LUCRARE SCRISĂ LA LIMBA STRĂINĂ – ENGLEZĂ
VARIANTA I

A. Partea I: CITIT
(Citirea cu atenție)

Choose the correct answer a, b, c, or d.

Dogs can be trained to provide many kinds of tasks. They are called service dogs and provide special help to people who are challenged with disabilities. Each dog is trained individually to perform the tasks that its future owner will need help with.

Not all dogs can become service dogs because the training isn't easy. First, dog trainers observe the dog carefully during the start of its training. They judge its behavior and performance, and look for signs that show it has the ability to become a service dog. It must show that it is intelligent, alert, obedient, and possesses other appropriate traits.

At the end of a year, a trainer decides whether or not the dog is suitable for final training. If it is judged capable, the dog starts a new stage of instruction: it begins to train with its future owner. This instruction is critical because the owner will demand a lot from the dog. The dog must be able to meet those demands successfully since the owner will depend on it so much.

1. The article informs us that …

a	dogs that are trained individually to provide help to their assistants.
b	service dogs are supposed to assist people with special needs.
c	service dogs are challenged with disabilities during their training.
d	dogs will be provided special help from their future owners.

2. Based on the text, a dog can become a service dog if …

a	it displays a set of good traits and performs well for the purposes of its training.
b	its physical traits correspond to its future owner's.
c	its performance during training is appropriate to its owner's.
d	it possesses good looks and an ability to show off during the start of its training.

3. The text informs us that ….

a	the most critical instruction of a service dog begins with a new suitable trainer.
b	whether or not a dog is suitable to become a service dog depends on the trainer.
c	the most relevant stage of a dog's training is its matching with its future owner.
d	the most relevant thing about a dog's training is that it demands a lot from its owner.

Military and local civilian police forces both have the responsibility to protect and serve their communities. However, they differ in two major ways. The first difference is where they have authority to make arrests. Military police have authority to arrest military personnel only on US military bases in the United States or overseas. On the other hand, local police forces have authority to arrest anyone within the limits of their assigned city, county, or state.

Another difference between military police and local law enforcement is the set of laws which they are responsible for enforcing. The former group enforces the laws contained in the Uniform Code of Military Justice (UCMJ), while the latter force follows city, county, and state laws.

Military police and local police forces have major differences, yet both have the responsibility of protecting and serving the United States and its citizens.

4. We learn from this passage that …

a	Local police can arrest anyone who breaks the law in the United States or overseas.
b	Military police cannot arrest anyone who is outside their county's authority.
c	Local police usually have authority over bases within the limits of several states.
d	Military police cannot arrest anyone who serves outside the US military bases.

5. Based on the text we find out that …

a	Military police cannot enforce laws outside the regulations of a US city.
b	Both military and local police enforce the laws that protect responsible citizens.
c	Local police enforces laws to protect US citizens from people serving in the military.
d	Military police enforces laws based on military justice.

(*Citirea selectivă*)

On 08-13-09 at 23:30, Oakridge officers were called to Quick Fill Gas Station because approximately $1000 had been stolen. A man entered the gas station, took the money from the register and then ran out the store entrance. The station owner, who is a former police officer, followed after him, trying to catch up with him, but the suspect jumped into a black four-door vehicle and drove away recklessly, almost hitting a pedestrian. The suspect is described as a white male, mid-20s, wearing glasses with thick lenses, a plain white T-shirt, and blue jeans. An unusual physical feature is a huge tattoo of a snake covering his entire right arm. The cashier said the suspect looked familiar, and that perhaps he had run across the suspect earlier that day. The cashier could smell alcohol on the suspect's breath and suggested his actions were possibly due to heavy drinking.

6. The man stole the money from …

a	the cash-desk.
b	a black car.
c	a customer.
d	a police officer.

7. While getting away in his car, the robber was about to …

a	hit another vehicle.
b	run into a walker.
c	meet a police officer.
d	bump into the store.

8. The suspect was described as a man ….

a	no older than 20 years old.
b	much younger than 25 years old.
c	aged about 25 years old.
d	aged between 19 and 20 years old.

9. The station owner remembered that the suspect had …

a	a plane drawn on his T-shirt.
b	a serpent tattoo on his arm.
c	sunglasses with thin lenses.
d	plain white jeans.

10. The cashier believed he … the suspect earlier that day.

a	had accidentally met
b	had looked at
c	had probably run over
d	had smelled

Mohandas Mahatma Gandhi was an important leader of India during the late 1800s and early 1900s. He strongly believed in nonviolence, which is a way to achieve political and social goals without using weapons or force.

Gandhi took a position as a lawyer in South Africa in 1893, and he worked to defend the rights of the Indian community there. However, he chose not to settle in South Africa, and he returned to India in 1915. There he organized workers and helped them to fight against the high taxes that were being collected by the foreign power which was in charge of the government. He showed people how to avoid using violence while they gradually took over government responsibilities for themselves.

Gandhi's life was far from easy. He spent many years in prison, and there were six attempts on his life. Nevertheless, he continually engaged in working toward peace until his last day. His strong beliefs led India to independence, and he became an example for others around the world who wanted to obtain civil rights and freedom.

11. Based on the text, Mahatma Gandhi's employment in Africa was related to…

a	politics
b	defense
c	justice
d	sociology

12. We are told that Gandhi had no intention to … in South Africa.

a	lead
b	work
c	fight
d	remain

13. Taxes were collected from India by a …

a	non-native government.
b	South-African ruling system.
c	leader of the country.
d	a defender of civil rights.

14. Gandhi's life was under threat …

a	at peace time.
b	because of workers.
c	on his last day.
d	for 6 times

15. Gandhi's ideas resulted in …

a	the world's freedom.
b	peace in the country.
c	India's autonomy.
d	setting examples of civil rights.

B. Partea a II – a: ELEMENTE DE GRAMATICĂ ŞI VOCABULAR
(Gramatică)

Choose one correct answer a, b, c or d:

16. … any of your classmates attend the air show, in 2013?

a	Had
b	Did
c	Has
d	Does

17. I don't believe John won the competition. He used to be one of the … runners in his class!

a	slowly
b	slower
c	slowest
d	slowlier

18. At this moment Miranda …. Japanese for eleven years.

a	had been studying
b	has been studying
c	is studying
d	has been studied

19. I would not take any chances to oppose him if I … you.

a	were
b	had been
c	would be
d	have been

20. I admire him a lot! His … in the field of astronomy is impressive!

a	acknowledged
b	knowledges
c	acknowledge
d	knowledge

21. If only it … tomorrow! We would go for a picnic in the forest!

a	didn't rain
b	hasn't rained
c	doesn't rain
d	won't rain

22. The commander explained to the cadets what … during the field training exercise.

a	is going to happen
b	is happening
c	will happen
d	was going to happen

23. He has a fast car but he enjoys driving it too …

a	faster
b	fastly
c	fast
d	fastlier

24. The Professor does not really know if he … his project on time.

a	would finish
b	will finish
c	is finished
d	will be finished

25. Which city is … from our home? Bucharest, or Cluj-Napoca?

a	the farthest
b	farther
c	further
d	the furthest

(Vocabular)

26. What an inefficient worker! Let's … a decision to reduce his salary!

a	do
b	engage
c	make
d	execute

27. Everyone felt … when Margaret proved to be lacking any common sense.

a	annoyed
b	excited
c	annoying
d	exciting

28. The topic of religion should not be brought up! It is far too … for them!

a	sensitively
b	sensibly
c	sensible
d	sensitive

29. John has just phoned. He will be late because he … his plane.

a	lost
b	cancelled
c	missed
d	delayed

30. He keeps … us fabulous stories about his sea adventures.

a	telling
b	saying
c	sharing
d	speaking

31. My brother's shin is broken. Where does he most probably feel the pain?

a	in his head
b	in his leg
c	in his arm
d	in his chest

32. The President of that company has an exaggerated self-esteem. He … .

a	expects to be estimated by others.
b	trusts others better than himself.
c	expects others to comfort him.
d	trusts himself a lot.

33. I can't understand the English they are speaking. They must be …

a	outsiders.
b	strangers.
c	no-native.
d	non-native.

34. Who is going to … the company after the big boss dies?

a	take in
b	take over
c	take out
d	take off

35. That old lady over there is choking! We should … her right now!

a	encourage
b	applaud
c	help
d	photograph

B.   Partea a III-a: SCRIS

36. Which is the correct word order?

a	She asked me how long I had been working in my present job.
b	She asked me how long had I been working in my present job.
c	She asked me how long I had in my present job been working.
d	She asked me how long I had been in my present job working.

37. What text type is it?

I lay in bed warm and comfortable listening to the rain beating against the windows. Its strange, tireless music seemed to pass through the glass.

a	report
b	short story
c	article
d	formal note

38. In what type of letter would you find the following sentence?

As I won`t be able to meet you, I am sending you a present now, by separate post. Please accept them with my love and best wishes.

a	of invitation
b	of complaint
c	of apology
d	of request

39. *I am writing to you at the suggestion of a friend who stayed at your hotel and warmly recommended it. Would you please let me know whether you have a room available for this period?* This line appears in a letter…

a	of requesting information
b	of giving information
c	of giving advice
d	of requesting advice

40. Which sentence is correct?

a	I could growed by my own vegetables.
b	I could grown my own vegetables.
c	I could grow mine own vegetables.
d	I could grow my own vegetables.

41. What is the proper way to start a formal letter?

a	What a surprise to get a letter from you…
b	I'm sorry it has taken me so long to reply….
c	I read you advertisement in yesterday's issue of the "Daily News"…
d	Sorry to hear from you…

42. Choose the most appropriate line to make a formal complaint.

a	The product you sent is damaged. Send me the cash immediately!
b	The product you sent is not what I ordered. Therefore, I request its replacement.
c	The product you sent is inexpensive. Can I keep it, please?
d	The product you sent is a piece of nonsense. I want my money back!

43. Choose the most appropriate line to end an informal letter.

a	With gratitude,
b	With respect,
c	Yours sincerely,
d	Lots of hugs,

44. Which is the most appropriate line to begin a letter of application?

a	I would like to apply for a job with your company.
b	My education recommends me. You cannot ignore my resume.
c	My experience in the field makes me the best of all applicants.
d	I am writing this letter hoping that you will choose me.

45. Which is the correct narration?

a	Mom told her children that they will travel by train.
b	Mom told her children that they would travel by train.
c	Mom told her children that they have travelled by train.
d	Mom told her children that they are travelling by train.

BAREM DE EVALUARE ŞI APRECIERE A TESTULUI GRILĂ LA ENGLEZĂ
VARIANTA I

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

LUCRARE SCRISĂ LA MATEMATICĂ
VARIANTA A

1. Fie ecuația $x^2 + mx + m + 1 = 0$, $m \in \mathbf{R}$. Mulțimea valorilor lui m pentru care ecuația are rădăcini reale x_1, x_2 cu $x_1 < 1 < x_2$, este:

    a) $m \in (-\infty; -1)$; **b)** $m \in \{1; 2\}$; **c)** $m \in (1; +\infty)$; **d)** $m = 2$; **e)** $m = 0$.

2. Fie sistemul
    $$\begin{cases} x + y = a + 1 \\ x^2 + 2ay - 2a^2 + a - 2 = 0 \end{cases}$$
    Să se determine $a \in \mathbf{R}$ astfel încât sistemul să admită soluție unică.

    a) $a \in [0; 1]$; **b)** $a \in \{1; 2\}$; **c)** $a \in (-\infty; 1] \cup [3; +\infty)$; **d)** $a \in \Phi$; **e)** $a \in [1; 2]$.

3. Se consideră punctele $A(x; 1)$, $B(-1; y)$ și $C(1; 3)$. Să se determine x și y în cazul în care $\vec{AB} = 3\vec{BC}$.

    a) $x = -7, y = \dfrac{3}{2}$; **b)** $x = 2, y = \dfrac{3}{2}$; **c)** $x = 1, y = 1$; **d)** $x = 3, y = 4$; **e)** $x = -7, y = \dfrac{5}{2}$.

4. Calculați $tg\alpha$ dacă $\sin^2\alpha - 2\cos^2\alpha = \sin\alpha\cos\alpha$, unde $\alpha \in [5; 6]$.

    a) $tg\alpha = 1$; **b)** $tg\alpha = 2$; **c)** $tg\alpha \in \{-1; 2\}$; **d)** $tg\alpha = -1$; **e)** $tg\alpha = -2$.

5. Progresia aritmetică $(a_n)_{n \geq 1}$ este caracterizată de faptul că $S_m = S_n, m \neq n$. Atunci S_{m+n} este:

    a) 7; **b)** 1; **c)** 0; **d)** 4; **e)** 3.

6. Modulul soluțiilor ecuației cu rădăcini complexe $|z| + z - \bar{z} = 10 - 12i$ este:

    a) 6; **b)** 10; **c)** 5; **d)** 8; **e)** **9**.

7. Dacă $\log_2 5 = a$ și $\log_2 3 = b$ atunci $\log_8 75$ este:

    a) $\dfrac{2a - b}{3}$; **b)** $\dfrac{a + b}{2}$; **c)** $\dfrac{2a + b}{3}$; **d)** $\dfrac{a - b}{3}$; **e)** $\dfrac{2a + b}{5}$.

8. Se consideră un dreptunghi având două laturi de ecuații $3x - 2y - 5 = 0$ și $2x + 3y + 7 = 0$ și un vârf $A(-2; 1)$. Atunci aria dreptunghiului este:

    a) 15; **b)** 7; **c)** 10; **d)** 6; **e)** 4.

9. Laturile (AB), (BC) și (AC) ale triunghiului ABC sunt date prin ecuațiile $x + 21y - 22 = 0$, $5x - 12y + 7 = 0$ și $4x - 33y + 146 = 0$. Distanța de la centrul de greutate al triunghiului ABC la latura (BC) este:

    a) 1; **b)** 4; **c)** 5; **d)** 2; **e)** 3.

10. Fie matricea $A = \begin{pmatrix} 1 & 0 & 1 \\ 0 & 0 & 0 \\ 1 & 0 & 1 \end{pmatrix}$. Valoarea lui $n \in \mathbf{N}^*$ pentru care avem egalitatea:
    $$A^n + A^{n-1} = \begin{pmatrix} 48 & 0 & 48 \\ 0 & 0 & 0 \\ 48 & 0 & 48 \end{pmatrix} \text{ este:}$$

    a) $n = 6$; **b)** $n = 4$; **c)** $n = 5$; **d)** $n = 10$; **e)** $n = 12$.

11. Să se determine $\alpha, \beta \in \mathbf{R}$ astfel încât sistemul $\begin{cases} \alpha x + y + z = 4 \\ x + \beta y + z = 3 \\ x + 2\beta y + z = 4 \end{cases}$ să fie simplu nedeterminat.

    a) $\alpha = 1, \beta = \dfrac{1}{3}$; **b)** $\alpha = -1, \beta = \dfrac{1}{2}$; **c)** $\alpha = 2, \beta = \dfrac{1}{2}$; **d)** $\alpha = 1, \beta = \dfrac{1}{2}$; **e)** $\alpha = 1, \beta = \dfrac{1}{4}$.

12. Fie funcția $f(x) = \dfrac{mx^2 - 1}{(x-1)(x-2)}$, $x \neq 1$, $x \neq 2$, $m \in \mathbf{R}$. Să se determine parametrul m astfel încât funcția f să admită puncte de extrem.

    a) $m \in \left(-\infty; \dfrac{1}{4}\right) \cup (1; +\infty)$; **b)** $m \in \left(-\infty; \dfrac{1}{2}\right) \cup (1; +\infty)$; **c)** $m \in (1; +\infty)$; **d)** $m \in \left(-\infty; \dfrac{1}{4}\right)$; **e)** $m \in \Phi$.

13. Valoarea limitei $\displaystyle\lim_{x \to e} \left(\dfrac{1 + 2^{\ln x}}{3}\right)^{\frac{1}{1 - \ln x}}$ este:

    a) $\ln\left(1 + \sqrt{2}\right)$; **b)** $\dfrac{1}{\sqrt[3]{3}}$; **c)** $\dfrac{1}{\sqrt[3]{4}}$; **d)** $\dfrac{1}{4}$; **e)** $\dfrac{1}{2}$.

14. Valoarea integralei $\displaystyle\int_0^2 \sqrt{x^2 + 4}\, dx$ este:

    a) $\ln\dfrac{2 + \sqrt{2}}{2 - \sqrt{2}} - 2\sqrt{2}$; **b)** $\ln\dfrac{2 + \sqrt{2}}{2 - \sqrt{2}} + 2\sqrt{2}$; **c)** $\ln\dfrac{2 + \sqrt{2}}{2 - \sqrt{2}}$; **d)** $\ln\dfrac{2 - \sqrt{2}}{2 + \sqrt{2}}$;

    e) $\ln\dfrac{2 - \sqrt{2}}{2 + \sqrt{2}} + 2\sqrt{2}$.

15. Aria zonei cuprinsă între graficele funcțiilor $f, g : [0, +\infty) \to \mathbf{R}$, $f(x) = \dfrac{x^2}{6}$ și $g(x) = \sqrt{6x}$ este:

    a) 1; **b)** 10; **c)** 15; **d)** 18; **e)** 12.

BAREM DE EVALUARE ŞI APRECIERE A TESTULUI GRILĂ LA MATEMATICĂ
VARIANTA I A

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