

CONCURS ADMITERE 2014

SUBIECTELE PROBELOR ȘI BAREMELE DE CORECTARE ȘI NOTARE

PROFILUL MAȘTRI MILITARI

SUBIECTE TEST GRILĂ LA LIMBA ENGLEZĂ VARIANTA II

PARTEA I: CITIT

Nelson Mandela became the first black president of South Africa in 1994, serving until 1999. A symbol of global peacemaking, he won the Nobel Peace Prize in 1993.

Nelson Mandela was born on July 18, 1918, in Mveso, South Africa. Becoming actively involved in the anti-apartheid movement in his 20s, Mandela joined the African National Congress in 1942. For 20 years, he directed a campaign of peaceful, nonviolent defiance against the South African government and its racist policies. In 1993, Mandela and South African President F.W. de Klerk were jointly awarded the Nobel Peace Prize for their efforts to dismantle the country's apartheid system. In 1994, Mandela was inaugurated as South Africa's first black president. In 2009, [Mandela's birthday](#) (July 18) was declared "Mandela Day" to promote global peace and celebrate the South African leader's legacy. Mandela died at his home in Johannesburg on December 5, 2013, at age 95.

Only hours after Nelson Mandela's death was announced on December 5, 2013, citizens of South Africa flocked to his home to pay tribute to the icon.

1. What country was Nelson Mandela born in?
 - a) Netherlands
 - b) South Africa
 - c) Spain
 - d) Japan
2. When was Mandela elected for President?
 - a) 1994
 - b) 1999
 - c) 1993
 - d) 2013.
3. What did Mandela join in 1942?
 - a) Mandela Day
 - b) Nobel Peace Prize
 - c) the African National Congress
 - d) South Africa

4. How long did he direct a campaign of peaceful, nonviolent defiance against the South African government and its racist policies?
 - a) for ten years
 - b) for twenty years
 - c) for fifty years
 - d) for two weeks

5. Where did Mandela die?
 - a) in war
 - b) at home
 - c) racist policies
 - d) in apartheid detention

6. How old was Mandela when he died?
 - a) 20
 - b) 95
 - c) 18
 - d) 40.

7. What was he awarded in 1993?
 - a) Johannesburg
 - b) the African National Congress
 - c) F.W. de Klerk
 - d) the Nobel Peace Prize

8. What day is being celebrated as “Mandela Day?”
 - a) December 5
 - b) July 18
 - c) in 1993
 - d) in 1999

9. When did Mandela step down from presidency?
 - a) 1999
 - b) 1993
 - c) 1994
 - d) 2013.

The UEFA Champions League, known simply as the Champions League, is an annual continental club [football](#) competition organised by the Union of European Football Associations ([UEFA](#)) since 1992. It replaced the European Champion Clubs' Cup, or simply European Cup, which had run since 1955, adding a group stage to the competition and allowing multiple entrants from certain countries. It is one of the most prestigious tournaments in the world and the most prestigious club competition in European football. The [final of the 2012–13 tournament](#) was the most watched UEFA Champions League final to date, as well as the most watched annual sporting event worldwide in 2013, drawing 360 million television viewers.

10. Which final had the largest number of viewers?
 - a) the European cup
 - b) the European Champion Clubs' Cup
 - c) the [final of the 2012–13 tournament](#)
 - d) the Bundesliga

11. What was the previous name that the UEFA Champions League had?
- a) the European Champion Clubs' Cup
 - b) the World Cup Final Tournament
 - c) the Union of European Football
 - d) the European football
12. How many viewers did the 2013 Champions League final attract?
- a) 10 million
 - b) 20 million
 - c) 100 million
 - d) 360 million.
13. How many times a year does the Champions League final occur?
- a) twice
 - b) once
 - c) four times
 - d) 1992.
14. When did the European Cup begin?
- a) in 2012
 - b) in 1992
 - c) in 1955
 - d) in 1990
15. What does UEFA stand for?
- a) European Cup
 - b) The European Champion Clubs' Cup
 - c) Final Tournament
 - d) Union Of European Football Associations

PARTEA A II – A GRAMATICĂ ȘI VOCABULAR

16. Good advice...good for me.
- a) has
 - b) are
 - c) have
 - d) is
17. Time.....money.
- a) are
 - b) is
 - c) have
 - d) can
18. The baby.....all the milk yesterday
- a) drinks
 - b) drink
 - c) drinking
 - d) drank
19. If I could, I.....help you.
- a) will
 - b) would
 - c) am
 - d) is

20.were forced to work in the Middle Ages.

- a) Child
- b) Childrens
- c) Children
- d) Childs

21. This bed is.....than the other one.

- a) softer
- b) more soft
- c) soft
- d) softest

22. As a soldier, you must wear.....uniform.

- a) an
- b) a
- c) two
- d) many

23. Soldiers.....obey rules?

- a) can
- b) may
- c) must
- d) might

24. It is.....rain, because it is cloudy outside.

- a) can
- b) will
- c) shall
- d) going to

25. I did not see John.....

- a) either
- b) neither
- c) all
- d) ago

26. MP.....for Military Police.

- a) means
- b) represents
- c) is
- d) stands

27. Do you know where Mary.....

- a) lives
- b) has been being
- c) live
- d) living

28. What is.....name?

- a) your's
- b) you
- c) yours
- d) your

29. It is a quarter to five. It is.....
- a) 16.45
 - b) 16.15
 - c) 17.15
 - d) 17.45
30. If today is Wednesday, the day before yesterday was.....
- a) yesterday
 - b) Sunday
 - c) Friday
 - d) Monday
31. My sister works in a hospital. She is a.....
- a) nurse
 - b) soldier
 - c) wall
 - d) flag
32.a photo of me and my friends, please.
- a) Do
 - b) Make
 - c) Bake
 - d) Take
33. I need a.....of chocolate
- a) any
 - b) loaf
 - c) some
 - d) bar
34. John has not eaten for two days. He must be.....
- a) hungry
 - b) thirsty
 - c) tired
 - d) funny
35. Which is the seventh month of the year?
- a) July
 - b) May
 - c) Summer
 - d) October

PARTEA A III – A SCRIS

36. How do you begin a formal letter?
- a) Dear Dan
 - b) Dear sir
 - c) Yours
 - d) Hello

37. Which is the correct order?
- a) I need coffee black now right
 - b) Black coffee I need now right
 - c) I black coffee need right now
 - d) I need black coffee right now
38. Choose the best way to end a formal letter:
- a) Dear madam
 - b) Be careful
 - c) Beware
 - d) Faithfully yours
39. How do you begin an informal letter?
- a) Dear friend
 - b) Dear Mr President
 - c) Dear Sir
 - d) Good bye
40. Which is the correct order?
- a) Movie good Susan is watching
 - b) Susan is watching a good movie
 - c) Susan good movie watching is
 - d) Susan is watching a movie good
41. How do you finish an informal letter?
- a) Love, Tom
 - b) Dear Tom
 - c) Looking forward to hearing from you soon, sir
 - d) Respectfully yours
42. Which is the most logical sentence?
- a) I hate cars and hope to buy one very soon.
 - b) I like cars and hope to buy one very soon.
 - c) I do not like cars and hope to buy one very soon.
 - d) I don't enjoy cars and hope to buy one very soon.
43. Which is the most suitable way to begin a letter of application?
- a) Please give me your job
 - b) I want that job
 - c) This job is already mine
 - d) I would like to apply for the position of....
44. When talking to your boss, you should use.....
- a) Formal language
 - b) Informal language
 - c) A dictionary
 - d) The Internet
45. How do you make an informal invitation?
- a) Sir, please follow me to the movies
 - b) Will you please accompany me to the movies?
 - c) Let's go to the movies
 - d) Dear sirs, join me to the movies

Punctaj acordat: Câte 0,2 puncte pentru fiecare răspuns corect (0,2 puncte x 45 întrebări = 9 puncte).
Nota se calculează adăugând un punct din oficiu la punctajul obținut.

**GRILA DE CORECTARE LIMBA ENGLEZĂ
VARIANTA II**

1.	b	11.	a	21.	a	31.	a	41.	a
2.	a	12.	d	22.	b	32.	d	42.	b
3.	c	13.	b	23.	c	33.	d	43.	d
4.	b	14.	c	24.	d	34.	a	44.	a
5.	b	15.	d	25.	a	35.	a	45.	c
6.	b	16.	d	26.	d	36.	b		
7.	d	17.	b	27.	a	37.	d		
8.	b	18.	d	28.	d	38.	d		
9.	a	19.	b	29.	a	39.	a		
10.	c	20.	c	30.	d	40.	b		

**TEST GRILĂ DE VERIFICARE A CUNOȘTINTELOR
LA MATEMATICĂ ȘI FIZICĂ
VARIANTA NR. 1**

1. Soluția inecuației $\frac{x}{x+1} \geq 3$

a) $x \in (-10, 0]$

b) $x \in \left(-\infty, \frac{-3}{2}\right)$

c) $x \in \left[\frac{-3}{2}, -1\right)$

d) $x \in (10, +\infty)$

2. Pentru ecuația $x^2 + x - 7 = 0$, expresia $E = \frac{1}{x_1} + \frac{1}{x_2}$ are valoarea:

a) $E = -\frac{3}{7}$

b) $E = -\frac{1}{7}$

c) $E = \frac{1}{7}$

d) $E = \frac{5}{7}$

3. Distanța de la punctul $M(2, -1)$ la dreapta de ecuație $d: -3x + 2 = 0$ este:

a) $D = \frac{4}{3}$

b) $D = \frac{1}{3}$

c) $D = -\frac{4}{3}$

d) $D = \frac{7}{3}$

4. Valoarea expresiei $E(x) = 4 \cos\left(\frac{\pi}{2} - x\right) \sin\left(\frac{\pi}{2} - x\right)$ pentru $x = \frac{\pi}{4}$ este:

a) $E = 4\sqrt{2}$

b) $E = \sqrt{2}$

c) $E = 0$

d) $E = 2$

5. Produsul soluțiilor ecuației dată de relația $A_{x-3}^2 - 9 = 0$ are valoarea:

a) $P = 3$

b) $P = 7$

c) $P = 5$

d) $P = 9$

6. Soluția ecuației exponențiale $2^{2x} - 2^{x-\frac{1}{2}} = 2^{x+\frac{1}{2}} - 2^{2x-1}$ este:

a) $x = -\frac{1}{2}$

b) $x = \frac{1}{2}$

c) $x = -\frac{3}{2}$

d) $x = -\frac{5}{2}$

7. Se dă o progresie aritmetică cu termenii $a_1 = 3$ și $a_3 = 7$. Termenul a_{10} are valoarea:

a) $a_{10} = 32$

b) $a_{10} = 16$

c) $a_{10} = 24$

d) $a_{10} = 21$

8. Dacă A, B sunt matrici aparținând mulțimii matricilor de ordin 2 cu termeni reali

$A = \begin{pmatrix} 1 & 1 \\ 1 & -1 \end{pmatrix}$ și $B = \begin{pmatrix} 1 & 2 \\ 1 & 0 \end{pmatrix}$ produsul $B \cdot A$ are valoarea

a) $\begin{pmatrix} 4 & -1 \\ 2 & 1 \end{pmatrix}$

b) $\begin{pmatrix} 1 & -1 \\ 1 & 3 \end{pmatrix}$

c) $\begin{pmatrix} 2 & 1 \\ 0 & -1 \end{pmatrix}$

d) $\begin{pmatrix} 3 & -1 \\ 1 & 1 \end{pmatrix}$

9. Valoarea determinantului atașat matricii $A = \begin{pmatrix} 2 & -4 & 6 \\ 3 & 0 & 27 \\ 0 & 0 & 5 \end{pmatrix}$ este:

a) $\det A = 72$

b) $\det A = 64$

c) $\det A = 60$

d) $\det A = 56$

10. Un corp, pornind din repaus, se mișcă rectiliniu uniform accelerat. În secunda $k = 3$ parcurge distanța $d = 5$ cm. Viteza v la momentul $\tau = 12$ s este:

- a) $v = 30$ m/s b) $v = 12$ m/s
c) $v = 24$ m/s d) $v = 26$ m/s

11. O forță de 10 N este aplicată unui corp având masa de 5 kg. Accelerația a imprimată corpului este:

- a) $a = 2$ m/s² b) $a = 8,2$ m/s²
c) $a = 5$ m/s² d) $a = 6$ m/s²

12. Fie sistemul din figură. Se dau masa M a celor două corpuri identice și unghiurile α_1 și α_2 ale planului dublu înclinat. Coeficientul de frecare corpuri-plane este μ . Pentru aplicația: $M = 2$ kg; $\alpha_1 = 30^\circ$; $\alpha_2 = 45^\circ$ și $\mu = 0,1$, accelerația a are valoarea:

α_2

α_1

- a) $a = 0,48$ m/s² b) $a = 0,12$ m/s²
c) $a = 0,06$ m/s² d) $a = 0,24$ m/s²

13. O forță orizontală $F = 10$ N imprimă unui corp de masă $m = 4$ kg, așezat pe un plan orizontal o accelerație $a = 2$ m/s², conform figurii (se va lua $g = 10$ m/s²). Coeficientul de frecare are valoarea:

- a) $\mu = 0,05$ b) $\mu = 0,15$
c) $\mu = 0,25$ d) $\mu = 0,01$

14. Lucrul mecanic necesar pentru a ridica un corp de masă $m = 200 \text{ g}$ la înălțimea $h = 80 \text{ cm}$ este:

- a) $L = 1,6 \text{ J}$ b) $L = 4,2 \text{ J}$
c) $L = 1 \text{ J}$ d) $L = 0,1 \text{ J}$

15. Printr-o spiră circulară de diametru $D = 1 \text{ m}$ trece curentul dat de o sursă cu t.e.m. $E = 1,5 \text{ V}$ și rezistența internă $0,032 \Omega$. Sârma are diametrul secțiunii transversale $d = 1 \text{ mm}$ și rezistivitatea $\rho = 1,7 \cdot 10^{-8} \Omega \cdot \text{m}$. Intensitatea I a curentului prin spiră este:

- a) $I = 18 \text{ A}$ b) $I = 15 \text{ A}$
c) $I = 30 \text{ A}$ d) $I = 45 \text{ A}$

16. Aflați rezistența echivalentă R a dipolului AB din figură. Se dau $R_1 = 1\Omega$, $R_2 = 4\Omega$, $R_3 = 8\Omega$, $R_4 = 4\Omega$.

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- a) $R_e = 5 \Omega$ b) $R_e = 10 \Omega$
c) $R_e = 12 \Omega$ d) $R_e = 8 \Omega$

17. În expresia tensiunii electromotoare $E = \frac{L}{q}$ mărimea L este:

- a) Căldura degajată la încărcarea sursei de tensiune b) Lungimea parcursă de sarcina q la aplicarea tensiunii E
c) Sarcina necesară pentru încărcarea sursei de tensiune d) Lucrul mecanic efectuat de sursă pentru deplasarea sarcinii q pe întreg circuitul

18. Pentru confecționarea rezistorului unei plite electrice de putere $P = 600 \text{ W}$, ce funcționează la tensiunea $U = 120 \text{ V}$, se folosește sârmă de crom-nichel de diametru $d = 0,75 \text{ mm}$ și coeficientul de rezisivitate $\rho = 100 \cdot 10^{-8} \Omega \cdot \text{m}$. Lungimea L a sârmei necesare este:

- a) $L = 8,34 \text{ m}$ b) $L = 6,55 \text{ m}$
c) $L = 10,59 \text{ m}$ d) $L = 12,23 \text{ m}$

NOTĂ:

Punctaj acordat: Câte 0,5 puncte pentru fiecare răspuns corect (0,5 puncte x 18 întrebări = 9 puncte).

Nota se calculează adăugând un punct din oficiu la punctajul obținut.

GRILA DE CORECTARE
TEST GRILĂ DE VERIFICARE A CUNOȘTIȚELOR LA MATEMATICĂ ȘI
FIZICĂ
VARIANTA NR. 1

1	c	10	c
2	c	11	a
3	a	12	d
4	d	13	a
5	a	14	a
6	b	15	b
7	d	16	a
8	d	17	d
9	c	18	c