

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: **1000050**

Toshkent – 2014

**MATEMATIKA (INFORMATIKA BILAN)**

1. To'g'ri burchakli trapetsiyaning bitta burchagi  $60^\circ$ , katta asosi 12 sm ga teng. Agar trapetsiyaning kichik diagonali katta asosiga teng bo'lsa, diagonallar o'rtalarini tutashtiruvchi kesma uzunligini (sm) toping.  
A) 4 B) 3 C) 8 D) 5
2. Koordinata boshidan o'tuvchi tekislik tenglamasini toping.  
A)  $x + y - 1 = 0$  B)  $x + 3y + 9z - 1 = 0$   
C)  $2x - 2y + 5z = 0$  D)  $x + y + 1 = 0$
3.  $\int_0^2 (x^2 + 1) dx$  ni hisoblang.  
A)  $4\frac{5}{6}$  B)  $4\frac{4}{5}$  C)  $4\frac{3}{4}$  D)  $4\frac{2}{3}$
4. 2 ta parallel to'g'ri chiziqni uchinchi to'g'ri chiziq kesib o'tganda hosil bo'lgan ichki bir tomonli burchaklar  $\frac{7}{13}$  nisbatda. Ulardan kattasini toping.  
A)  $120^\circ$  B)  $63^\circ$  C)  $113^\circ$  D)  $117^\circ$
5.  $31 \cdot 52 - 93 \cdot 4 + 57 \cdot 25 - 19 \cdot 35 + 2 \cdot (-10)^3$   
A) 1000 B) -1000 C) 4000 D) 0
6. 117, 177, 237 sonlarini  $A$  soniga bo'lganda mos ravishda 5, 9, 13 qoldiqlar chiqadi.  $A$  ning qabul qilishi mumkin bo'lgan qiymatlari yig'indisini toping.  
A) 31 B) 42 C) 98 D) 120
7. Avtomashina Toshkentdan Samarqandga tomon yo'lga chiqdi. Yo'lning  $\frac{2}{5}$  qismini rejadagi tezlikda o'tgach, tezligini 20% ga oshirdi va Samarqandga mo'ljaldagidan yarim soat oldin keldi. Avtomashina ikki shahar orasidagi masofani necha soatda o'tgan?  
A) 4,5 B) 3 C) 2,5 D) 4
8.  $y = -3x^2 + 2x + |x + 2|$  funksiyaning eng katta qiymatini toping.  
A)  $2\frac{4}{5}$  B) 10 C)  $3\frac{11}{12}$  D)  $2\frac{3}{4}$
9.  $f(x) = e^{2x-4} + 2\ln x$ ,  $f'(2) = ?$   
A) 4 B) 5 C) 3 D) 2
10. Uchlari  $A(3; 0)$ ,  $B(-3; 8)$ ,  $C(3; 8)$  nuqtalarda bo'lgan uchburchakka ichki chizilgan aylana tenglamasini toping.  
A)  $(x - 2)^2 + (y + 6)^2 = 4$   
B)  $(x - 3)^2 + (y + 1)^2 = 2$   
C)  $(x - 1)^2 + (y - 6)^2 = 4$   
D)  $(x + 3)^2 + (y - 2)^2 = 1$
11.  $y = \ln ||x| + 1|$  funksiyaning aniqlanish sohasini toping.  
A)  $(-\infty; 0)$   
B)  $(0; \infty)$   
C)  $(1; \infty)$   
D)  $(-\infty; \infty)$
12.  $(x - 4)(x - 7)(x - 9) > 0$  tengsizlikni yeching.  
A)  $x \in (-\infty; 4) \cup (7; 9)$   
B)  $x \in (7; 9)$   
C)  $x \in (4; 7) \cup (9; \infty)$   
D)  $x \in (4; 7)$
13. 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)  $6\pi$  B)  $9\pi$  C)  $12\pi$  D)  $4\pi$
14.  $\sin x = [x]$  tenglamani yeching. (Bu yerda  $[x]$  – butun qism.)  
A) 0 va  $\frac{\pi}{2}$   
B)  $\emptyset$   
C)  $x = \pi k$ ;  $x = \frac{\pi}{2} + \pi k$ ;  $k \in Z$   
D)  $0, \frac{\pi}{2}, \pi$
15.  $\frac{2}{\sqrt{10} + \sqrt{15} + \sqrt{14} + \sqrt{21}}$  kasrning maxrajini irratsionallikdan qutqaring.  
A)  $\sqrt{10} - \sqrt{15} + \sqrt{14} - \sqrt{21}$   
B)  $\sqrt{10} - \sqrt{15} + \sqrt{21} - \sqrt{14}$   
C)  $\sqrt{10} - \sqrt{15} + \sqrt{21} + \sqrt{14}$   
D)  $\sqrt{10} + \sqrt{15} + \sqrt{14} - \sqrt{21}$

16. Radiusi 5 ga teng bo'lgan doiradagi uzunligi 8 ga teng vatar doira markazidan qancha uzoqlikda bo'ladi?

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

17. Muntazam sakkizburchakka tashqi chizilgan aylana radiusi  $\sqrt{2 + \sqrt{2}}$  ga teng bo'lsa, uning tomonini toping.

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

18.  $\sqrt[3]{x} + 6 = \sqrt[3]{x^2}$  tenglamaning katta va kichik ildizlari ayirmasini toping.

- A) 50 B) 25 C) 45 D) 35

19.  $ABC$  uchburchak uchlaridan va shu uchburchakning medianalari kesishgan  $M$  nuqtadan  $\alpha$ -tekislikka tushirilgan perpendikularlar asoslari mos ravishda  $A_1, B_1, C_1, M_1$  nuqtalarda yotsa,  $AA_1 + BB_1 + CC_1$  va  $MM_1$  uzunliklari nisbatini toping.

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

20.  $(x - 1)^2(x^2 - 2x) = 12$  tenglamaning haqiqiy ildizlari yig'indisini toping.

- A) 0 B) 3 C) 4 D) 2

21.  $\sqrt{\frac{a^2}{3} + \sqrt{\frac{a^2}{3} + \sqrt{\frac{a^2}{3} + \dots}}} = 4$  tenglikni qanoatlantiruvchi  $a$  musbat sonni toping.

- A) 2 B) 8 C) 6 D) 4

22.  $\sqrt{3x^2 + 7x + 2} - \sqrt{2x^2 + 3x - 2} = \sqrt{x^2 + 2x}$  tenglama ildizlarining yig'indisini toping.

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

23.  $ABCDEFGH$  muntazam sakkizburchakning yuzi 1 ga teng bo'lsa,  $ABEF$  to'g'ri to'rtburchakning yuzini toping.

- A)  $\frac{1}{2}$  B)  $\frac{\sqrt{2}}{4}$  C)  $\frac{1 + \sqrt{2}}{4}$  D)  $\frac{3}{2}$

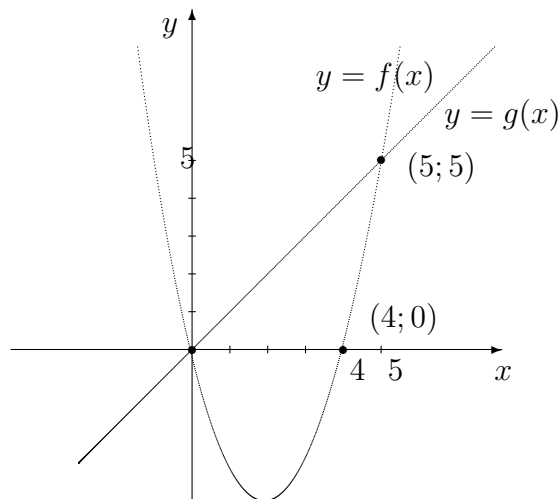
24.  $||x - 4| - 7| > 5$  tengsizlikning eng kichik musbat va eng katta manfiy butun yechimlari ayirmasini toping.

- A) 6 B) 12 C) -12 D) -6

25.  $y = 1994x^2 + 2013x - 1$  funksiya grafigi qaysi choraklardan o'tadi?

- A) I, II, IV B) I, II, III C) I, II, III, IV  
 D) II, IV

26. Quyidagi chizmaga asoslanib  $\frac{f(8)}{g(8)}$  ning qiymatini toping.



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

27. Agar  $a^3 + a - 2 = 0$  bo'lsa,  $\frac{a^4 + a^3 + a^2 + 9}{a^5 + a^2 + a + 6}$  ifodaning qiymatini toping.

- A)  $\frac{4}{3}$  B) -2 C)  $\frac{12}{11}$  D) 1

28. Agar  $a = \frac{\sqrt{7} + \sqrt{3}}{3}$  bo'lsa,  $\sqrt{a - 2\sqrt{a - 1}} + \sqrt{a + 2\sqrt{a - 1}}$  ifodaning qiymatini toping.

- A)  $\frac{\sqrt{7} + \sqrt{3}}{3}$  B)  $\sqrt{2}$  C) 2 D)  $5 + \sqrt{21}$

29. Rombning tomoni  $10\sqrt{3}$  ga, o'tmas burchagi  $120^\circ$  ga teng. Rombga ichki chizilgan doiraning yuzini hisoblang.

- A)  $48,75\pi$  B)  $52,25\pi$  C)  $58,6\pi$  D)  $56,25\pi$

30. Teploxod ikki pristan oraligidagi masofani daryo oqimi bo'yicha 7 soat, oqinga qarshi 9 soatda o'tadi. Agar oqimning tezligi 2 km/soat bo'lsa, pristanlar orasidagi masofani (km) aniqlang.

- A) 126 B) 128 C) 120 D) 130

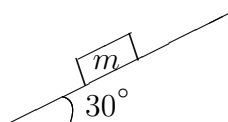
31. Yunonlar foydalangan hisoblash vositasi nomini aniqlang.

- A) Abak B) Serobyan C) Suan-pan  
 D) Cho't

32. Tashkil etuvchi barcha sodda mulohazalar rost bo'lganda quyidagilardan qaysi birining natijasi rost bo'ladi?
- A)  $(A \vee \neg B) \wedge \neg (C \vee D)$   
 B)  $A \wedge \neg B \vee C \wedge \neg D$   
 C)  $A \vee B \wedge \neg C \vee \neg D$   
 D)  $\neg A \vee (B \vee C) \wedge \neg D$
33. Kompyuter uchun yangi dasturlar tayyorlash va tahrirlashni yengillashtiruvchi dasturlar qanday nomlanadi?
- A) *Sistema dasturlari* B) *Amaliy dasturlar*  
 C) *Uskunaviy dasturlar* D) *Utilitalar*
34. MS Word 2003 dasturida uskunalar panelini sozlash bo'limi qaysi menyuda joylashgan?
- A) *Файл(Fayl)* B) *Правка(Tahrir)*  
 C) *Вид(Ko'rinish)* D) *Формат(Format)*
35. Elektron pochta manziliga oid mulohazalardan xatosini aniqlang.
- A) *E-mail manzilida @ belgisi ishtirok etmaydi*  
 B) *E-mail manzilida probel (bo'shliq) belgisi ishtirok etmaydi*  
 C) *E-mail manzilida raqamlar ishtirok etadi*  
 D) *E-mail manzilida lotin harflari ishtirok etadi*
36. Paskal dasturi lavhasidagi write protsedurasi necha marta bajariladi?  
 for i:=1 to 3 do for j:=0 to 3 do write (i+j);
- A) 1 marta B) 3 marta C) 12 marta  
 D) 9 marta

### FIZIKA

1. Chastotasi 5 MGs bo'lgan to'lqin suvga tushganida qanday chastotada (MGs) bo'ladi?
- A) 4 B) 6 C) 5 D) 3
2. Tinch holatidan boshlab tekis tezlanuvchan harakat qilayotgan jismning 12-sekundda bosib o'tgan yo'li 4-sekundda bosib o'tgan yo'lidan necha marta farq qiladi?
- A) 23/5 B) 9 C) 23/9 D) 23/7
3.  $N = N_0 \cdot 2^{-t/T}$   
 Radioaktiv parchalanish qonunida  $N$  nimani bildiradi?
- A) *tabiiy parchalangan yadrolar sonini*  
 B) *radioaktiv parchalangan yadrolar sonini*  
 C) *radioaktiv parchalanmagan yadrolar sonini*  
 D) *majburiy parchalangan yadrolar sonini*
4. Radiusi  $R$  bo'lgan shar yerda tinch turibdi. O'lchami sharning o'lchamidan ancha kichik jism sharning yuqorigi nuqtasidan tinch holatdan boshlab sirpanmoqda. Yer sirtidan qanday  $h$  balandlikda jism shardan ajraladi?
- A)  $h = 5R/3$  B)  $h = 2,5R$  C)  $h = R/3$   
 D)  $h = 2R/3$
5. Vakuimli diodning to'yinish toki 32 mA ga teng bo'lganda, katoddan 2 s ichida nechta elektron ajralib chiqadi?
- A)  $2 \cdot 10^{17}$  B)  $4 \cdot 10^{17}$  C)  $4 \cdot 10^{16}$  D)  $2 \cdot 10^{16}$
6. Jism radiusi 2 m bo'lgan aylana bo'ylab 180 rad/min burchak tezlik bilan harakatlanmoqda. Agar uning massasi 6 kg bo'lsa, unga ta'sir qilayotgan markazga intilma kuchni (N) aniqlang.
- A) 27 B) 36 C) 64 D) 108
7. 200 V kuchlanishgacha zaryadlanib tok manbaidan ajratilgan  $10 \mu\text{F}$  sig'imli kondensator qoplamalari orasidan dielektrik singdiruvchanligi  $\varepsilon=2,5$  bo'lgan dielektrikni tortib olish uchun qancha ish (J) bajarish kerak?
- A) 5 B) 3 C) 1,25 D) 0,3
8. Bir jinsli magnit maydon induksiyasi 2 marta ortsa, bu maydonga joylashgan o'tkazgichdagi tok kuchi qanday o'zgaradi?
- A) 4 marta ortadi B) o'zgarmaydi  
 C) 2 marta kamayadi D) 2 marta ortadi
9. 6 kg massali jism qiya tekislikdan o'zgarmas tezlik bilan sirpanib tushmoqda. 30 sm masofada bajarilgan ish (J) nimaga teng?



- A) 9 B) 2,5 C) 6 D) 5

10. Qizil yorug'lik nuri uchun foton energiyasini (J) hisoblang.  
A)  $3 \cdot 10^{-16}$  B)  $3 \cdot 10^{-19}$  C)  $3,5 \cdot 10^{-16}$   
D)  $2,83 \cdot 10^{-19}$
11. Agar qavariq linza yordamida buyumning haqiqiy, teskari kichiklashgan tasviri hosil qilinayotgan bo'lsa, buyum qayerda joylashgan?  
A) *ikkilangan fokus masofadan uzoqda*  
B) *fokus masofa bilan ikkilangan fokus masofa orasida*  
C) *ikkilangan fokus masofada*  
D) *fokus nuqta va optik markaz orasida*
12. Ikki kosmik kema  $v_1 = v_2 = 0,75c$  tezlik bilan qarama-qarshi yo'nalishda harakatlanmoqda. Birining 2-siga nisbatan tezligi qanday?  
A)  $0,9c$  B)  $0,96c$  C)  $0,86c$  D)  $c$
13. Havoning nisbiy namligini o'lchaydigan asbob nima?  
A) *psixrometr* B) *ariometr* C) *barometr*  
D) *gigrometr*
14. Chaqmoq chaqqandan so'ng 6 s o'tgach momoqaldiroq gumburladi, yashin razradi kuzatuvchidan qanday masofada (km) bo'lgan?  
A) 256 B) 45 C) 2 D) 56
15. Prujinaning bikrligi 40 N/m ga teng bo'lsa, unga maxkamlagan 100 g massali jismning tebranish chastotasi (Gs) qanchaga teng bo'ladi?  
A) 3 B) 4 C) 30 D) 0,3
16. O'zgarmas tok manbaiga avval 9  $\Omega$  qarshilik so'ngra 4  $\Omega$  qarshilik ulandi. Har ikkala holda birday vaqt ichida qarshiliklarda bir xil miqdorda issiqlik ajraladi. Manbaning ichki qarshiligini ( $\Omega$ ) aniqlang.  
A) 6 B)  $\sqrt{6}$  C) 3 D) 36
17. Raketa gazlarning chiqish tezligi 3,5 km/s bo'lganda 2000 kg/s yonilg'i sarflayotgan dvigatelning tortish kuchini (N) aniqlang.  
A)  $7 \cdot 10^6$  B)  $10 \cdot 10^6$  C)  $7 \cdot 10^3$  D)  $9 \cdot 10^6$
18. Massasi va boshlang'ich temperaturasi bir xil bo'lgan vodorod va geliy gazlari 70 K ga qizdirildi. Vodorodni qizdirishda bajarilgan ish  $A_1$  va geliyni qizdirishda bajarilgan ish  $A_2$  lar qanday munosabatda bo'ladi? ( $P = \text{const}$ )  
A)  $A_2 = 4A_1$  B)  $A_1 = A_2$  C)  $A_2 = 2A_1$   
D)  $A_1 = 2A_2$
19. 220 V kuchlanishli tarmoqqa ulangan lampochkadan 1 A tok o'tmoqda. Lampochkada tok bajarilgan ishning 4% yorug'lik energiyasiga aylanadi. Lampochkada 0,5 soat davomida qancha yorug'lik energiyasi (J) tarqaladi?  
A) 15840 B) 15400 C) 15000 D) 15800
20. Kuchlanishni 2 marta, o'tkazgich uzunligini 4 marta oshirilsa, o'tkazgich qarshiligi qanday o'zgaradi?  
A) 6 marta ortadi B) 4 marta ortadi  
C) 2 marta ortadi D) 8 marta ortadi
21. Bir atomli 1 mol gaz izobarik kengayganda 160 J ish bajaradi va temperaturasi 10°C ga ortadi. Gazga qancha issiqlik miqdori (J) berilgan?  
A) 284 B) 160 C) 84 D) 124
22. Ballonda 20 mol gaz bo'lsa, undagi molekulalar sonini toping.  
A)  $12 \cdot 10^{24}$  B)  $1,2 \cdot 10^{25}$  C)  $1,2 \cdot 10^{24}$   
D)  $12 \cdot 10^{25}$
23. Quduqdan chelakda suv tortilmoqda. Chelak hajmi 10 l. Arqon o'raladigan baraban radiusi 10 sm va dastak tirsagi 50 sm ga teng. Suv chiqarish uchun tirsakka qanday kuch (N) bilan ta'sir etish kerak? Suvning zichligi  $1000 \frac{\text{kg}}{\text{m}^3}$ .  
A) 20 B) 100 C) 50 D) 10
24. G'altakning o'lchamlarini uning induktivligi 2 marta ortadigan qilib o'zgartirildi. G'altakdan o'tayotgan tokni 2 marta kamaytirildi. G'altakning magnit maydon energiyasi qanday o'zgaradi?  
A) *o'zgarmaydi* B) 2 marta kamayadi  
C) 2 marta ortadi D) 4 marta ortadi
25. Induktivligi 0,4 H bo'lgan o'tkazgichning induktiv qarshiligi ( $\Omega$ ) tok chastotasi 50 Hz bo'lganda qanday?  
A) 113 B) 20 C) 126 D) 200

26. 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) 2,0 D) 5,0
27. Metallarda erkin elektronlarning tezligi  $1,1 \cdot 10^5$  m/s bo‘lsa, uning kinetik energiyasi (J) nimaga teng?  
A)  $6 \cdot 10^{20}$  B)  $5,5 \cdot 10^{-21}$  C)  $5,5 \cdot 10^{-20}$   
D)  $5 \cdot 10^{-20}$
28. Buyum va uning tasviri orasidagi masofa  $l$  ga teng bo‘lib, tasvir buyumdan  $n$  marta katta bo‘lsa, linzaning fokus masofasini ( $F$ ) toping.  
A)  $\frac{n+1}{n^2}$  B)  $\frac{n}{(n+1)^2 l}$  C)  $\frac{ln}{(n+1)^2}$   
D)  $\frac{l(n+1)}{n^2}$
29. Og‘irligi 100 N bo‘lgan jismning zichligi  $500 \text{ kg/m}^3$  bo‘lgan suyuqlikdagi og‘irligi 60 N. Boshqa bir suyuqlikdagi og‘irligi esa 80 N ga teng. Ikkinchi suyuqlikning zichligini ( $\text{kg/m}^3$ ) toping.  
A) 250 B) 1000 C) 150 D) 125
30. Loshmida sonini belgilang.  
A)  $2,7 \cdot 10^{25} \text{ m}^{-1}$  B)  $2,3 \cdot 10^{25} \text{ m}^{-3}$   
C)  $2,3 \cdot 10^{25} \text{ m}^{-1}$  D)  $2,7 \cdot 10^{25} \text{ m}^{-3}$
31. Uzoq masofaga uchayotgan kosmik kemaning tezligi harakat boshidan 1 soat o‘tgach  $1000 \text{ km/s}$  ga yetdi. Kemaning tezlanishini ( $\text{m/s}^2$ ) toping.  
A) 0,278 B) 100 C) 1000 D) 278
32. Tomonlari 0,5 m bo‘lgan yog‘och kub ko‘lda  $2/3$  qismi botgan holda suzib yuribdi. Shu kubni suvga to‘liq botirish uchun qanday minimal ish (J) bajarish kerak?  
A) 68 B) 54 C) 34 D) 74
33.  $16^\circ\text{C}$  temperaturada  $4 \text{ m}^3$  havoda 40 g suv bug‘i bor. Nisbiy namlikni (%) toping.  
 $\rho_{16^\circ\text{C}} = 13,6 \text{ g/m}^3$   
A) 34 B) 74 C) 85 D) 21
34. Tebranish konturidagi tok kuchining vaqt bo‘yicha o‘zgarish tenglamasi quyidagi ko‘rinishda berilgan  $I = 0,02 \sin 400\pi t$  (A). Konturning induktivligi 1 H ga teng. Kondensator qoplamalaridagi maksimal potentsiallar farqini (V), magnit va elektr maydonlarning maksimal energiyasini (J) toping.  
A) 24;  $3 \cdot 10^{-4}$  B) 26;  $9 \cdot 10^{-4}$  C) 23;  $7 \cdot 10^{-4}$   
D) 25,1;  $2 \cdot 10^{-4}$
35. Massasi 4,9 kg bo‘lgan jism 2,5 kg massali qo‘zg‘almas jism bilan to‘qnashgandan keyin bu ikki jismlar sistemasining kinetik energiyasi 5 J ga teng bo‘lib qolgan. Urilishni markaziy va noelastik hisoblab birinchi jismning urilishdan oldingi kinetik energiyasini (J) toping.  
A) 7,0 B) 8,5 C) 8,0 D) 7,55
36. Tomonlari 30 sm dan bo‘lgan kvadratning uchta uchida har biri 20 nC dan bo‘lgan uchta bir xil zaryad joylashgan. Bu zaryadlar tomonidan kvadratning to‘rtinchi uchida joylashgan 10 nC zaryadga ta’sir etuvchi kuchni ( $\mu\text{N}$ ) toping.  
A) 38 B) 40 C) 30 D) 35

### INGLIZ TILI

- Choose the answer which correctly completes the sentence.  
The twins were difficult to tell apart, particularly when they wore very ... clothing.  
A) *alike* B) *different* C) *the same*  
D) *similar*
- Choose the answer which correctly completes the sentence.  
You can't go on holiday without ... money.  
A) *many* B) *any* C) *no* D) *some*
- Choose the answer which correctly completes the sentence.  
I dislike using credit cards, so I always pay ... cash.  
A) *in* B) *with* C) *from* D) *by*
- Choose the answer which correctly completes the sentence.  
The last ice age ... have ended over 10,000 years ago, but from a historical point of view it was a relatively recent event.  
A) *was to* B) *may* C) *could* D) *should*

5. Choose the answer which correctly completes the sentence.  
Once a busy city, Pompeii was destroyed by the eruption of ... Mount Vesuvius in 79 A.D.  
A) a B) an C) - D) the
6. Choose the answer which correctly complete the sentence.  
While Dan was washing up the dishes the girls ... the kitchen.  
A) was cleaned B) cleaned  
C) were cleaning D) were cleaned
7. Choose the answer which correctly completes the sentence.  
She would have recognised him if she ... him before.  
A) see B) would see C) saw D) had seen
8. Choose the answer which correctly completes the sentence.  
I advise you to buy a Volkswagen . . . .  
Volkswagen cars are cheap, they last a long time.  
A) even though B) because C) despite  
D) as
9. Choose the answer which correctly completes the sentence.  
"Did it rain last week?"  
Do you know ... last week.  
A) if it had rained B) did it rain  
C) if did it rain D) whether it rained
10. Choose the answer which correctly completes the sentence.  
How about ... out for a meal tonight?  
A) going B) went C) to go D) go
11. Choose the answer which correctly completes the sentence.  
We invited Peter for dinner yesterday, and he came round ... we were eating.  
A) till B) during C) as soon as D) while
12. Choose the answer which correctly completes the sentence.  
The cause of car accident ... at present.  
A) is investigated B) is being investigated  
C) have been investigated  
D) are being investigated
13. Choose the answer which correctly completes the sentence.  
Neither David nor Jane ... to University.  
A) go B) goes C) are going D) going
14. Choose the answer which correctly complete the sentence.  
The news is going ... tomorrow or the day after tomorrow.  
A) be announced B) to be announced  
C) is announcing D) to announce
15. Choose the answer which correctly complete the sentence.  
The man was made ... all the questions in court.  
A) to answer B) answering C) answer  
D) answered
16. Choose the answer which correctly completes the sentence.  
Dad, I have nothing to wear. The jeans you bought me ... fit me.  
A) isn't B) doesn't C) don't D) aren't
17. Choose the answer which correctly completes the sentence.  
Once he was skiing too fast down a mountain, when he crashed into ... tree.  
A) an B) - C) a D) the
18. Choose the answer which correctly complete the sentence.  
You shouldn't get offended. You ... Nick. He didn't mean to hurt you.  
A) must misunderstand  
B) must have misunderstood  
C) mustn't understand  
D) must be understanding
19. Choose the answer which correctly completes the sentence.  
Geese are not the same ... ducks. Geese are usually larger and have longer necks.  
A) like B) as C) so D) such
20. Choose the answer which correctly completes the sentence.  
The children shouldn't play outside in cold weather, and ...  
A) she should neither B) neither she should  
C) neither should she D) she should either

21. Choose the answer which correctly completes the sentence.

The crowd was full of ... as the fireworks started.

- A) *exciting* B) *excitement* C) *excite*  
D) *excited*

22. Choose the answer which correctly completes the sentence.

You will see nothing ... you use a microscope. It is the most interesting insect.

- A) *if* B) *providing* C) *unless* D) *in case*

23. Choose the answer which correctly completes the sentence.

The sky grew ... as the storm approached.

- A) *darkly* B) *darkness* C) *dark*  
D) *darken*

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

When the first cars hit British roads in the late 19th century, they had an unusual safety feature. Every "horseless carriage" was guided by a man walking in front waving a red flag to warn other road users of the vehicle's approach. These early precautions, known as the "red flag laws", seem laughable now. However, future generations may look at current safety measures in much the same way. In the US state of Nevada, the government has begun to draft a set of regulations that will allow self-driving vehicles on its roads. These cars will have technological advantages such as cameras that determine exactly where other cars are and how fast they are moving. Promoters of the self-driving cars believe they will save time and fuel, and reduce traffic jams. If these cars become a reality, there may be a dramatic decrease in human drivers on the roads. People who still want the pleasure of driving themselves will someday have to warn other road users that they are engaging in such a dangerous activity. People then might consider reintroducing the red flags.

24. The author of the passage thinks that ...

- A) *many cars will not be driven by humans when unmanned cars come into existence.*  
B) *road users rely heavily on self-driving cars due to their technological advantages.*  
C) *precautions taken by the British were not as effective as those of the Nevada government.*  
D) *current technology is insufficient to meet safety needs on today's roads.*

25. It can be understood from the passage that ...

- A) *the designs of self-driving cars will be more attractive than current ones.*  
B) *the technical features of self-driving cars will make them expensive at first.*  
C) *promoters of the self-driving cars believe these cars will have several benefits.*  
D) *we need to build special roads for self-driving cars.*

26. It is inferred in the passage that ...

- A) *the Nevada government was inspired by the "red flag laws" while drafting regulations for self-driving cars.*  
B) *driving a car yourself may be considered dangerous in the future.*  
C) *cars were often used to carry equipment when they were first introduced to British roads in the 19th century.*  
D) *a red flag was generally used to signal the approach of a pedestrian.*

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

Andrew Murphy former (27)... director of Delco Electronics, has pleaded "Not Guilty" to charges that he stole £ 5 million from the company. He claims not to know where the money went. He has suggested (28)... an accountant took the money. Investigators consider it unlikely that anyone else in the company could have committed the crime.

- 27.

- A) *managed* B) *managing* C) *manage*  
D) *to manage*



28.

- A) *who* B) *that* C) *where* D) *what*

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

A forest is a thickly wooded area. Forests have a wide (29)... of plants and animals living among the trees. Forests that like cooler climates (30)... largely in the northern hemisphere, far north of the equator. Forest floors are shady places and it can be hard (31)... plants to grow.

29.

- A) *various* B) *variety* C) *variable*  
D) *vary*

30.

- A) *are found* B) *find* C) *were found*  
D) *found*

31.

- A) *from* B) *by* C) *of* D) *for*

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 Gimbels 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, Ladislav and Georg Biro, two Hungarian brothers, **came up with** a solution to this problem. In 1935 Ladislav 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. Ladislav and Georg set about making models of new pen designs and creating better inks to use in them. Ladislav 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 were affected by weather conditions*
  - B) *they could not write on ordinary paper*
  - 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 reject*
  - C) *to suggest*    D) *to get rid of*

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 feat. 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) *advanced tools of measurement*
  - B) *advanced technology*
  - C) *observation of the celestial bodies*
  - D) *knowledge of the earth's surface*

35. Why was the Great Pyramid constructed?
- A) *as an engineering feat*
  - B) *as a religious temple*
  - C) *as a solar observatory*
  - 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 is very old*
  - B) *it was selected as the tomb of Pharaoh Cheops*
  - C) *it was built by a super race*
  - D) *it is perfectly aligned to the four cardinal points of the compass and contains many prophecies*