*Seu modelo de prova está na página seguinte

Curso de Inglês Instrumental Online

preparatório para Provas de Proficiência do Mestrado e Doutorado com Certificado de Proficiência

SAIBA MAIS

EXAME DE PROFICIÊNCIA EM LÍNGUA INGLESA

Programa de Pós-graduação em Ciência da Informação, da Faculdade de Ciências da Informação (PPGCINF)

Leia com atenção as seguintes instruções:

- ✓ Cada questão possui somente uma resposta correta.
- ✓ Preencha a folha de respostas, sem rasuras.
- ✓ Somente a folha de respostas será corrigida e considerada para a nota final.
- ✓ O candidato não poderá levar este caderno de questões ao final do exame.
- ✓ Para considerar-se apto, o(a) candidato(a) deverá alcançar um total de acertos de 70% da prova.
- ✓ A duração da prova é de 1h30, podendo o(a) candidato(a) realizar duas provas, neste caso, é acrescido mais uma hora para a realização das provas.
- ✓ O resultado será enviado para o programa de pós-graduação que fará a divulgação.

ENGLISH PROFICIENCY TEST PPE UNB IDIOMAS

FACULDADE DE CIÊNCIAS DA INFORMAÇÃO

Programa de Pós-graduação em Ciência da Informação, da Faculdade de Ciências da Informação (PPGCINF)

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- Leia os texto e responda às questões.
- As respostas às questões devem ser assinaladas na Folha de Respostas.

The evolution of the computer likely began with the human desire to comprehend the environment. The earliest humans recognized the phenomenon of quantity and used their fingers to count and act upon material items in their world. Simple methods such as these eventually gave way to the creation of proxy devices such as the abacus, which enabled action on higher quantities of items, and wax tablets, on which pressed symbols enabled information storage. Continued progress depended on harnessing and controlling the power of the natural world – steam, electricity, light, and finally the amazing potential of the quantum world. Over time, our new devices increased our ability to save and find what we now call data, to communicate over distances, and create information products assembled from countless billions of elements, all transformed into a uniform digital format.

These functions are the essence of computation: the ability to augment and amplify what we can do with our minds, extending our impact to levels of superhuman reach and capacity.

These superhuman capabilities that most of us now take for granted were a long time coming, and it is only in recent years that access to them has been democratized and scaled globally. A hundred years ago, the instantaneous communication afforded by telegraph and long-distance telephony was available only to governments, large corporations, and wealthy individuals. Today, the ability to send international instantaneous messages such as emails is essentially free to the majority of the world's population.

The development of computing is in large part the history of technology, both because no invention happens in isolation, and because technology and computing are inextricably linked; fundamental technologies have allowed people to create complex computing devices, which in turn have driven the creation of increasingly sophisticated technologies.

The history of computing can be seen as a series of overlapping technology waves.

More than people who were simply facile at math, the earliest "computers" were humans who performed repeated calculations for days, weeks, or months at a time. The first human computers successfully plotted the trajectory of Halley's Comet. After this demonstration, teams were put to work producing tables for navigation and computing of logarithms, with the goal of improving the accuracy of warships and artillery.

Starting in the 17th century with the invention of the slide rule, computation was increasingly realized with the help of mechanical aids. This era characterized by mechanisms such as Oughtred's slide rule and mechanical adding machines such as Charles Babbage's difference engine and the arithmometer.

In the 18th century, engineers working on a variety of different systems hit upon the idea of using holes in cards and tape to represent repeating patterns of information that could be stored and automatically acted upon. The Jacquard loom used holes on stiff cards to enable automated looms to weave complex, repeating patterns. Herman Hollerith managed the scale and complexity of processing population information for the 1890 US Census on smaller punch cards, and Émile Baudot created a device that let human operators punch holes in a roll of paper to represent characters as a way of making more efficient use of long-distance telegraph lines. Boole's algebra lets us interpret these representations of information (holes and spaces) as binary – 1s and Os – fundamentally altering how information is processed and stored.

Charles Wheatstone in England and Samuel Morse in the US both built systems that could send digital information down a wire for many miles. By the end of the 19th century, engineers had joined together millions of miles of wires with relays, switches, and sounders, as well as the newly invented speakers and microphones, to create vast international telegraph and telephone communications networks. In the 1930s, scientists in England, Germany, and the US realized that the same electrical relays that powered the telegraph and telephone networks could also be used to calculate mathematical quantities. Meanwhile, magnetic recording technology was developed for storing and playing back sound – technology that would soon be repurposed for storing additional types of information.

In 1906, scientists discovered that a beam of electrons through a vacuum could be switched by applying a slight voltage to a metal mesh, and the vacuum tube was born. In the 1940s, scientists tried using tubes in their calculators and discovered that they ran a thousand times faster than relays. Replacing relays with tubes allowed the creation of computers that were a thousand times faster than the previous generation.

Semiconductors – materials that can change their electrical properties – were discovered in the 19th century, but it wasn't until the middle of the 20th century that scientists at Bell Laboratories discovered and then perfected a semiconductor electronic switch – the transistor. Faster still than tubes and solids, semiconductors use dramatically less power than tubes and can be made smaller than the eye can see. They are also incredibly rugged. The first transistorized computers appeared in 1953; within a decade, transistors had replaced tubes everywhere, except for the computer's screen. That wouldn't happen until the widespread deployment of flat-panel screens in the 2000s.

Year after year, transistors shrank in size and got faster, and so did computers … until they didn't. The year was 2005, roughly, when the semiconductors industry's tricks for making each generation of microprocessors run faster than the previous pretty much petered out. Fortunately, the industry had one more trick up its sleeve: parallel computing, or splitting up a problem into many small parts and solving them more or less independently, all at the same time. Although the computing industry had experimented with parallel computing for years (ENIAC was actually a parallel machine, way back in 1943), massively parallel computers weren't commercially available until the 1980s and didn't become commonplace until 2000s, when scientists started using graphic processors units (GPUs) to solve problems in artificial intelligence (AI).

Whereas the previous technology waves always had at their hearts the purpose of supplementing or amplifying human intellect or abilities, the aim of artificial intelligence is to independently extend cognition, evolve a new concept of intelligence, and algorithmically optimize any digitized ecosystem and its constituent parts. No longer do machines have to be programmed to perform these tasks; computing has evolved to the point that AIs are taught to teach themselves and "learn" using methods that mimic the connections in the human brain. Continuing on this trajectory, over time we will have to redefine what "intelligence" actually means.

The computer book: Milestones in the history of computer Science
Simson L. Garfinkel and Rachel H. Grunspan
Sterling Publishig, 2018, Kindle version (adapted)

1. O objetivo primordial do texto acima é o de:

A) descrever as formas como o homem subjugou as forças da natureza.

B) provar que antes do surgimento dos computadores modernos, a mente humana já exercia as funções básicas de um computador.

C) traçar um panorama da evolução da computação.

D) demonstrar que sem a contribuição de cientistas alemães, ingleses e americanos, hoje não teríamos acesso à tecnologia da Inteligência Artificial.

2. Segundo o texto, pode-se afirmar que:

A) a tecnologia computacional evolui no sentido de democratizar a sua acessibilidade.

B) o autor compara o uso da comunicação via telégrafo e telefonia interurbana àquele dos e-mails em termos de prontidão e rapidez.

C) o homem somente conseguiu traçar o percurso de determinado corpo celeste após o advento das primeiras máquinas de computador.

D) a imagem que o autor usa para se referir à evolução da computação é a de uma sucessão de progressos e retrocessos.

3. Opte, entre os itens abaixo, pela única alternativa correta.

A) "...the instantaneous communication afforded by telegraph and long-distance telephony was available only to governments …" (ll.16-17)

...somente os governos podiam arcar com os custos e disponibilizar a comunicação telegráfica e de telefonia interurbana...

B) "...teams were put to work producing tables for navigation…" (l.28)

...equipes foram forçadas a criar mesas usadas na navegação...

C) "...the industry had one more trick up its sleeve..." (l.68)

…a indústria (da computação) mantinha seus segredos guardados a sete chaves...

D) "…computing has evolved to the point that AIs are taught to teach themselves..." (ll.79-80)

...os computadores atingiram tal grau de evolução que permitiram que as Inteligências Artificiais se tornassem autodidatas;

4. Em termos de uso da língua opte, entre os itens abaixo, pelo único correto.

A) “The evolution of the computer likely began…” (l.1)

Pode ser reescrito como:

The evolution of the computer did begin...

B) A forma verbal “realized” à linha 31 e “realized” à linha 48 não significam a mesma coisa.

C) À linha 54, a estrutura “tried using” poderia ser re-escrita corretamente como “tried and used”.

D) À linha 70, “had experimented” pode ser substituído corretamente por “had experienced”.

5. Em termos de equivalência entre inglês e português opte, entre os itens abaixo, pelo único correto.

A) “simple methods such as these eventually gave way to the creation of proxy devices such as the abacus...” (ll.3-4)

métodos simples como esses, culminaram com a substituição de dispositivos engenhosos tais como o ábaco.

B) “continued progress depended on harnessing and controlling the power of the natural world...” (ll. 6-7)

continuamos a progredir, mas ainda dependentes do conhecimento e controle das forças do mundo natural.

C) “... and create information products assembled from countless billions of elements...” (ll.9-10)

... e gerar conhecimento sobre produtos oriundos de bilhões de inumeráveis elementos.

D) “these superhuman capabilities that most of us now take for granted were a long time coming...” ll. 14 -15

tais aptidões sobre-humanas que em nossa grande maioria, aceitamos agora como algo natural, tardaram muito a surgir.

6. Em termos de equivalência entre inglês e português das palavras em negrito no excerto que se segue, opte, entre os itens abaixo, pela única opção correta:

   "...engineers working on a variety of different systems **1 hit upon** the idea of using holes in cards and tape to represent repeating patterns of information that could be stored and automatically **2 acted upon**. The Jacquard loom used holes on **3 stiff** cards to enable automated looms to **4 weave** complex, **5 repeating** patterns." (ll.35-38)

A) 1 surgiram	2 aperfeiçoados	3 reciclados	4 trançar	5 habituais
B) 1 perceberam	2 memorizados	3 flexíveis	4 urdir	5 semelhantes
C) 1 tiveram	2 usados	3 rígido	4 construir	5 recorrentes
D) 1 difundiram	2 aplicados	3 duros	4 tecer	5 comuns

7. Em termos de referentes, escolha a única alternativa correta:

   A) "previous generation" (l.56) se refere à "scientists" (l.52)

   B) "then" (l.59) se refere à "until the middle of the 20th century" (l.58)

   C) "did" (l.65) se refere à "shrank in size and got faster" (l.65)

   D) "petered out" (l.67) se refere à "industry" (l.66)

8. A única ideia que se encontra explicitada no texto é a seguinte:

   A) o autor concebe a evolução da computação em 4 estágios distintos de desenvolvimento.

   B) já no início da evolução da computação percebeu-se o seu enorme potencial no campo da indústria bélica.

   C) a evolução ou desenvolvimento da computação é, fundamentalmente, a história da evolução da tecnologia.

   D) o fato das inovações na área da computação acontecerem em diversos países e em distintas eras contradiz a teoria do autor sobre a natureza das invenções.

9. Segundo o texto, pode-se afirmar que:

A) no início do século XXI, a computação se deparou com um desafio técnico significativo.

B) Morse e Wheatstone juntaram forças para concretizar o projeto de instalação da gigantesca rede internacional de comunicação telegráfica e telefônica.

C) a evolução no sentido da miniaturização dos transistores chegou a seu termo no começo do século XXI.

D) dois séculos transcorreram entre a invenção dos semicondutores e o aperfeiçoamento de transistor.

10. Em termos de significado, opte pela única alternativa correta.

A) “facile” à linha 25 pode ser substituída por **fácil**.

B) “available” à linha 72 e “commonplace” à linha 72 são sinônimos.

C) “Repurposed” à linha 51 significa **adaptado**.

D) “whereas” à linha 75 é usado para reforçar ou confirmar o que será dito adiante.