MINISTÉRIO DA EDUCAÇÃO
Fundação Universidade Federal do ABC
Núcleo Educacional de Tecnologias e Línguas: Divisão de Idiomas
Programa de Pós-Graduação em Engenharia de Produção
Ingresso Q2.2024 - Edital 49/2023

Exame de Proficiência em Língua Inglesa - GABARITO
(as respostas corretas estão destacadas em fonte vermelha e grifo amarelo)

Estrutura do Exame:
Recomendamos que o exame tenha a duração de 2 horas (120 minutos)
O exame foi estruturado com 30 questões de múltipla escolha, visando uma avaliação abrangente das seguintes habilidades:
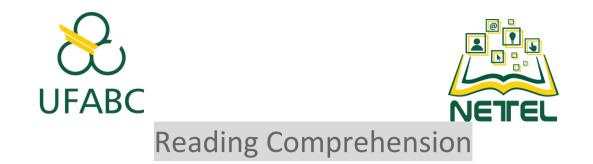
- **Compreensão de Leitura:** 20 questões;
- **Gramática e Uso da Língua:** 5 questões;
- **Produção Escrita:** 5 questões (focadas no reconhecimento de escrita correta e apropriada.

Notas de Corte e Competência Linguística:
As notas serão atribuídas da seguinte maneira para refletir o nível de proficiência:

- Menos de **40%** de acertos indicará uma proficiência abaixo de **A2** (menos de 12 questões);
- Entre **40% a 55%** refletirá um nível **A2** (entre 12 e 16 questões);
- Acima de **60%** demonstrará competência no nível **B1**, o nível alvo para o programa (a partir de 18 questões);
- Uma pontuação acima de **75%** sugerirá competências que se aproximam do nível **B2** ou superior (23 ou mais questões).

Esperamos que façam um bom exame!

Text 1

Clean fuel storage attracts big business amid energy shift

Karolin Schaps
07/27/2023 July 27, 2023

Europe is deepening its commitment to reducing carbon emissions and becoming less dependent on energy imports from Russia by seeking alternatives to fossil fuels. Despite the fact that fossil fuels currently meet 70% of the EU's energy needs, there is a significant shift towards adopting renewable energy sources such as biofuels, clean hydrogen, green ammonia, and methanol. This transition involves importing these cleaner energy sources, suggesting a shift in supply chains towards more sustainable options.

Clean fuels arrive at Dutch ports

The Netherlands is spearheading this change, with its strategic ports in Rotterdam and Amsterdam becoming central to Europe's clean energy distribution. These ports are key components of the ARA hub, crucial for supplying not just the Netherlands but also serving as a main conduit for Germany's industrial sector. Efforts to establish low-carbon fuel infrastructure are moving from plans to reality, with significant investments in hydrogen import and storage facilities being a highlight.

EU counts on green hydrogen imports

Among the alternatives, clean hydrogen stands out for its potential to decarbonize heavy industries. The European Commission has set ambitious targets to bolster both the import and domestic production of renewable hydrogen by 2030, aiming to transform Rotterdam into a leading hydrogen hub in Europe.

Hydrogen transport requires conversion

Transporting and storing hydrogen presents unique challenges due to its flammable nature and storage requirements. Innovations in transportation methods, such as compressing or liquefying hydrogen and using ammonia as a carrier, are being explored to address these challenges.

Hydrogen to be stored in converted salt caverns

Beyond hydrogen, the broader strategy for Europe's energy transition includes leveraging carbon capture technologies and repurposing existing infrastructures, like converting underground salt caverns for storage. This holistic approach illustrates the comprehensive efforts underway to shift Europe towards a more sustainable and secure energy future, with the Netherlands playing a crucial role in this transition.

Adapted from: https://www.dw.com/en/clean-fuel-storage-attracts-big-business-amid-energy-shift/a-66344960

Questions 1-5

1. Why is Europe shifting towards renewable energy sources?
A) To increase its dependence on Russian energy imports
B) To address the high costs of renewable energy
C) To reduce carbon emissions and decrease reliance on fossil fuels
D) Because renewable energy sources are easier to transport

2. What role do the Netherlands' ports play in Europe's transition to cleaner energy?
A) They are primarily used for the export of traditional fossil fuels.
B) They have become crucial for the import and distribution of renewable energy sources.
C) They are focusing on local consumption rather than international distribution.
D) They play a minor role in the transition to cleaner energy.

3. What makes clean hydrogen a notable alternative for Europe's energy needs?
A) It requires no infrastructure changes to transport and store.
B) It is the most expensive form of renewable energy.
C) It has the potential to significantly reduce carbon emissions in heavy industries.
D) It is less efficient than traditional fossil fuels.

4. What challenge is associated with transporting and storing hydrogen?
A) It is too abundant and easy to find locally.
B) It does not require any special conditions for storage.
C) It is highly flammable and requires significant space for storage.
D) It can only be transported by sea.

5. What strategy is being pursued to manage the logistical challenges of hydrogen transport?
A) Ignoring the risks and transporting hydrogen in its natural state.
B) Developing new, untested methods for hydrogen transportation on the spot.
C) Utilizing ammonia as a carrier and exploring methods like compression or liquefaction.
D) Completely avoiding the transportation of hydrogen due to its challenges.

Text 2

IAs we travel into new AI world in 2024, it's the same old internet privacy tradeoff for consumers

Trevor Laurence Jockims
Dec 29 2023

In the forefront of digital transformation, leading tech giants from Google to Apple are embedding generative Artificial Intelligence (AI) into their platforms, fundamentally altering online service delivery. Google's Bard, a chat-based AI, exemplifies this shift by integrating into various applications, from Gmail to Google Maps, acting as an advanced digital assistant. This AI tool processes extensive data and tailors responses to individual user needs in a natural, conversational manner, facilitating tasks like email summarization, trip planning, and list creation.

The burgeoning prominence of generative AI, especially after its surge in public interest in 2023, is set to centralize AI in decision-making for individuals and businesses alike. In travel, generative AI is evolving from a background efficiency tool to a front-and-center intelligent concierge, revolutionizing consumer experiences by providing personalized planning and in-trip assistance. For example, travelers can now consult Google Bard for real-time advice, showcasing AI's capacity to adapt content dynamically and engage in meaningful dialogues to discern traveler preferences.

Nonetheless, the accelerated adoption of AI in daily digital interactions brings to the fore significant privacy and security considerations. The comprehensive integration of AI into user data amplifies concerns over unauthorized access and misuse, urging a balance between convenience and privacy safeguards. Despite the known risks, the tangible benefits of AI enhancements, such as personalized online experiences, often lead consumers to willingly exchange personal data for utility.

Generative AI's evolution signifies a shift towards a nuanced analysis of online consumer behavior, utilizing AI to deliver personalized digital interactions based on individual preferences and historical behaviors. Google's Bard, envisioned as a "creative collaborator," reflects a broader trend of leveraging AI to enhance user engagement while navigating privacy implications. As the digital sphere continues to evolve, the integration of AI, alongside the ethical considerations of privacy and data use, remains a pivotal area for dialogue and regulation.

Questions 6-13

6. What is the primary purpose of integrating generative AI into online services according to the text?
A) To complicate the user interface
B) To fundamentally change how online services are provided
C) To increase the cost of online services
D) To reduce the number of online services available

7. How does Bard, Google's AI tool, enhance the user experience?
A) By limiting the data it can access
B) By performing tasks traditionally done by personal assistants
C) By reducing the accuracy of search results
D) By increasing the time it takes to perform tasks

8. What role will generative AI play in the travel industry?
A) It will decrease the number of available travel options.
B) It will serve as an intelligent concierge, personalizing the travel experience.
C) It will make travel more expensive for consumers.
D) It will replace all human travel agents.

9. What concerns are raised by the increasing use of AI in daily digital interactions?
A) Improved efficiency and accuracy in tasks
B) Decreased reliance on technology
C) Potential security risks and privacy concerns
D) Reduced number of online services

10. What benefit does AI provide in online searches and services?
A) Makes online services less reliable
B) Delivers personalized experiences based on user data
C) Decreases the variety of services offered online
D) Complicates the process of online shopping

11. How do consumers generally react to the privacy concerns associated with AI?
A) By completely avoiding online services
B) By expressing no concern over data privacy
C) By preferring the benefits of AI over potential privacy risks
D) By demanding the removal of all AI from online services

12. How is Google Bard positioned in relation to traditional online search methods?

A) As a lesser alternative
B) As a direct replacement
C) As a complement or creative collaborator
D) As an unrelated tool with no impact on search

13. What does the text suggest about the future interaction between AI tools and consumer privacy?

A) AI tools will eliminate all privacy concerns.
B) There will be no need for privacy settings in the future.
C) The ethical use of consumer data and privacy will be central to ongoing discussions.
D) Consumers will have less control over their privacy settings.

Text 3

Amazon's record drought driven by climate change

By Mark Poynting
Jan 25, 2024

Climate change is damaging the Amazon rainforest, a key defense against global warming. Termed the "lungs of the planet" for its carbon absorption, the Amazon has recently experienced its worst drought in over fifty years, exacerbated by rapid deforestation and making it more prone to weather extremes.

Last year's unprecedented drought saw the Rio Negro, one of the world's largest rivers, at its lowest level in a century near Manaus, Brazil. This situation threatens the rainforest's climate buffer role and its biodiversity, which includes about 10% of the world's species.

Millions relying on the river for transport, food, and income were severely impacted, especially in vulnerable communities. The drought is primarily driven by human-induced climate change, along with natural phenomena like El Niño affecting South American rainfall patterns. The Amazon receives less rainfall and suffers increased evaporation, leading to significant water loss.

Research shows severe droughts are now 30 times more likely due to climate change, potentially recurring every 50 years. Without human-caused warming, such events would be rare, occurring once in 1,500 years.

Global warming threatens to make these droughts more frequent. With a 2℃ temperature rise, similar events could happen every 13 years. Deforestation further strains the Amazon's resilience, impacting its moisture retention and cooling capabilities.

The Amazon's role in limiting climate change is crucial. Yet, climate change and deforestation risk pushing it to a "tipping point," possibly turning it into a CO2 source. However, a recent dip in deforestation rates offers hope. With efforts to cut greenhouse emissions, preserving the Amazon remains possible, underscoring the urgency of addressing global warming to protect this vital ecosystem.

Adapted from: https://www.bbc.com/news/science-environment-68032361

Questions 14-20

14. What has caused the Amazon rainforest, known as the "lungs of the planet," to become more vulnerable?
A) Increased rainfall and cooler temperatures
B) Rapid deforestation and extreme weather conditions
C) A decrease in the world's species
D) Natural phenomena only

15. How did last year's drought in the Amazon affect local communities?
A) It had no significant impact on local communities.
B) It improved transportation and food supply through rivers.
C) It severely impacted millions, especially in vulnerable communities, who rely on the river.
D) It increased the river's water level, benefiting local transportation.

16. What are the consequences of the Amazon receiving less rainfall and experiencing increased evaporation?
A) The rainforest has become less dense.
B) Significant water loss from plants and soil, leading to severe droughts.
C) An increase in the biodiversity of the Amazon.
D) The Amazon has become cooler and wetter.

17. Why is the Amazon rainforest important in the fight against global warming?
A) It releases more carbon dioxide into the atmosphere.
B) It absorbs carbon dioxide, reducing the amount in the atmosphere.
C) It has no significant role in global warming.
D) It increases global temperatures through deforestation.

18. What natural event contributes to changes in rainfall patterns in South America, affecting the Amazon?
A) Global cooling
B) El Niño
C) Lunar cycles
D) Ocean currents in the North Atlantic

19. How has human-induced climate change altered the frequency of severe droughts in the Amazon?
A) It has made them 30 times more likely, with severe droughts now expected every 50 years.
B) It has reduced the likelihood of droughts occurring.

C) It has had no impact on the frequency of droughts.
D) It has made droughts less severe but more frequent.

20. What could be the implications of reaching a "tipping point" due to climate change and deforestation in the Amazon?

A) The Amazon could become a significant source of CO2 emissions.
B) The Amazon would become less important in the fight against global warming.
C) It would lead to an increase in the Amazon's biodiversity.
D) The Amazon would receive more rainfall, reducing drought severity.

Grammar and Language Usage

Questions 21-25

21. Choose the correct form of the verb to complete the sentence from the text on AI integration:

"Generative AI _____ seamlessly into the digital ecosystems of leading tech companies."

A) is integrate
B) integrates
C) has integrating
D) integrate

22. Select the correct preposition to complete the sentence from the text on the Amazon rainforest:

"The Amazon rainforest is crucial _____ the global fight against climate change due to its ability to absorb carbon dioxide."

A) in
B) since
C) about
D) at

23. Choose the correct pronoun to complete the sentence from the text on AI integration:

"Bard, by integrating with platforms ranging from Gmail to Google Maps, acts as a highly efficient digital assistant, tailoring responses to _____ users' needs in a conversational manner."

A) its
B) their
C) his
D) her

24. Identify the correct adjective to complete the sentence from the text on the Amazon rainforest:

"Recent research highlights last year's drought as _____, with the Rio Negro river hitting record low levels."

A) unprecedented
B) common
C) regular
D) frequent

25. Select the correct modal verb to complete the sentence from the text on the Amazon rainforest regarding future possibilities:

"If the planet's temperature _____ 2C above pre-industrial levels, similar droughts could happen approximately every 13 years."

A) rises
B) will rise
C) would rise
D) should rise
Correct Answer: A) rises

Writing

Questions 26-30

26. In an academic essay discussing the impact of technology on society, how should you integrate information from the AI integration text?
A) By expressing personal opinions without citing the text.

C) By copying sections of the text without modification.
D) By ignoring the details and focusing only on unrelated information.

27. When writing a research proposal on deforestation's impact on climate change, based on information from the Amazon rainforest text, what is an essential element to include?

A) A detailed description of a personal visit to the Amazon.
B) A fictional story illustrating the effects of deforestation.
C) Hypothetical solutions not based on scientific research.
D) A review of the literature on deforestation and its impacts, referencing relevant studies.

28. For a conference presentation abstract on the future of generative AI in online services, what approach should be taken based on the AI text?

A) Provide a vague overview without mentioning specific AI technologies.
B) Discuss the role of generative AI, using examples like Google Bard to highlight its potential.
C) Focus solely on the technical aspects of AI without considering its application.
D) Predict the decline of AI technology without providing evidence.

29. In drafting a discussion section of a thesis on the ecological impacts of climate change, how should findings related to the Amazon rainforest drought be incorporated?

A) By disregarding the drought as an isolated incident.
B) By discussing the drought in the context of global climate change trends and citing similar studies.
C) By suggesting the drought is beneficial for the Amazon ecosystem without evidence.
D) By focusing only on the economic implications, ignoring environmental factors.

30. When preparing a short essay on the importance of AI for modern businesses, how should the integration of AI into services like Google and Apple be addressed, based on the AI text?
A) By speculating on potential negative outcomes without discussing current applications.
B) By highlighting the efficiency and personalization benefits AI offers, referencing examples from the text.
C) By writing exclusively about the history of AI without connecting it to its current use.
D) By focusing on the ethical concerns only, without mentioning its benefits or applications.