MARINHA DO BRASIL

DIRETORIA DE ENSINO DA MARINHA

CONCURSO PÚBLICO DE ADMISSÃO À ESCOLA NAVAL CPAEN/2019

NÃO ESTÁ AUTORIZADA A UTILIZAÇÃO DE MATERIAL EXTRA

1º Dia – Prova de Matemática e Inglês

QUESTÃO 1

Considere que para obter a posição de um navio, navegando em um canal, faz-se o uso de três retas. Essas retas são tomadas sob o olhar de três pontos notáveis e de três marcações angulares feitas por vigias no navio, sempre com o navio em movimento. As interseções dessas retas geram uma região triangular de área X e não acontecem em um único ponto. A região triangular é chamada de triângulo de incerteza e quanto menor o valor de X melhor é a precisão da marcação da posição do navio no canal. Suponha que depois de feitas as marcações as três retas obtidas tenham as equações $r_1: 2x + y - 6 = 0$, $r_2: \left(\frac{1}{2}, 1\right) + t\left(\frac{1}{6}, 1\right), t \in \mathbb{R}$, e $r_3: \begin{cases} x = 6 + 6\lambda \\ y = 2 + 4\lambda \end{cases}, \lambda \in \mathbb{R}$. Sendo assim, assinale a opção que indica a área da região triangular X determinadas por r_1, r_2 e r_3.

(A) 2
(B) 4
(C) 6
(D) 8
(E) 10

QUESTÃO 2

Uma loja de bombons está com o seguinte cartaz de promoção: "compre x bombons e ganhe x % de desconto". A promoção é válida para compras de até 60 bombons, caso em que é concedido o desconto máximo de 60 %. Maria, Flávio, Gisele, Felipe, Evandro e Diego compram $53, 40, 33, 47, 38$ e 57 bombons, respectivamente. Nessas condições, assinale a opção que apresenta o nome das pessoas que poderiam ter comprado mais bombons e pago a mesma quantia inicial.

(A) Diego e Maria.
(B) Gisele e Evandro.
(C) Maria e Gisele.
(D) Diego e Evandro.
(E) Felipe e Flávio.

QUESTÃO 3

Seja f uma função real. Supondo que $\lim_{x \to b} \frac{f(x) - f(b)}{x - b} = M$, calcule $\lim_{p \to 0} \frac{f(b+p) - f(b-p)}{p}$ e assinale a opção correta.

(A) M
(B) $-$M
(C) 2M
(D) $-$2M
(E) 0

QUESTÃO 4

Seja a matriz $M = \begin{bmatrix} 1 & 1 & 1 \\ 1 & 0 & 0 \\ 0 & 1 & 0 \end{bmatrix}$ onde $M^n = M \times M \times \ldots \times M$, com n fatores, x a soma dos elementos da 1ª coluna de M^{12} e y a soma dos elementos da 3ª coluna de M^{12}. Nesse caso, o valor de $x - y$ é:

(A) 504
(B) 927
(C) 778
(D) 1431
(E) 1705

QUESTÃO 5

Suponha que duas aeronaves da Marinha estejam fazendo um voo de modo que suas trajetórias estejam contidas no plano $x'y'$, de um sistema cartesiano ortogonal $x'y'z'$, no instante de tempo t_0. Em um instante t_1, os pilotos precisam alcançar uma certa altura z'_1 e recebem as seguintes determinações:

I- A aeronave A deve fazer seu voo sobre a reta $r: \begin{cases} x' = 1 + t \\ y' = 1 + \frac{1}{2}t \\ z' = 2t \end{cases}$ com $t \in \mathbb{R}$.

II- A aeronave B deve fazer seu voo sobre a reta m que é paralela a r, que está contida no plano $x' - 4y' + z' = 0$ e que dista $\frac{\sqrt{20}}{3}$ do ponto $P(1,0,1)$.

Considerando que r, m e P estão no sistema $x'y'z'$, assinale a opção que apresenta uma possível trajetória da aeronave B a partir de t_1 até alcançar a altura z'_1.

(A) $r: (1, -1, 1) + \lambda\left(1, \frac{1}{2}, 2\right)$ com $\lambda \in \mathbb{R}$

(B) $r: (-1, 0, -1) + \lambda\left(1, \frac{1}{2}, 2\right)$ com $\lambda \in \mathbb{R}$

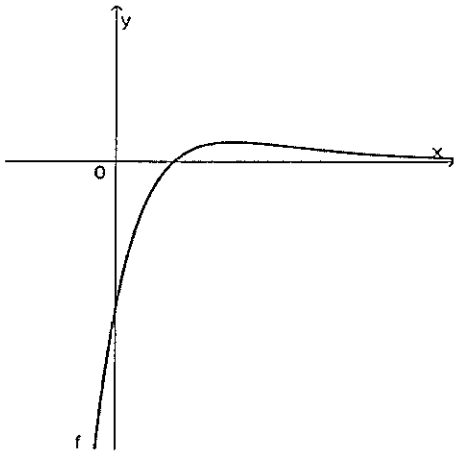
(C) $r: (1, -1, 1) + \lambda(2, 1, 4)$ com $\lambda \in \mathbb{R}$

(D) $r: (-1, 0, 1) + \lambda(2, 1, 4)$ com $\lambda \in \mathbb{R}$

(E) $r: (1, 0, -1) + \lambda(2, 1, 2)$ com $\lambda \in \mathbb{R}$

QUESTÃO 6

Seja a função f definida por $f(x) = 2e^{-x}.(1 - 2e^{-x})$, cujo gráfico está representado a seguir, e seja o número real $\ln a$, tal que $f(\ln a) = 0$.



Tomemos um valor real positivo h, tal que a área compreendida entre o gráfico da função e o eixo das abscissas no intervalo $[\ln(a-h); \ln(a)]$ seja igual à área compreendida entre o gráfico da função e o eixo das abscissas no intervalo $[\ln(a); \ln(a+h)]$. Nesse sentido, pode-se afirmar que:

(A) $0 < h < e^{-1}$
(B) $e^{-1} < h < \ln(2)$
(C) $\ln(2) < h < 1$
(D) $1 < h < e$
(E) h não existe.

QUESTÃO 7

Um raio luminoso parte do ponto $A(-1, 6, 2)$, reflete na superfície refletora do plano $x = -5$, no ponto E, e atinge o ponto B(2,2,4). Indique a somas das coordenadas do ponto E.

(A) 25/11
(B) 5/14
(C) 3/11
(D) 2
(E) 15/2

QUESTÃO 8

O volume de um cubo de aresta $2x$ excede em 27 unidades o volume de um paralelepípedo retângulo com 54 unidades de área da base e altura x. Sendo assim, o valor de x é

(A) $8.\cos(40°)$
(B) $3.\cos(20°)$
(C) $8.\cos(20°)$
(D) $9.\cos(40°)$
(E) $2.\cos(30°)$

QUESTÃO 9

Considere um conjunto de números inteiros $A = \{1,2,3,\cdots,n\}$, com n elementos. Se retirarmos um número do conjunto A, a média aritmética dos elementos restante é 16,4. Sabendo que p é o número que foi retirado, determine $|p - n|$ e assinale a opção correta.

(A) 27
(B) 28
(C) 33
(D) 35
(E) 37

QUESTÃO 10

Seja $VABCD$ uma pirâmide regular cujas faces laterais são triângulos equiláteros de lado 1 e P uma extensão do seguimento VA, de modo que $A \in VP$ e $AP = \frac{1}{2}$. Considerando um plano π determinado por P e os pontos médios dos seguimentos BC e AD, determine a área de intersecção entre a pirâmide e o plano π e assinale a opção correta.

(A) $\frac{16\sqrt{11}}{7}$

(B) $\frac{7\sqrt{11}}{16}$

(C) $\frac{7\sqrt{11}}{64}$

(D) $\frac{64\sqrt{11}}{7}$

(E) $\frac{32\sqrt{11}}{7}$

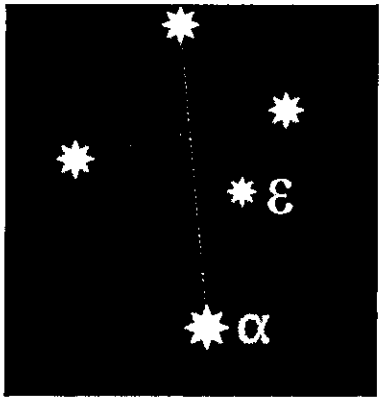
QUESTÃO 11

Seja z um número complexo da forma $z = a + ib$, no qual i é a unidade imaginária. Seja $k \in \mathbb{R}$ de modo que k é o menor limitante superior para $\left|\frac{-1}{z^4+3z^2+2}\right|$, quando $|z| = 2$. Sendo assim, assinale a opção que apresenta o intervalo ao qual k pertença.

(A) $[0,1]$
(B) $[1,\frac{3}{2}]$
(C) $[\frac{1}{2},1]$
(D) $[\frac{3}{2},2]$
(E) $[2,3]$

QUESTÃO 12

O Cruzeiro do Sul é uma das mais importantes constelações para os povos no hemisfério sul. Ela é muito útil na navegação e está presente em nossa Bandeira Nacional, no Brasão Nacional, assim como em símbolos de colégios, agremiações etc. Dentre as cinco principais estrelas há a Alpha Crucis (α), a mais brilhante, e a Epsilon Crucis (ε), a menos brilhante dentre as principais que formam uma cruz, conforme figura abaixo.



Pode-se medir, de forma aproximada, a distância até uma estrela pela equação $M_d = -5 + 5.\log_{10}\frac{D}{3,3}$,tal que M_d é o módulo de distância de uma estrela (uma medida de brilho na Astronomia) e D é a distância, em anos-luz. Considerando $M_d = 5$ para Alpha Crucis e $M_d = 4,2$ para Epsilon Crucis, D_a a distância até Alpha Crucis e D_e a distância até Epsilon Crucis, ambas em anos-luz, pode-se afirmar, de forma aproximada, que:
Dados: $\log_{10} 3 = 0,48$ e $\log_{10} 23 = 1,36$

(A) $D_e > D_a$
(B) $D_a + D_e = 557,7$
(C) $D_a = 330$
(D) $D_e = 69$
(E) $D_a = 100$

QUESTÃO 13

Seja W o conjunto dos números múltiplos de 2 ou P, em que P é um primo ímpar. Sabendo que $\frac{3}{5}$ de W, que são múltiplos de P, são ímpares; $\frac{2}{5}$ de W são ímpares; e 77 elementos de W não são múltiplos de 2P, pode-se afirmar que a quantidade de elemenos de W que são ímpares é um número múltiplo de:

(A) 4
(B) 5
(C) 7
(D) 9
(E) 11

QUESTÃO 14

Seja a curva determinada pelo lugar geométrico dos centros das circunferências no $\mathbb{R}^2$, que tangenciam a reta $x = 2$ e passam pelo ponto $(6,4)$. Sendo assim, a reta tangente a essa curva pelo ponto $(6,8)$ possui equação:

(A) $y - 8 = 0$
(B) $x + y - 6 = 0$
(C) $x + y - 14 = 0$
(D) $x - y + 2 = 0$
(E) $x - y + 4 = 0$

QUESTÃO 15

Três amigos marcam um encontro na frente do estádio Nílton Santos para assistir a uma partida de futebol. Eles combinaram que cada um deverá chegar em um momento escolhido entre 15h00 e 16h00 e que nenhum deles esperará mais de 30 minutos pelos demais, dentro do horário estipulado. Qua é a probabilidade de que os três amigos se encontrem entre 15h00 e 16h00?

(A) 7/16
(B) 5/8
(C) 1/2
(D) 15/32
(E) 31/64

QUESTÃO 16

Um círculo, contido no plano $x - 2y + 4 = 0$, de centro $(4, 4, 4)$ e raio $\sqrt{5}$, é projetado ortogonalmente no plano $y = 0$, formando uma figura plana de área, em unidades de área, igual a:

(A) $2\sqrt{5}\pi$
(B) 4π
(C) 5π
(D) $5\sqrt{2}\pi$
(E) 10π

QUESTÃO 17

Sabendo que f é uma função definida por $f(x) = x^x$ e que D é o domínio de f, é correto afirmar que:

(A) f possui um máximo global em $x = \frac{1}{e^2}$ em D.
(B) f possui um mínimo local em $x = \frac{1}{e^2}$ em D.
(C) f possui um máximo local em $x = \frac{1}{e}$ em D.
(D) f possui um mínimo global em $x = \frac{1}{e}$ em D.
(E) f não possui máximo ou mínimo em D.

QUESTÃO 18

Quantos são os anagramas de MARINHA, em que somente uma vogal apareça em sua posição de origem?

(A) 1512
(B) 1152
(C) 1008
(D) 720
(E) 480

QUESTÃO 19

Sejam $p(x), q(x)$ e $r(x)$ polinômios reais. Considere que $p(x)$ cumpre os seguintes requisitos:

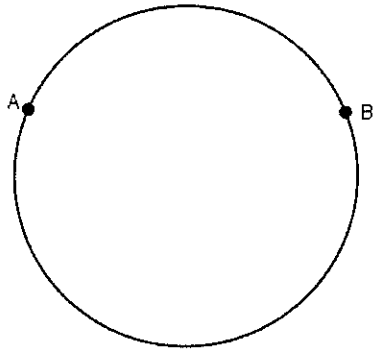
I- O polinômio $q(x) = 3x^3 - 21x + 18$ divide $p(x)$;
II- $p(0) = 162$;
III- 1 é raíz de $p'(x)$;
IV- $p'(0) = -477$;
V- $\frac{p(x)}{r(x)} = q(x)$.

Sabendo que o $\text{gr}(q(x)) > \text{gr}(r(x))$ e $p'(x)$ indica a primeira derivada de $p(x)$, assinale a opção que apresenta o polinômio $r(x)$.

(A) $r(x) = -9x + 9$
(B) $r(x) = 7x^2 - 16x + 9$
(C) $r(x) = -5x^2 + 16x + 9$
(D) $r(x) = 3x^2 + 14x + 9$
(E) $r(x) = -16x + 9$

QUESTÃO 20

Dois amigos se encontram em dois portões de acesso, pontos A e B, de um ginásio com um muro circular de raio 12 metros, conforme figura ilustrativa abaixo.



Aquele que se encontra no portão A caminha, na área externa ao muro, x metros, numa trajetória retilínea, até avistar o ponto B. Sabendo que o comprimento do arco AB é de 3π metros, o menor valor de x, em metros, vale:

(A) $12\sqrt{2} + 12$
(B) $12\sqrt{2} - 12$
(C) $12\sqrt{2}$
(D) $12\sqrt{2 - \sqrt{2}}$
(E) $12\sqrt{2 + \sqrt{2}}$

Based on the text below, answer the six questions that follow it. The paragraphs of the text are numbered.

If children lose contact with nature they won't fight for it

[1] According to recent research, even if the present rate of global decarbonisation were to double, we would still be on course for 6°C of warming by the end of the century. Limiting the rise to 2°C, which is the target of current policies, requires a six-time reduction in carbon intensity.

[2] A new report shows that the UK has lost 20% of its breeding birds since 1966: once common species such as willow tits, lesser spotted woodpeckers and turtle doves have all but collapsed; even house sparrows have fallen by two thirds. Ash dieback is just one of many terrifying plant diseases, mostly spread by trade. They now threaten our oaks, pines and chestnuts.

[3] While the surveys show that the great majority of people would like to see the living planet protected, few are prepared to take action. This, I think, reflects a second environmental crisis: the removal of children from the natural world. The young people we might have expected to lead the defence of nature have less and less to do with it.

[4] We don't have to undervalue the indoor world, which has its own rich ecosystem, to lament children's disconnection from the outdoor world. But the experiences the two spheres offer are entirely different. There is no substitute for what takes place outdoors, mostly because the greatest joys of nature are unplanned. The thought that most of our children will never swim among phosphorescent plankton at night, will never be startled by a salmon leaping, or a dolphin breaching is almost as sad as the thought that their children might not have the opportunity.

[5] The remarkable collapse of children's engagement with nature - which is even faster than the collapse of the natural world - is recorded in Richard Louv's book Last Child in the Woods, and in a report published recently by the National Trust. Since the 1970s the area in which children may roam without supervision has decreased by almost 90%. In one generation the proportion of children regularly playing in wild places in the UK has fallen from more than half to fewer than one in 10. In the US, in just six years (1997-2003) children with particular outdoor hobbies fell by half. Eleven- to 15-year-olds in Britain now spend, on average, half their waking day in front of a screen.

[6] There are several reasons for this collapse: parents' irrational fear of strangers and rational fear of traffic, the destruction of the fortifying lands where previous generations played, the quality of indoor entertainment, the structuring of children's time, the criminalisation of natural play. The great indoors, as a result, has become a far more dangerous place than the diminished world beyond.

[7] The rise of obesity and asthma and the decline in cardio-respiratory fitness are well documented. Louv also links the indoor life to an increase in attention deficit hyperactivity disorder and other mental ill health. Research conducted at the University of Illinois suggests that playing among trees and grass is associated with a marked reduction in indications of ADHD, while playing indoors appears to increase them. The disorder, Louv suggests, "may be a set of symptoms aggravated by lack of exposure to nature". Perhaps it's the environment, not the child, that has gone wrong.

[8] In her famous essay the Ecology of Imagination in Childhood, Edith Cobb proposed that contact with nature stimulates creativity. Reviewing the biographies of 300 "geniuses", she exposed a common theme: intense experiences of the natural world in the middle age of childhood (between five and 12). Animals and plants, she argued, are among "the figures of speech in the rhetoric of play... which the genius, in particular of later life, seems to remember".

[9] Studies in several nations show that children's games are more creative in green places than in concrete playgrounds. Natural spaces encourage fantasy and roleplay, reasoning and observation. The social standing of children there depends less on physical dominance, more on inventiveness and language skills.

[10] And here we meet the other great loss. Most of those I know who fight for nature are people who spent their childhoods immersed in it. Without a feel for the texture and function of the natural world, without an intensity of engagement almost impossible in the absence of early experience, people will not devote their lives to its protection.

[11] Forest Schools, Outward Bound, Woodcraft Folk, the John Muir Award, the Campaign for Adventure, Natural Connections, family nature clubs and many others are trying to bring children and the natural world back together. But all of them are fighting forces which, if they cannot be changed, will deprive the living planet of the wonder and delight that for millennia have attracted children to the wilds.

(Adapted from: https://www.theguardian.com/commentisfree/2012/nov/19/children-lose-contact-with-nature)

QUESTÃO 21

According to the text, which option is correct?

(A) Edith Cobb proposed that contact with nature stimulates creativity because many geniuses have presented theories in favour of that.
(B) The creativity of many geniuses has led them to suggest that children between the ages of five and 12 should be in contact with nature.
(C) The creativity of many geniuses appears to have been influenced by their intense experiences of the natural world when they were children.
(D) Edith Cobb proposed that the biographies of many geniuses should contain information about how their creativity was improved.
(E) Edith Cobb wrote about the fact that geniuses of later life used to present speeches in public.

QUESTÃO 22

In paragraph 9, the word "there" refers to

(A) social standing.
(B) concrete playgrounds.
(C) nations.
(D) studies.
(E) natural spaces.

QUESTÃO 23

According to the text, which option is correct?

(A) Richard Louv believes there is a connection between attention deficit hyperactivity disorder (ADHD) and life indoors.
(B) Richard Louv believes that ADHD consists of a set of symptoms that are aggravated by too much exposure to nature.
(C) Richard Louv suggests that ADHD is an illness that is caused by a child's physical conditions.
(D) The symptoms of ADHD increase when a child is submitted to many unexpected conditions in the natural world.
(E) Richard Louv suggests that the environment has gone wrong and, consequently, parents should be afraid of exposing their children to it.

QUESTÃO 24

According to the text, which option is correct?

(A) Undervaluing the indoor world would be a solution to the problem of children's disconnection from nature.
(B) Undervaluing the indoor world would emphasize the fact that there are two spheres that are completely different.
(C) Being in contact with nature has no substitute because the greatest joys of nature are unplanned.
(D) There is no substitute for what takes place outdoors because children will never swim among phosphorescent plankton at night.
(E) The thought that our children's children might not have the opportunity to enjoy nature has been overestimated for decades.

QUESTÃO 25

According to the text, which option completes the sentence below correctly?

The current policies aim at a _____ in the rise of temperatures by the end of the century.

(A) minimum of 6°C
(B) maximum of 6°C
(C) maximum of 12°C
(D) maximum of 2°C
(E) minimum of 2°C

QUESTÃO 26

What's the meaning of the word "engagement" in paragraph 5?

(A) Argument.
(B) Disagreement.
(C) Involvement.
(D) Disappointment.
(E) Punishment.

QUESTÃO 27

Analyze these sentences.

I - Sheriff Grady Judd decided to do something to cheer up young Daylin.
II - He came to Daylin's house to bringing him a brand new bike and a helmet.
III - Daylin thanked the man while he worked to making sure the helmet fit.
IV - Daylin will be able to ride the bike after he finishes his medical treatment.
V - Sheriff Grady Judd hopes this bike will help him enjoy to be a kid again.

(Adapted from https://edition.cnn.com)

Choose the correct option.

(A) Only I and II are grammatically correct.
(B) Only I and IV are grammatically correct.
(C) Only II and III are grammatically correct.
(D) Only II and IV are grammatically correct.
(E) Only II and V are grammatically correct.

QUESTÃO 28

Which option completes the paragraph below correctly?

A lawyer I worked _____ told me he was impressed because I wasn't afraid _____ anything. I had no idea what he was talking _____. I'm scared _____ *everything*.

(Adapted from www.hrexaminer.com)

(A) with / of / to / to
(B) at / from / about / with
(C) with / of / about / of
(D) at / for / with / with
(E) with / for / with / of

QUESTÃO 29

Which option completes the dialogue below correctly?

John: What's the matter?
Mary: My notebook isn't working properly. I must call the technician and _____ immediately.

(A) have fixed it
(B) have it fixed
(C) fixed it
(D) has fixed it
(E) has it fixed

QUESTÃO 30

Which option completes the tips below correctly?

Leadership

- _____ way to lead is *to lead by example*. A good leader *tells* you how it's done, a great one *shows* you how.

- As a leader, _____ thing that you can give your team members is your time. A lot of them will go through a bad phase or will be clueless about what to do. At those times, *they need to know you are there.*

- *People will look up to you.* At times, even for things in which they are far _____ than you. You don't have to take their decisions, just provide them your confidence so that they can take their decisions.

(Abridged from: https://yourstory.com/mystory/4b6ce51011-85-things-i-learned-being-a-ceo)

(A) The better / the bigger / the most skill
(B) The better / the bigger / more skilled
(C) Better / bigger / most skilled
(D) The best / the biggest / more skilled
(E) The best / the biggest / most skilled

QUESTÃO 31

Which of the options completes the text below correctly?

I got into _____ accident on my bike

If you have experienced _____ crash on your Citi Bike and are injured, call 911 immediately. You should also call _____ police department where _____ crash took place and file _____ report with _____ officer to make sure that all important information is documented.

(Adapted from https://help.citibikenyc.com)

(A) an / a / the / the / a / an
(B) an / a / - / a / the / an
(C) the / the / a / the / the / a
(D) a / the / the / a / a / a
(E) a / the / a / a / - / a

QUESTÃO 32

Which option completes the sentence below correctly?

Like any technology, artificial intelligence has both positive aspects and more worrying aspects, _____?

(Adapted from: https://cryptoid.com.br/international-news/artificial-intelligence-and-the-energy-sector-huge-potential-tough-questions/)

(A) haven't they
(B) hasn't it
(C) doesn't it
(D) don't they
(E) aren't they

QUESTÃO 33

Which word best completes the question below?

How _____ do YOU look at your phone?

The average user now picks up their device more than 1,500 times a week.

(http://www.dailymail.co.uk/sciencetech)

(A) far
(B) old
(C) high
(D) often
(E) many

QUESTÃO 34

Mark the correct option to complete the paragraph below.

The doctor _____ Peggy if she _____ the blood pressure pill. Peggy _____ to the doctor that she _____ taking it several weeks before. The doctor _____ Peggy _____ taking the medicine again.

(Adapted from McAslan, Mary Sue. *Read the Prescription Label.* Balboa Press, 2012, p.150-151)

(A) said / had taken / told / stopped / said / start
(B) asked / was taking / said / stopped / told / start
(C) told / had taken / said / had stopped / said / start
(D) asked / was taking / admitted / had stopped / told / to start
(E) told / took / admitted / would have stopped / asked / to start

QUESTÃO 35

Which is the correct option to complete the text below?

All 12 members of the Wild Boar soccer team and their coach _____ after more than two weeks trapped inside a cave in Thailand. The rescue mission was complicated. Here's how it went down.

First, experts _____ to teach the boys how to use scuba gear. During the hours-long trip out of the cave, each boy _____ underwater by two divers. The boys and their escorts _____ to squeeze through a narrow, flooded channel. Having completed that narrow section, the boys _____ to separate, specialist rescue teams, who _____ them through the remainder of the cave.

(Adapted from: https://edition.cnn.com/asia/live-news/thai-cave-rescue-live-intl/index.html)

(A) were rescued / were sent in / accompanied / were required / were handed over / were helped
(B) were rescued / were sent in / was accompanied / were required / were handed over / helped
(C) rescued / sent in / accompanied / required / handed over / were helped
(D) rescued / sent in / was accompanied / required / handed over / were helped
(E) was rescued / were sent in / accompanied / were required / handed over / helped

QUESTÃO 36

Mark the correct option to complete the text below.

When Debbie Carr collapsed unconscious on the floor after an epileptic fit, _____ son might easily have panicked. But the youngster showed the kind of coolness in a crisis - and conversational skill - that was way beyond _____ years.

_____ picked up the phone, dialled 999 and gave the operator _____ full name, _____ mother's name and the number of the house and the street where _____ lived. An ambulance was duly dispatched to Whinfield Terrace in Rowlands Gill, near Gateshead, Tyne and Wear.

The operator kept _____ on the line until for around half an hour, awaiting the arrival of the ambulance.

(Adapted from: <https://www.dailymail.co.uk/health/article-21322/The-boy-saved-mothers-life.html>)

(A) his / her / She / her / her / she / his
(B) hers / him / She / him / him / he / his
(C) her / his / He / her / his / he / her
(D) hers / him / She / him / her / they / him
(E) her / his / He / his / his / they / him

QUESTÃO 37

Which option completes the paragraph below correctly?

After a particularly long week in Shanghai and Beijing, several of us _____ on a United flight direct to Chicago on a late Friday afternoon. We _____ at the airport only to find out the company _____ the flight right before takeoff.

(Adapted from https://www.linkedin.com/pulse)

(A) was / were arriving / had cancelled
(B) were / were arriving / had been cancelling
(C) was / arrived / had been cancelling
(D) was / had arrived / had been cancelling
(E) were / arrived / had cancelled

QUESTÃO 38

Which is the correct option to complete the paragraph below?

The power of a thank-you note

Thank-you notes might seem old-fashioned _____ there's plenty of value to be found in the tradition. _____ a study by Accountemps, just 24% of job applicants send thank-you notes after interviews - _____ 80% of hiring managers who receive them say they are useful in evaluating the potential of applicants. Proponents of thank-you notes say they are an inexpensive way to strengthen a relationship _____ show the applicant cares about the job.

(Adapted from https://www.linkedin.com)

(A) but / According to / but / and
(B) and / Because of / because / but
(C) so / According to / so / because
(D) so / In addition to / but / because
(E) but / Because of / because / and

QUESTÃO 39

Mark the sentence that is correct.

(A) If your computer didn't have Bluetooth support, you could bought a cheap Bluetooth adapter.
(B) If your computer wouldn't have Bluetooth support, you could buy a cheap Bluetooth adapter.
(C) If your computer hadn't Bluetooth support, you could be able to buy a cheap Bluetooth adapter.
(D) If your computer doesn't have Bluetooth support, you can buy a cheap Bluetooth adapter.
(E) If your computer won't have Bluetooth support, you will buy a cheap Bluetooth adapter.

QUESTÃO 40

Which option completes the text below correctly?

Tips for a Healthy Diet

You _____ eat vegetables every day. Vegetables contain essential vitamins and substances that are very important for your organism.

You _____ only eat what you like to eat because to stay healthy you also need to eat what your organism needs you to eat.

(Adapted from https://nexter.org/top-5-tips-for-a-healthy-diet)

(A) can't / can
(B) should / can
(C) shouldn't / can't
(D) should / shouldn't
(E) shouldn't / should

INSTRUÇÕES GERAIS AO CANDIDATO

1 - Verifique se a prova recebida e a folha de respostas são da mesma cor (consta no rodapé de cada folha a cor correspondente) e se não faltam questões ou páginas. Escreva e assine corretamente o seu nome, coloque o seu número de inscrição e o dígito verificador (DV) apenas nos locais indicados;

2 - O tempo para a realização da prova será de **05 (cinco) horas**, incluindo o tempo necessário à marcação das respostas na folha de respostas, e não será prorrogado;

3 - Só inicie a prova após ser autorizado pelo Fiscal, interrompendo sua execução quando determinado;

4 - Iniciada a prova, não haverá mais esclarecimentos. O candidato somente poderá deixar seu lugar, devidamente autorizado pelo Supervisor/Fiscal, para se retirar definitivamente do recinto de prova ou, nos casos abaixo especificados, devidamente acompanhado por militar designado para esse fim:
- atendimento médico por pessoal designado pela MB;
- fazer uso de banheiro; e
- casos de força maior, comprovados pela supervisão do certame, sem que aconteça saída da área circunscrita para a realização da prova.
Em nenhum dos casos haverá prorrogação do tempo destinado à realização da prova, em caso de retirada definitiva do recinto de prova, esta será corrigida até onde foi solucionada;

5 - Use caneta esferográfica preta ou azul para preencher a folha de respostas;

6 - Confira nas folhas de questões as respostas que você assinalou como corretas antes de marcá-las na folha de respostas. Cuidado para não marcar duas opções para uma mesma questão na folha de respostas (a questão será perdida);

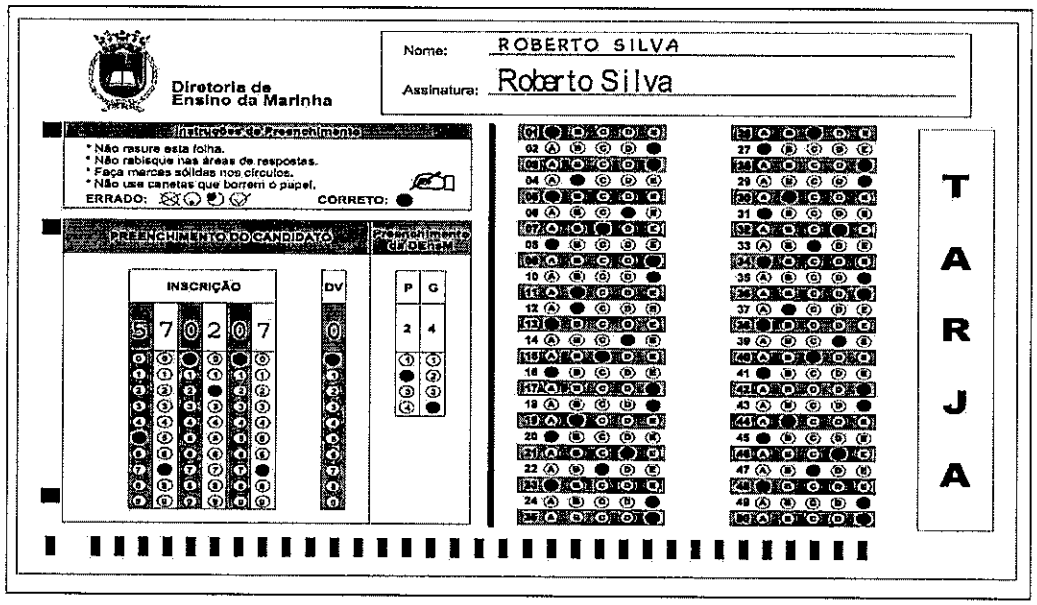
7 - Para rascunho, use os espaços disponíveis nas folhas de questões, mas só serão corrigidas as respostas marcadas na folha de respostas;

8 - O tempo mínimo de permanência dos candidatos no recinto de aplicação de provas é de **150 minutos**.

9 - Será eliminado sumariamente do processo seletivo/concurso e suas provas não serão levadas em consideração, o candidato que:
a) der ou receber auxílio para a execução de qualquer prova;
b) utilizar-se de qualquer material não autorizado;
c) desrespeitar qualquer prescrição relativa à execução das provas;
d) escrever o nome ou introduzir marcas identificadoras noutro lugar que não o determinado para esse fim;
e) cometer ato grave de indisciplina; e
f) comparecer ao local de realização da prova após o horário previsto para o fechamento dos portões.

10 - Instruções para o preenchimento da folha de respostas:
a) use caneta esferográfica azul ou preta;
b) escreva seu nome em letra de forma no local indicado;
c) assine seu nome no local indicado;
d) no campo inscrição DV, escreva o seu número de inscrição nos retângulos, da esquerda para a direita, um dígito em cada retângulo. Escreva o dígito correspondente ao DV no último retângulo. Após, cubra todo o círculo correspondente a cada número. Não amasse, dobre ou rasgue a folha de respostas sob pena de ser rejeitada pelo equipamento de leitura ótica; e
e) só será permitida a troca de folha de respostas até o início da prova, por motivo de erro no preenchimento nos campos nome, assinatura e número de inscrição, sendo de inteira responsabilidade do candidato qualquer erro ou rasura na referida folha de respostas, após o início da prova.

11 - Procure preencher a folha com atenção de acordo com o exemplo abaixo:



12 - Não será permitido levar a prova após sua realização. O candidato está autorizado a transcrever suas respostas, dentro do horário destinado à solução da prova, utilizando o modelo impresso no fim destas instruções para posterior conferência com o gabarito que será divulgado. É proibida a utilização de qualquer outro tipo de papel para anotação do gabarito.

ANOTE SEU GABARITO PROVA DE COR _____

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50