, Quyoshdan chiqqan yorug‘lik Yerga qancha vaqtda (min) yetib keladi? Yorug‘lik tezligi $3\cdot10^8$ m/s ga teng.

A) *8* B) *6* C) *8,5* D) *8,33*

17. Neft quduqdan diametri 60 mm bo‘lgan quvur orqali ko‘tariladi. Har soatda 9,12 t neft ko‘tarilayotgan bo‘lsa, neftning oqish tezligini (m/s) toping. Neftning zichligi 800 kg/m^3.

A) *5* B) *1,8* C) *1,2* D) *1,12*

18. Qarshiliklari R_1=180 Ω va R_2=360 Ω bo‘lgan ikkita chiroq U=120 V kuchlanishli tarmoqqa parallel ulandi. Chiroqlarning har birida qanday quvvat ajraladi?

A) *P_1=80 W: P_2=40 W*
B) *P_1=80 W: P_2=50 W*
C) *P_1=80 W: P_2=60 W*
D) *P_1=60 W: P_2=80 W*

19. 16 V kuchlanishga mo’ljallangan ikkita 8 W li lampochka 8 V kuchlanish tarmog’iga ketma-ket ulansa, har bir lampochka qanday quvvat (W) bilan yonadi?

A) *2* B) *0,5* C) *4* D) *1,5*

20. Agar azotning ionlashuv potensial 14,5 V bo‘lsa, azot atomini ionlashtirish uchun elektron qanday eng kichik tezlikki (m/s) ega bo‘lish kerak?

A) *$1{,}8\cdot10^6$* B) *$3{,}6\cdot10^6$* C) *$2{,}6\cdot10^6$*
D) *$2{,}3\cdot10^6$*

21. Kondensatorning sig‘imi 6 μF, zaryadi esa $3\cdot10^{-4}$ C. Kondensatorning elektr maydon energiyasini aniqlang (mJ).

A) *7,5* B) *5,4* C) *3,4* D) *8,2*

22. Tinch turgan liftdagi matematik mayatnik tebranish davri 5 s ga teng. Tezlanish bilan harakatlanayotgan liftdagi mayatnik tebranish davri 10 s ga teng bo‘lsa, liftning tezlanishini (m/s^2) aniqlang.

A) *7,5* B) *4* C) *5* D) *2,5*

23. Tebranish konturdagi kondensator sig‘imi 25 marta ortirilsa, g‘altakning induktivligi 16 marta kamaytirilsa, tebranish davri necha marta o‘zgaradi?

A) *5/4 marta ortadi* B) *1,6 marta kamayadi*
C) *1,6 marta ortadi* D) *4/5 marta ortadi*

24. Tezligi 10 m/s, massasi 10 kg bo‘lgan granata ikki bo‘lakka ajraldi. Katta bo‘lakning tezligi 25 m/s bo‘lib granataning harakat yo‘nalishida, kichik bo‘lakning tezligi 12,5 m/s bo‘lib qarama-qarshi yo‘nalishda harakatlansa, bo‘laklarning massalarini (kg) toping.

A) *8 va 2* B) *6 va 4* C) *9 va 1* D) *7 va 3*

25. Buyumdan ekrangacha masofa 3 m. Buyumning 5 marta kattalashgan tasvirini olish uchun optik kuchi (dptr) qanday bo‘lgan linzani olish va uni qayerda joylashtirish lozim (m)?

A) *4,8; 0,5* B) *3; 0,5* C) *2,4; 0,5*
D) *2,4; 2,5*

26. Harorati 20°C va bosimi 100 kPa bo‘lgan 1,45 m^3 havo suyuk holatga keltirildi. Agar suyuk havoning zichligi 860 kg/m^3 bo‘lsa, u qanday hajmni (l) egallaydi. Havoning molyar massasi 29 g/mol.

A) *3* B) *4* C) *1,5* D) *2*

27. Elektr lampochka yonganda undagi gazning temperaturasi 15 dan 300°C gacha ortsa, lampochka ballonidagi gazning bosimi necha marta ortadi?
A) ≈*3 marta* B) ≈*1,5 marta* C) ≈*4 marta* D) ≈*2 marta*

28. Qiya tekislikda yukni balandlikka ko‘tarish uchun 20 J ish bajarildi. Bunda FIK 80% bo‘lganda foydali ishni (J) toping.
A) *18* B) *20* C) *15* D) *16*

29. Bola chanada uzunligi 40 m bo‘lgan qiya tekislikdan 10 s da tushdi va to‘xtaguncha gorizontal uchastkada yana 40 m o‘tdi. Qiya tekislik oxiridagi tezlikni (m/s) toping.
A) *8* B) *5* C) *6* D) *13*

30. Ko‘ndlang kesimining yuzi 1,72 mm^2 bo‘lgan mis simdan 10 sm diametri halqa kavsharlab yasalgan. Halqa bir jinsli magnit maydonga, magnit induksiya chiziqlariga perpendikular ravishda joylashgan. Agar magnit maydon induksiyasi 1 T/s tezlik bilan bir tekis o‘zgara boshlasa, halqada qanday tok kuchi (A) paydo bo‘ladi? ρ_m=1,72·10^{-8} Ω·m
A) *10* B) *7,5* C) *2,5* D) *5*

31. Agar metall sirtlari 350 va 540 nm to‘lqin uzunlikli nurlanish bilan galma-gal yoritilsa, u holda fotoelektronlarning maksimal tezliklari bir-biridan 2 marta farq qiladi. Bu metaldan elektronlarning chiqish ishini (J) aniqlang. h=6,63·10^{-34} J·s
A) *3·10^{-19}* B) *25·10^{-29}* C) *30·10^{-30}* D) *30·10^{-29}*

32. Induktivligi 0,2 H bo‘lgna g‘altakdan 10 A tok o‘tmoqda. G‘altak ichidagi magnit maydon energiyasini (J) aniqlang.
A) *10* B) *100* C) *0,1* D) *1*

33. m massali zarraning energiyasi E bo‘lsa, kinetik energiyasi W nimaga teng?
A) $W = E + mc^2$ B) $W = E - mc^2$ C) $W = p^2/2m$ D) $W = c\sqrt{p^2 + m^2c^2}$

34. Suv tubidan qalqib chiqayotgan pufakchaning hajmi suv sirtiga yaqinlashganda n marta ortgan bo‘lsa, suvning chuqurligini aniqlash ifodasini ko‘rsating. P_a - atmosfera bosimi, ρ_s - suv zichligi.
A) $\dfrac{P_a}{\rho_s(n-1)g}$ B) $\dfrac{P_a g}{\rho_s(n-1)}$ C) $\dfrac{P_a(n-1)}{\rho_s g}$ D) $\dfrac{\rho_s(n-1)}{P_a g}$

35. Prujinaga birinchi jism osilganda prujina 2 sm ga cho‘zildi, ikkinchi jism osilganda yesa 3 sm ga cho‘zildi. Ikkala jism birgalikda osilganda prujina qancha (sm) cho‘ziladi?
A) *1,2* B) *2,5* C) *5,0* D) *2,0*

36. Issiqlikni uzatish turlari to‘g‘ri ko‘rsatilgan variantni aniqlang.
A) *konveksiya, nurlanish*
B) *konveksiya, kondensatsiya, nurlanish*
C) *konveksiya, issiqlik o‘tkazuvchanlik, nurlanish*
D) *konveksiya, nurlanish, issiqlik tashuvganlik*

INGLIZ TILI

1. Choose the answer which correctly completes the sentence.
Nancy used ... a bike to work, but now she drives.
A) *to ride* B) *to be ridden* C) *riding* D) *ride*

2. Choose the answer which correctly completes the sentence.
You can’t have good crops unless you ... the soil. It is usually poor without care and cultivation.
A) *will not cultivate* B) *don’t cultivate* C) *will cultivate* D) *cultivate*

3. Choose the answer which correctly completes the sentence.
It is usually ... lava but gas that kills people during volcanic eruptions.
A) *no* B) *neither* C) *not only* D) *not*

4. Choose the answer which correctly completes the sentence.
We must run to the cinema. The film ... in five minutes.
A) *starts* B) *will start* C) *is starting* D) *will be starting*

5. Choose the answer which correctly completes the sentence.
The twins were difficult to tell apart, particularly when they wore very ... clothing.
A) *similar* B) *the same* C) *different* D) *alike*

6. Choose the answer which correctly completes the sentence.
You broke my knife. You used it ... a tin opener.
A) *with* B) *as* C) *like* D) *such*

7. Choose the answer which correctly completes the sentence.
I daren't ... my boss for a rise just now.
A) *asking* B) *to ask* C) *be asking* D) *ask*

8. Choose the answer which correctly completes the sentence.
"Where is the nearest bank?"
The boy asked the tour guide where ...
A) *the nearest bank is* B) *is the nearest bank*
C) *the nearest bank was*
D) *was the nearest bank*

9. Choose the answer which correctly completes the sentence.
Before Brian started his job last month, he had been told by the manager that he ... dress very smartly.
A) *had to* B) *must* C) *could* D) *ought*

10. Choose the answer which correctly completes the sentence.
The class got ... when the professor entered.
A) *quiet* B) *quieting* C) *quitness* D) *quietly*

11. Choose the answer which correctly completes the sentence.
I don't like cooking, and...
A) *he either doesn't* B) *either he doesn't*
C) *he doesn't neither* D) *he doesn't either*

12. Choose the answer which correctly completes the sentence.
The cause of car accident ... at present.
A) *have been investigated* B) *is investigated*
C) *is being investigated*
D) *are being investigated*

13. Choose the answer which correctly complete the sentence.
These library books are overdue so I ... pay a fine when I return them.
A) *can* B) *need* C) *may* D) *have to*

14. Choose the answer which correctly completes the sentence.
I wish I ... there to see Dan's face when they told him the news.
A) *have been* B) *would have been* C) *were* D) *had been*

15. Choose the answer which correctly completes the sentence.
At the party I really enjoyed ... your friends.
A) *to meet* B) *meeting* C) *met* D) *meet*

16. Choose the answer which correctly completes the sentence.
Whose spectacles are these? - ... are on the table, and these are my spectacles.
A) *Yours* B) *Our* C) *Your* D) *Their*

17. Choose the answer which correctly completes the sentence.
I saw you in the park yesterday. You ... with your friend Tom.
A) *had sat* B) *sat* C) *sit* D) *were sitting*

18. Choose the answer which correctly completes the sentence.
They closed down the factory because it ⋯ money for years.
A) *has lost* B) *was losing*
C) *had been losing* D) *lost*

19. Choose the answer which correctly completes the sentence.
There are 9 planets in our solar system, and ... Pluto is the farthest.
A) - B) *an* C) *the* D) *a*

20. Choose the answer which correctly completes the sentence.
The ground was ... last year.
A) *dig* B) *dogged* C) *digging* D) *dug*

21. Choose the answer which correctly completes the sentence.
I haven't got enough cash. Can I pay ... cheque?
A) *with* B) *by* C) *from* D) *in*

22. Choose the answer which correctly complete the sentence.
We went out for a delicious meal in ... Chinese restaurant last week.
A) - B) *the* C) *an* D) *a*

23. Choose the answer which correctly completes the sentence.
The best time to go shopping is in the morning ... shops are not busy then.
A) *that* B) *when* C) *which* D) *what*

Read the text. Then choose the correct answer to question 24-26.

Sleep researchers have found that people can make themselves wake up at a given time simply by deciding to do so before they go to sleep. Scientists took two groups of volunteers and, at nightfall, told one group that they would be woken at 6 a.m. and the other that they would be woken at 9 a.m. The sleepers' levels of the hormone adrenocorticotropin, which is known to cause spontaneous awakening, were then measured. In each group, there was a rise in the levels of the hormone one hour before the volunteers expected to get up. The three -hour difference between the rise in hormones in the two groups suggests that the body can be programmed to wake up on command.

24. The people studied by the researchers ...
A) *suffered from insomnia.*
B) *were unable to wake up by other means.*
C) *participated in the experiment at their own will.*
D) *were having difficulty getting up early.*

25. It seems that adrenocorticotropin ...
A) *is produced by the body some time before a person wakes up*
B) *is used by doctors for people who have difficulty getting up*
C) *exists in higher levels in people who wake up very early*
D) *is responsible for causing sleeplessness in a number of people*

26. The experiment related in the passage has indicated that ...
A) *our bodies are capable of being conditioned to wake up at a suggested hour.*
B) *people who wake up at 6 a.m. have more hormones than 9 a.m. risers.*
C) *the hormones that wake people up have a three -hour long cycle.*
D) *hormones are more effective than outside stimuli for waking people.*

Read the text. Then choose the correct answer for the gaps 27-28 in the text.

Although they were described as the (27)... designs in many years, there isn't anything very new about the lattest line of shoes from Santorelli. As one of the most famous designers in Italy, Salvatore Santorelli is expected to do more than simply repeat the previous year's (28)... formula of "smart, but casual" sandals in a range of pastels.

27.
A) *first new Italian* B) *new first Italian*
C) *first Italian new* D) *Italian first new*

28.
A) *success* B) *succession* C) *successful*
D) *successfully*

Read the text. Then choose the correct answer for the gaps 29-31 in the text.

One of the earliest methods of home heating, the fireplace continues (29) ... popular today. Ancient fireplaces were usually central pits in the house that also served as stoves, light sources, and (30) ... from wild animals. Modern fireplaces are sometimes valued more (31) ... their appearance than their actual heating capacities.

29.
A) *to be* B) *been* C) *is* D) *was*

30.
A) *benefit* B) *comfort* C) *challenge*
D) *protection*

31.

A) *after* B) *at* C) *for* D) *on*

Read the text. Then choose the correct answer to question 32-33

One chilly autumn morning in 1945, five thousand shoppers crowded the pavements outside Gimbles Department Store in New York City. The day before, Gimbels had taken out a full-page newspaper advertisement in the *New York Times*, announcing the sale of the first ballpoint pens in the United States. Within six hours, Gimbels had sold its entire stock of ten thousand ballpoints at $12.50 each-approximately $130 at today's prices.

In fact this "new" pen was not new after all, and was just the latest development in a long search for the best way to deliver ink to paper. In 1884 Lewis Waterman had patented the fountain pen, giving him the sole rights to manufacture it. This marked a significant leap forward in writing technology, but fountain pens soon became notorious for leaking. In 1888, a leather tanner named John Loud devised and patented the first "rolling-pointed marker pen" for marking leather. Loud's design contained a reservoir of ink in a cartridge and a rotating ball point that was constantly bathed on one side with ink.

Loud's pen was never manufactured, however, and over the next five decades, 350 additional patents were issued for similar ball-type pens, though none advanced beyond the design stage. Each had their own faults, but the major difficulty was the ink: if the ink was thin, the pens leaked, and if it was too thick, they clogged. Depending on the climate or air temperature, sometimes the pens would do both. Almost fifty years later, Ladislas and Georg Biro, two Hungarian brothers, **came up with** a solution to this problem. In 1935 Ladislas Biro was working as a journalist, editing a small newspaper. He became frustrated by the amount of time he wasted filling fountain pens with ink and cleaning up ink smudges. Ladislas and Georg set about making models of new pen designs and creating better inks to use in them. Ladislas observed the ink in newspaper printing dried rapidly, leaving the paper dry and smudge-free. He was determined to construct a pen using the same type of ink. However, the thicker ink would not flow from a regular pen nib so he had to develop a new type of point. Biro came up with the idea of fitting his pen with a tiny ball bearing in its tip. As the pen moved along the paper, the ball bearing rotated and picked up ink from the ink cartridge which it delivered to the paper.

32. The problem with the ballpoint pens invented between 1888 and 1935 was that ...

A) *they could not write on ordinary paper*

B) *they were affected by weather conditions*

C) *they cost a great deal of money to manufacture*

D) *the technology to manufacture them did not exist*

33. What does **"came up with"** in bold mean?

A) *to move towards* B) *to get rid of*
C) *to reject* D) *to suggest*

Read the text. Then choose the correct answer to question 34-36.

The Great Pyramid of Giza, a monument of wisdom and prophecy, was built as a tomb for Pharaoh Cheops in 2720 B.C. Despite its antiquity, certain aspects of its construction make it one of the truly great wonders of the world. The four sides of the pyramid are aligned almost exactly on true north, south, east, and west - an incredible engineering flat. The ancient Egyptians were sun worshippers and great astronomers, so computations for the Great Pyramid were based on astronomical observations.

Explorations and detailed examinations of the base of the structure reveal many intersecting lines. Further scientific study indicates that these represent a type of time line of events past, present, and future. Many of the events have been interpreted and found to coincide with known facts of the past.

Others are prophesied for future generations and presently are under investigation.

Was this superstructure made by ordinary beings, or one built by a race superior to any known today?

34. What did the ancient Egyptians base on their calculations?

A) *observation of the celestial bodies*

B) *advanced tools of measurement*

C) *advanced technology*

D) *knowledge of the earth's surface*

35. Why was the Great Pyramid constructed?
    A) *as an engineering feat*
    B) *as a solar observatory*
    C) *as a religious temple*
    D) *as a tomb for the pharaoh*

36. Why is the Great Pyramid of Giza considered one of the Seven Wonders of the World?
    A) *it was selected as the tomb of Pharaoh Cheops*
    B) *it is very old*
    C) *it was built by a super race*
    D) *it is perfectly aligned to the four cardinal points of the compass and contains many prophesies*