

O'RTA MAXSUS KASB-HUNAR KOLLEJLARI VA AKADEMIK  
LITSEYLARIGA KIRUVCHILAR UCHUN

ACER

**JAVOBLARINGIZNI (90) 916-94-90 raqamiga sms qilib quyidagi ko'rinishda "47\*JAVOBLAR"  
jo'nating va natijangizni bilib oling. (Masalan: 47\*ABCCAD va h.k)**

## SAVOLLAR KITOBI

SAVOLLAR KITOBI RAQAMI:

009994

BLOKLAR:

Ingliz tili (1.1)  
Matematika (3.1)  
Fizika (2.1)

Test topshiruvchi:

F.I.O.

IMZO

### DIQQAT!

Test topshiriqlarini yechishdan avval savollar kitobini varaqlab, unda har bir fan bo'yicha savollar soni to'liqligini tekshiring. Agar savollar soni kamligi aniqlansa yoki savollar kitobi raqami bilan javoblar varag'idagi "savollar kitobi raqami" bir xil bo'lmasa, darhol auditoriya rahbariga ma'lum qiling.

Savollar kitobida va javoblar varag'ida test topshiruvchining familiyasi, ismi, otasining ismi to'ldirilganligiga va imzosi qo'yilganligiga e'tibor qarating!

TOSHKENT – 2019

## INGLIZ TILI

1. **Choose the answer which correctly completes the sentence.**  
Mark was sure to get acknowledged as he worked ... so he deserved promotion .  
A) hardness B) hardly  
C) hard D) more hardly
2. **Choose the answer which correctly completes the sentence.**  
Isn't there ... else to watch? This movie is putting me to sleep.  
A) somebody B) everything  
C) nothing D) anything
3. **Choose the answer which correctly completes the sentence.**  
"Don't play with matches," her mother said.  
Her mother said ... with matches.  
A) not play B) didn't play  
C) not to play D) don't play
4. **Choose the answer which correctly completes the sentence.**  
The children shouldn't play outside in cold weather, and ... .  
A) she should neither B) neither should she  
C) neither she should D) she should either
5. **Choose the answer which correctly completes the sentence.**  
Although Nell ... professionally for very long, her voice is as strong as if she ... for many years.  
A) hasn't sung/is singing  
B) won't have sung/would have sung  
C) didn't sing/were singing  
D) hasn't been singing/had been singing
6. **Choose the answer which correctly completes the sentence.**  
Glancing at the flowers, ... had been given her by her colleagues,  
she felt unhappy about leaving the company ... she had worked so contentedly.  
A) that/where B) which/which  
C) what/that D) which/ where
7. **Choose the best answer. You should . . . me you were going to be late.**  
A) to tell B) to have told  
C) have told D) tell
8. **Mrs. Davies asked me to tell you that she would like ... by Friday at the latest.**  
A) sending the orders B) the orders sent  
C) sent the orders D) that you send
9. **Choose the answer which correctly completes the sentence.**  
My friend said: "I will phone you when I get back".  
My friend said that ... .  
A) he would phone me when he got back  
B) she would phone you when she got back  
C) she would phone her when she got back  
D) she would have phoned me when she got back
10. **Choose the answer which correctly completes the sentence.**  
We tried another method, but it didn't work ... .  
A) neither B) so C) either D) or
11. **Choose the answer which correctly completes the sentence.**  
... avoid any misunderstandings, the company had printed the seminar paper both in English and in Uzbek.  
A) Unless B) Because  
C) In order that D) In order to
12. **Choose the answer which correctly completes the sentence.**  
If only we ... to do everything in the cheapest possible way, we ... these problems now.  
A) hadn't tried / wouldn't have  
B) didn't try / aren't having  
C) weren't trying / haven't had  
D) aren't trying / won't have
13. **I wish you'd stop chatting and ... with some work.**  
A) come back B) come on  
C) get down D) get on
14. **Choose the answer which correctly completes the sentence.**  
Academically, it is supposed to be one of the best universities in England; on the other hand, it offers very ... leisure facilities.  
A) B) many C) a few D) few
15. **Adam complained ... having a sore throat.**  
A) from B) for C) about D) of
16. **Choose the answer which correctly completes the sentence.**  
It looks like the meeting's going to be interesting, ...?  
A) do it B) it doesn't  
C) isn't it D) doesn't it
17. **You have a lot on your mind, ... ?**  
A) haven't you B) don't you  
C) have you D) do you
18. **Choose the answer which correctly completes the sentence.**  
I thought quite ... opposite.  
A) an B) - C) a D) the
19. **Choose the answer which correctly completes the sentence, I've nearly finished the quiz. There's only ... questions left**  
A) a few B) a little C) no D) few
20. **Choose the answer which correctly completes the sentence.**  
An earthquake of magnitude eight on the Richter scale occurs once ... five or ten years.  
A) every B) each C) another D) other
21. **Choose the answer which correctly completes the sentence.**  
The wonderful Victoria falls ... by Scottish explorer in the name of Queen Victoria in 1855.  
A) was named B) named  
C) had been named D) being named
22. **Choose the answer which correctly completes the sentence.**  
Davis is quite an athlete, Ha wants to be strong and healthy that's why he ... every morning.  
A) has jogged B) is jogging  
C) has been jogging D) jogs
23. **Choose the answer which correctly completes the sentence.**  
You need to know your own subject very well; furthermore, you must speak English ... to attend international conferences.  
A) such good B) so well  
C) too good D) well enough

24. Choose the answer which correctly completes the sentence.

We leaned out of the window to watch the school children ... down the street.

- A) marched B) to march  
C) marching D) to be marched

25. Choose the answer which correctly completes the sentence.

Learning a foreign language is important because it helps you

to understand ... cultures better.

- A) another B) the other  
C) other D) one another

26. Choose the answer which correctly completes the sentence.

One theory suggests that the civilization of ancient Crete ... by an

earthquake and volcanic eruption.

- A) must have destroyed  
B) could have destroyed  
C) is supposed to destroy  
D) may have been destroyed

Read the text. Then choose the correct answer for each

question below 27-30.

The majority of the swallows from western Europe migrate to equatorial Africa, and some even further south. Certainly their journey is very dangerous. Long sea crossings, where there is little available food or water, are generally avoided. In western Europe, most swallows cross to Africa via the Straits of Gibraltar, or fly the length of Italy before tackling the **relatively** short crossing to Tunisia in North Africa.

However, in storms they may be blown hundreds of kilometers off course. Exhausted swallows sometimes come to rest on ships way out in the Atlantic Ocean. They have to cross mountain ranges too, where again the weather may be unpredictable and food scarce. Along the coast of North Africa, many young swallows become the prey of Eleonora's falcons, which time their breeding to coincide with the migration of young birds southwards. But the most dangerous part of the journey is the crossing of the Sahara desert. Here, there is little food or water, sandstorms may delay and exhaust the already weakened birds, and many die. It is estimated that around 50% of adult birds die, and up to 80% of young birds, but enough survive to ensure the continuation of the species.

27. The word "relatively" in the passage is not close in meaning to ...  
A) reasonably B) absolutely  
C) fairly D) comparatively
28. Which of the following is not complication for the swallows while migrating?  
A) the Sahara desert B) Eleonora's falcon  
C) ships in the ocean D) mountain ranges
29. According to the text, the migration of swallows to Africa happens simultaneously with ...  
A) Eleonora's falcons' breeding period  
B) the strong sandstorms in the Sahara desert  
C) the stormy weather in North Africa.  
D) the time of food scarce in western Europe.
30. All of the following statements are TRUE, EXCEPT:  
A) The crossing of the Sahara desert is the most hazardous part of the migration.  
B) Young swallows are more tolerant of migration than adult swallows.  
C) Eleonora's falcons prey on young swallows migrating southwards.  
D) Most swallows cross to the African Continent via two

different ways.

## MATEMATIKA

31. O'suvchi arifmetik progressiyada  $a_1 + a_2 + a_3 = 0$  va  $a_1^2 + a_2^2 + a_3^2 = 98$  bo'lsa,  $a_4$  qanday bo'ladi?  
A) 14 B) -49 C) -14 D) 49
32. A aralashmaning narxi - 1 kg uchun 1000 so'm; B aralashmaning narxi - 1 kg uchun 2000 so'm. A va B aralashmadan mos ravishda 1:3 nisbatda tayyorlangan 1 kg aralashmaning narxi nimaga teng?  
A) 1750 B) 1500 C) 1650 D) 1800
33. Ushbu  $4\sin^2 x \cdot (1 + \cos 2x) = 1 - \cos 2x$  tenglamani yeching.  
A)  $\pm \frac{\pi}{3} + \pi n, n \in \mathbb{Z}$  B)  $\pi n; \pm \frac{\pi}{3} + 2\pi n, n \in \mathbb{Z}$   
C)  $\pi n; \pm \frac{\pi}{3} + \pi n, n \in \mathbb{Z}$  D)  $\pi n, n \in \mathbb{Z}$
34.  $(x-1) \cdot \sqrt{8-2x-x^2} \leq 0$  tengsizlik yechimini ko'rsating.  
A)  $[-2; 3]$  B)  $[-4; 1] \cup \{2\}$   
C)  $[2; \infty)$  D)  $[-2; 1] \cup \{3\}$
35.  $f(x-3) = \frac{2x-1}{x+1}$  bo'lsa,  $f(f(3))$  qanday bo'ladi?  
A) 13/17 B) 13/15 C) 19/13 D) 17/13
36.  $f(x) = x^2 + x - 1$  funksiya hosilasi x ning qanday qiymatida nolga teng bo'ladi?  
A) -1/2 B) -2/3 C) -3/4 D) 1/3
37.  $\sqrt[3]{3x+2} - \sqrt[3]{3x-5} = 1$  tenglama ildizlarining yig'indisini toping.  
A) 1 B) -1 C) -2 D) -3
38.  $y = \frac{1}{\sqrt{16-x^2}}$  funksiyaning aniqlanish sohasini toping.  
A) (-2; 2) B) (-4; 4)  
C) (0; 4) D) (0; 5)
39.  $f(x) = 2/x$  funksiyaning grafigi  $M(e; 4)$  nuqtadan o'tuvchi boshlang'ich funksiyasini toping.  
A)  $\ln x + 2$  B)  $\ln x + 3$  C)  $\ln x^2 + 2$  D)  $\ln x + 5$
40. Aylanaga tashqi chizilgan muntazam oltiburchakning tomoni  $4\sqrt{2}$  bo'lsa, aylanaga ichki chizilgan kvadratning yuzi qanday bo'ladi?  
A) 52 B) 64 C) 48 D) 50
41. Quyidagi tengsizlikni yeching.  
 $\frac{x(2-x)}{x^2 - 2x + 1} \leq 0$   
A) (0; 2) B) (4;  $\infty$ )  
C)  $[0; 1) \cup (1; 2]$  D)  $(-\infty; 0] \cup [2; \infty)$
42.  $\int_0^3 \frac{x}{x^2+1} dx$  ni hisoblang.  
A)  $\ln \sqrt{2}$  B)  $\ln \sqrt{10}$  C)  $\sqrt{10}$  D) 6
43. Muntazam to'rtburchakli piramida asosining tomoni 36 ga, uning hajmi esa 10368 ga teng. Piramidaning yon sirtini toping.  
A) 1800 B) 720 C) 1080 D) 2160

44. Uchlari  $A(0; 0)$ ,  $B(4; 3)$  va  $C(6; 8)$  bo'lgan uchburchakning  $A$  burchagi kattaligini toping.

- A)  $\arccos 0,9$  B)  $\frac{\pi}{36}$  C)  $\frac{\pi}{18}$  D)  $\arccos 0,96$

45. 10, 10 va 12 li tomonlari bo'lgan uchburchak tomonlari shar sirtiga urinadi. Agar shar markazidan uchburchak tekisligigacha bo'lgan masofa 4 ga teng bo'lsa, sharning radiusini toping.

- A) 8 B) 4 C) 6 D) 5

46. Ushbu  $2\cos^2(x-\pi)+3\sin(\pi+x)=3$  tenglamani yeching.

- A)  $\frac{\pi}{2}+2\pi n, n \in Z$  B)  $(-1)^{n+1}\frac{\pi}{6}+\pi n; -\frac{\pi}{2}+2\pi n, n \in Z$   
C)  $\pm\frac{\pi}{3}+2\pi n, n \in Z$  D)  $\pm\frac{\pi}{6}+2\pi n, n \in Z$

47. Konus asosining radiusi 6, yasovchi esa asosning tekisligi bilan  $30^\circ$  burchak tashkil qiladi. Asos markazidan yasovchigacha bo'lgan masofani toping.

- A)  $3\sqrt{3}$  B) 4 C) 3 D) 2,5

48.  $26^x+27 \geq 9(6-\sqrt{10})^x+3(6+\sqrt{10})^x$  tengsizlikni yeching.

- A)  $(-\infty; \log_{6+\sqrt{10}} 9] \cup [\log_{6-\sqrt{10}} 3; \infty)$   
B)  $(-\infty; \log_{6+\sqrt{10}} 9) \cup (\log_{6-\sqrt{10}} 3; \infty)$   
C)  $[\log_{6+\sqrt{10}} 9; \log_{6-\sqrt{10}} 3]$   
D)  $(\log_{6+\sqrt{10}} 9; \log_{6-\sqrt{10}} 3)$

49.  $A^2+B^2+C^2=AB+AC+BC$  ekanligi ma'lum.

$$\frac{A+B}{C} + \frac{B+C}{A} + \frac{C+A}{B} \quad (A \cdot B \cdot C \neq 0) \text{ ifodaning qiymatini}$$

toping.

- A) 2 B) 3 C) aniqlashning iloji yoq D) 6

50. Aylana yoyining uzunligi 10 sm, u tiralgan markaziy burchak  $60^\circ$  bo'lsa, aylananing radiusi qanday (sm)?

- A)  $30/\pi$  B)  $24/\pi$  C)  $15/\pi$  D)  $36/\pi$

51.  $2^{x-1}+2^{x-2}+2^{x-3}=448$  tenglamani yeching.

- A) 9 B) 7 C) 10 D) 11

52. Chiziqli o'lchamlari 3; 4;  $2\sqrt{14}$  bo'lgan to'g'ri burchakli parallelepipedning diagonali nimaga teng?

- A) 10 B) 9 C) 8 D) 7

53. Agar  $\operatorname{tg}\left(\frac{\pi}{4}+\alpha\right)=-\frac{59}{11}$  bo'lsa,

ctga ni toping

- A)  $\frac{24}{35}$  B)  $-\frac{24}{35}$  C)  $-\frac{35}{24}$  D)  $\frac{35}{24}$

54.  $y=1$  ga nisbatan  $y=2x+1$  to'g'ri chiziqqa simmetrik to'g'ri chiziq tenglamasini ko'rsating.

- A)  $y=-2x$  B)  $y=2x-1$   
C)  $y=1-2x$  D)  $y=2x$

55.  $|\vec{a}|=3$  va  $|\vec{b}|=4$  hamda vektorlar orasidagi burchak  $60^\circ$  ga teng bo'lsa,  $\vec{c}=3\vec{a}+2\vec{b}$  vektorning uzunligini toping.

- A)  $\sqrt{216}$  B)  $\sqrt{217}$  C)  $\sqrt{214}$  D)  $\sqrt{215}$

56. Paskal tilining faqat modullari keltirilgan javobni aniqlang.

- A) SYSTEM; CRT; CLEARDEVICE  
B) SYSTEM; SCT; GRAPH  
C) SYSTEM; CLRSCR; GRAPH  
D) SYSTEM; CRT; GRAPH

57. Agar kompyuter xotirasi ikki, uch, to'rt bit bo'lsa, nechta ranglar hosil qilish mumkin?

- A) 2,3,4 B) 4,16,256 C) 2,6,8 D) 4,8,16

58.  $A1=-8$ ,  $A2=-1$ ,  $B1=8$ ,  $B2=5$  bo'lsin. Natija -11ga teng bo'ladigan formulani aniqlang.

- A)  $=\text{ECLII}(A1+2>B1-1; B2; A2)$   
B)  $=\text{ЦЕЛЮЕ}(A1/B2)+A2-B1$   
C)  $=\text{ECLII}(A1+2>B1-1; B2; A2)$   
D)  $=\text{CP3HAЧ}(A1:B2)*A1$

59. Ikkilik sanoq sistemasida amallarni bajaring: 1111011,011 + 1,01-(1\*2<sup>3</sup>+1\*2<sup>2</sup>+1\*2<sup>3</sup>)

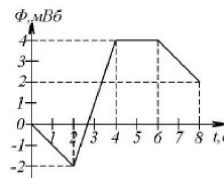
- A) 1010110,011 B) 1010010,001  
C) 1010101,011 D) 1010110,101

60. To'g'ri tenglikni ko'rsating:

- A) 1 Kbit=1000 bit. B) 1 Kbit=1024 bayt.  
C) 1 Kbit=1024 bit. D) 1 Kbit=1 bayt.

## FIZIKA

61. Rasmda konturni kesib o'tayotgan magnet oqimining vaqtga bog'lanishi tasvirlangan. Konturda hosil bo'ladigan induksiya EYK qaysi vaqt oralig'ida (s) eng katta bo'ladi?



- A) 6 - 8 B) 4 - 6 C) 0 - 2 D) 2 - 4

62. Normal sharoitda turgan gazning hajmi izotermik ravishda 10 litrdan 2 litrgacha kamaydi. Uning keyingi bosimini toping (mm.sim.ust).

- A) 152 B) 760 C) 2440 D) 3800

63. Gazni ideal deb hisoblash uchun nimani hisobga olmaslik kerak?

- A) molekularlarning to'qnashish ta'sirlashishini  
B) molekularlarning to'qnashish ta'sirlashishini  
C) molekularlarning uzoqdan ta'sirlashishini  
D) molekularlarning massasini

64. Suyuqlikka to'liq botgan 20 N vaznli jismga 12 N itarib chiqaruvchi kuch ta'sir qilmoqda. Jism siqib chiqargan suyuqlikning vazni necha nyuton?

- A) 12 B) 32 C) 20 D) 8

65. Jismning vakuumdagi vazni 40 N, zichligi  $0,8 \text{ g/sm}^3$  bo'lgan suyuqlikdagi vazni esa 24 N. jismning zichligini toping ( $\text{kg/m}^3$ ).

- A) 2800 B) 2400 C) 4200 D) 2000

66. Silliqlik gorizontal tekislikda jism turibdi. Agar tekislikning bir tomoni tekis ko'tarila boshlansa, jism qanday harakatlanadi?

- A) notekis tezlanuvchan tezlanish kamayib boradi  
B) notekis tezlanuvchan tezlanish ortib boradi  
C) notekis sekinlanuvchan, tezlanish moduli kamayib boradi  
D) tekis tezlanuvchan

67. Massasi 10 t bo'lgan artilleriya tortgichi (tyagach) joyidan qo'zg'alib,  $0,7 \text{ m/s}^2$  tezlanish bilan harakatlana boshladi. Agar harakatga qarshilik koeffitsiyenti 0,1 bo'lsa, tortish kuchini (N) aniqlang.

- A) 11700 B) 17000 C) 5600 D) 7200

68. Darvozabon 30 m/s tezlikda uchib kelayotgan 0,4 kg massali koptokni 0,1 s da to'xtatdi. U qanday quvvatni (Vt) (razvil)?

- A) 180 B) 1800 C) 360 D) 3600

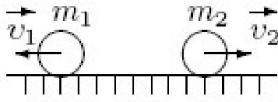
69. Uchlarida kuchlanish 9 V bo'lgan o'tkazgichdan 4 Kl zarad o'tganda qanday miqdorda issiqlik (J) ajralib chiqadi?

- A) 0.25 B) 4 C) 2 D) 36

70. Karno siklida ishlayotgan bug' turbinasiga temperaturasi 480 °C bo'lgan bug' kirib, undan 30 °C temperaturada chiqsa, turbinaning FIKni aniqlang (%).

- A) 30 B) 60 C) 70 D) 50

71. Rasmda ko'rsatilgan jismlar sistemasini impulsining modulini (kg · m/s) aniqlang.  $m_1 = m_2 = 2$  kg va  $V_1 = 2V_2 = 20$  m/s



- A) 2 B) 0 C) 20 D) 8

72. Quyidagi gaplarni ma'nosi bo'yicha to'ldiring.

1. Muvozanat holatdan kichik chetlatilganda jismga muvozanat holatga qaytaruvchi kuch ta'sir qila boshlasa, muvozanat . . . bo'ladi.

2. Muvozanat holatdan kichik chetlatilgan jismga hech qanday kuch ta'sir qilmasa, muvozanat . . . deyiladi.

3. Muvozanat holatdan kichik chetlatilgan jismga muvozanat holatdan uzoqlashtiruvchi kuch ta'sir qila boshlasa, muvozanat . . . deyiladi.

- A) 1) befarq, 2) turg'un emas, 3) turg'un  
B) 1) turg'un, 2) turg'un emas, 3) befarq  
C) 1) turg'un, 2) befarq, 3) turg'un emas  
D) 1) turg'un emas, 2) turg'un, 3) befarq

73. Chelakdagi suvda muz parchasi suzib yuribdi. Suv erib ketgandan keyin chelakdagi suvning sathi qanday o'zgaradi? Suvning zichligi -  $\rho_0$ , muzniki -  $\rho_1$

- A)  $\rho_0/\rho_1$  marta ko'tariladi  
B) o'zgarmaydi  
C)  $2\rho_0/\rho_1$  marta ko'tariladi  
D)  $2\rho_0/\rho_1$  marta pasayadi

74. Ikki nuqtaviy zaryaddan birini 9 marta kamaytirganda ular orasidagi o'zaro ta'sir kuchi o'zgarmay qolishi uchun zaryadlar orasidagi masofani qanday o'zgartirish kerak?

- A)  $\sqrt{3}\sqrt{3}$  kamaytirish kerak  
B) 9 marta kamaytirish kerak  
C) 3 marta kamaytirish kerak  
D) 3 marta uzaytirish kerak

75. Kondensator 700 V kuchlanishga mo'ljallangan. Shu kondensatorni ta'sir etuvchi qiymati qanday bo'lgan o'zgaruvchan kuchlanish tarmog'iga ulash mumkin (V)?

- A) 980 B) 490 C) 500 D) 700

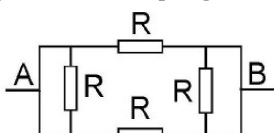
76. Reaktiv samolyot 20 s davomida tezligini 360 dan 900 km/h gacha oshirdi. U qanday tezlanish ( $m/s^2$ ) bilan harakatlangan?

- A) 15 B) 10 C) 7,5 D) 5

77. Bir-biriga qarab harakat qilayotgan ikki atomning tezliklari tinch turgan kuzatuvchiga nisbatan 0,8 c ga teng. Atomlarning nisbiy tezligining modulini toping.

- A) 0,8 c B) 0,98 c C) 0,95 c D) 1,6 c

78. Chizmadagi zanjirning A va B nuqtalari orasidagi umumiy qarshilikni aniqlang.



- A) R B) 4R C) R/2 D) 2R

79. Davri 0,02 mm bo'lgan difraksion panjarada hosil bo'lgan difraksion manzaryadagi markaziy va birinchi maksimumlar orasidagi masofa 3 sm. Panjaradan ekrangacha bo'lgan masofa 1 m bo'lsa, yorug'likning to'lqin uzunligi (nm) nimaga teng?

- A) 800 B) 400 C) 600 D) 200

80. Tomonlari a bo'lgan kvadratning uchlariga manfiy bir xil q zaryadlar joylashtirilgan. Kvadrat markazida elektr maydon kuchlanganligi nimaga teng?

- A)  $\frac{\sqrt{2}kq}{a}$  B) 0 C)  $\frac{4kq}{a^2}$  D)  $\frac{kq}{a}$

81. Linza yordamida undan 60 sm masofada turgan buyumning 2 marta kichiklashgan mavhum tasviri hosil qilindi. Bu linzaning optik kuchini aniqlang (D).

- A) -3,3 B) -1,3 C) -1,7 D) -2,5

82. Boshlang'ich tezliksiz erkin tushayotgan jism oxirgi 3 s da 165 m masofani bosib o'tgan bo'lsa, u qanday balandlikdan (m) tushmoqda?

- A) 245 B) 180 C) 215 D) 320

83. Barcha to'g'ri tasdiqlarni ko'rsating.

1) atomning deyarli barcha massasi uning yadrosida mujassamlashgan;

2) atomning deyarli barcha massasi uning elektron qobig'ida mujassamlashgan;

3) atom massasi uning yadrosi va elektron qobig'i orasida taxminan teng bo'linadi;

4) atomning o'lchamlari uning elektron qobig'i o'lchamlaridan ko'p marta katta;

5) atomning o'lchamlari uning elektron qobig'i o'lchamlaridan ko'p marta kichik;

6) atomning o'lchamlari - bu uning elektron qobig'i o'lchamlarining o'zidir.

- A) 3 va 5 B) 1 va 4 C) 2 va 4 D) 1 va 6

84. Mexanik ishning birligini XBS ning asosiy birliklari orqali ifodalang.

- A)  $N \cdot m$  B)  $\frac{kg \cdot m^2}{s^2}$  C)  $\frac{K}{kg \cdot s^2}$  D)  $\frac{kg^2 \cdot s}{m^2}$

85. Kerosinning sirt taranglik koeffitsiyenti 24 mN/m ga teng. Uchining diametri 2 mm bo'lgan tomizg'ichdan tomizilgan 50 ta kerosin tomchisining massasi qanday (mg)?  $g = 10$  m/s<sup>2</sup>.

- A) 377 B) 754 C) 1510 D) 3020

86. Molekulalarni xarakterlovchi qaysi kattaliklarga ideal gaz bosimi bog'liq bo'ladi?

- A) molekulalar orasidagi tortishish kuchiga  
B) molekulalarning kinetik energiyasiga  
C) molekulalar orasidagi itarishish kuchiga  
D) molekulalarning o'zaro ta'sir potensial energiyasiga

87. 10°zgarimas temperaturada to'yingan bug'ning bosimi . . .

- A) hajmga to'g'ri proporsional  
B) hajm kvadratiga to'g'ri proporsional  
C) hajmga bog'liq bo'lmaydi  
D) hajmga teskari proporsional

88. Magnit maydon induksiya chiziqlariga perpendikular holda 1 km/s tezlik bilan harakatlanayotgan 0,4 Kl zaryadli zarraga 4 N teng bo'lgan Lorens kuchi ta'sir qiladi. Magnit maydon induksiyasini toping.

- A) 1,6 Tl B) 10 mTl C) 10 Tl D) 1,6 mTl

89. Ichida bo'shlig'i bo'lgan zaryadlanmagan metall sharning

markaziga  $+q$  zaryad joylashtirilgan. Shar ichidagi umumiy zaryad nimaga teng?

A)  $+2q$  B)  $0$  C)  $+q$  D)  $-q$

90. Gazga  $200 \text{ J}$  issiqlik miqdori berildi va tashqi kuchlar gaz ustida  $300 \text{ J}$  ish bajardilar. Bunda gazning ichki energiyasi qanchaga (J) o'zgargan?

A)  $-500$  B)  $500$  C)  $200$  D)  $300$