

PPLLE - Prova de Proficiência em Leitura em Língua Inglesa
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ORIENTAÇÕES GERAIS

- ◇ Nesta prova, você encontrará 10 perguntas de múltipla escolha.
- ◇ Algumas perguntas podem ter mais de uma resposta correta.
- ◇ Leia atentamente o enunciado de cada questão.
- ◇ O tempo máximo para a realização desta prova é de duas (2) horas. Boa sorte!

TEXTO 1 - Surgical amputation of a member of the body 31,000 years ago in Borneo

Parágrafo 01 The predominant view about the evolution of medicine is that the emergence of established agricultural societies around 10,000 years ago (the Neolithic Revolution) caused many health problems that were previously unknown among non-sedentary foraging populations. It also stimulated the first major innovations in prehistoric medical practices. Such changes included the development of more advanced surgical procedures. Experts thought that the skeletal remains of a European Neolithic farmer (found in France) was the oldest indication of an ‘operation’; the left forearm of this person was surgically removed and then partially healed. Dating to around 7,000 years ago, this accepted case of amputation would have required comprehensive knowledge of human anatomy and considerable technical skill. It has thus been considered as the earliest evidence of a complex medical act. Here, however, we report the discovery of skeletal remains of a young individual from Borneo who had part of his left lower leg surgically amputated, probably as a child, at least 31,000 years ago. The individual survived the procedure and lived for another 6–9 years, before his remains were intentionally buried in Liang Tebo cave. The cave is located in East Kalimantan, Indonesian Borneo, in a limestone karst area that contains some of the world’s earliest dated rock art. This unexpectedly early evidence of a successful amputation of a part of the body suggests that at least some modern human foraging groups in tropical Asia had developed sophisticated medical knowledge and skills long before the Neolithic farming transition.

Parágrafo 02 The Sangkulirang–Mangkalihat Peninsula of East Kalimantan (Indonesian Borneo) has an extensive limestone karst landscape (around 4,200 km²) that, during the Late Pleistocene, was located close to the extreme easternmost edge of the Eurasian continental landmass, Sunda. This rugged karst terrain has many caves and rock shelters that abound with archaeological evidence of prehistoric human occupation, including figurative rock art dating to at least 40 thousand years ago. However, a considerable gap in Pleistocene archaeological records, particularly of human skeletal remains, exists in the region. Liang Tebo — a large three-chambered limestone cave (around 160 m³) with preserved rock art in the uppermost chamber — is situated approximately 2.5 km from, and 165 m above, the Marang River. In 2020, after geophysical research, a 2 m by 2 m trench was excavated in the central floor area of the largest chamber of this cave. This area was excavated to a depth of 1.5 m without reaching bedrock, revealing nine major stratigraphical units (SU) and a burial feature containing a fully articulated single adult inhumation (designated TB1), first exposed at 0.87 m depth in squares C and D.

Burial feature

Parágrafo 03 The Liang Tebo burial feature exhibited a strongly defined stratigraphic boundary and distinctive infilling sediment (grave infill). The bottom of the ovate-shaped grave cut terminated in SU8 and did not continue into the underlying SU9. A portion of the western margins of the burial cut was clearly visible when partially cross-sectioned by the western excavation wall. Limestone rocks were positioned above the head and each arm of the individual, immediately atop the grave infill. These apparent burial markers confirm that the burial was a ‘manufactured’ stratum and a deliberate human grave. TB1 was interred lying on their back in an almost north-to-south alignment (310° N), with the left and right legs flexed — the right with the knee at the chest, and the left knee flexed below the pelvis (underneath the femur), with the left hand inferior and the right superior, to the pelvic girdle. Minimal movement of fragile bone elements suggests rapid sedimentation and decomposition within a confined space.

Parágrafo 04 The TB1 burial feature and skeleton was removed in 32 stages (R1–R32), each accompanied by laser scanning and photography. TB1 is well preserved: the reassembled skeleton reveals 75% bone presence, with all teeth present and intact, and is therefore considered relatively complete in terms of representation of the skeletal elements and the condition of bone. The individual is classified as an anatomically modern human (*Homo sapiens*) based on a range of morphological considerations (Supplementary Information). The combination of epiphyseal fusion, pubic symphysis, and auricular surface stages, as well as analyses using dental formation techniques, indicate that TB1 was a young adult, approximately 19–20 years of age at the time of death. The cranium and pelvis show intermediate sex traits and therefore the sex is indeterminate. The TB1 individual is typical in stature when compared with other prehistoric male individuals with morphological and morphometric affinity to pre-Last Glacial Maximum skeletons from Asia, and is more than one standard deviation (σ) taller than the mean for most female individuals.

Parágrafo 05 With regard to TB1’s amputation, we infer that the Late Pleistocene ‘surgeon(s)’ had detailed knowledge of anatomy and muscular and vascular systems to prevent fatal blood loss and infection. Finally, during surgery, the surrounding tissue including veins, vessels and nerves, were exposed and treated in such a way that allowed this individual to not only survive but also continue living. Intensive post-operative care was vital, such as temperature regulation, regular feeding, bathing, and movement to prevent bed sores while the individual was immobile. The wound was regularly cleaned, dressed, and disinfected, perhaps using botanical resources with medicinal properties to prevent infection and provide anaesthetics. Although it is not possible to determine whether infection occurred after the surgery, this individual evidently did not suffer from an infection severe enough to leave permanent skeletal markers and/or cause death.

Adaptado de: MALONEY, T. et al. Surgical amputation of a limb 31,000 years ago in Borneo. *Nature*.vol. 609, 15 September 2022. Disponível em: <https://www.nature.com/articles/s41586-022-05160-8>. Acesso em 14/09/2022.

Questões

01 – A partir da leitura do Parágrafo 01, pode-se inferir que o texto constitui um trecho de:

a) um artigo na área de arqueologia

- b) um relatório de autópsia
- c) um resumo expandido da área de cavernas
- d) um estudo sobre técnicas modernas de amputação

02 – Considere o seguinte excerto do Parágrafo 01:

“The individual survived the procedure and lived for another 6–9 years, before his remains were intentionally buried in Liang Tebo cave. The cave is located in East Kalimantan, Indonesian Borneo, in a limestone karst area that contains some of the world’s earliest dated rock art.”

Responda: A partir desse excerto, pode-se afirmar que:

- a) O indivíduo foi enterrado na caverna Liang Tebo.
- b) O indivíduo tinha entre 6 e 9 anos de idade quando morreu.
- c) O indivíduo não sobreviveu ao procedimento cirúrgico.
- d) O indivíduo viveu na caverna Liang Tebo por 3 anos.

03 – Considere o seguinte excerto do Parágrafo 01:

“**Such changes** included the development of more advanced surgical procedures. Experts thought that the skeletal remains of a European Neolithic farmer (found in France) was the oldest indication of an ‘operation’; the left forearm of this person was surgically removed and then partially healed. Dating to around 7,000 years ago, this accepted case of amputation would have required **comprehensive** knowledge of human anatomy and considerable technical skill. It has **thus** been considered as the earliest evidence of a complex medical act.”

Assinale a alternativa que contém a correta tradução dos termos em destaque no excerto:

- a) Tais mudanças - abrangente – portanto
- b) Tantas mudanças — competência – no entanto
- c) O tipo de mudanças – compreensível – também
- d) A procura por mudanças– compreensivo - entretanto

04 – Considere o excerto do Parágrafo 02:

“The Sangkulirang–Mangkalihat Peninsula (Indonesian Borneo) has an extensive limestone karst landscape (around 4,200 km²) that, during the Late Pleistocene, was located close to the extreme easternmost edge of the Eurasian continental landmass, Sunda. **This** rugged karst terrain has many caves and rock shelters **that** abound with archaeological evidence of prehistoric human occupation, including figurative rock art dating to at least 40 thousand years ago.”

Responda: Os termos em destaque referem-se respectivamente a:

- a) The Sangkulirang–Mangkalihat Peninsula – caves and rock shelters
- b) The Late Pleistocene – terrain
- c) Prehistoric human occupation – rock art
- d) Many caves and rock shelters – terrain

05 – Considere o seguinte excerto do Parágrafo 02:

“In 2020, after geophysical research, a 2 m by 2 m trench was excavated in the central floor area of the largest chamber of this cave. This area was excavated to a depth of 1.5

m without reaching bedrock, revealing nine major stratigraphical units (SU) and a burial feature containing a fully articulated single adult inhumation (designated TB1), first exposed at 0.87 m depth in squares C and D.”

Responda: O excerto apresenta:

- a) **A descrição dos procedimentos de escavação.**
- b) O levantamento geofísico como consequência do achado.
- c) A motivação principal do estudo.
- d) As razões pelas quais a pesquisa foi realizada.

06 – Considere as afirmações sobre o Parágrafo 03 e selecione a alternativa que contém a sequência correta:

- () O parágrafo tem a função de descrever o local de sepultamento conforme foi encontrado pelos pesquisadores.
- () O termo destacado no trecho “TB1 was interred lying on **their** back in an almost north-to-south alignment” indica que os restos mortais de mais de uma pessoa foram encontrados no local.
- () O parágrafo detalha a posição em que os restos mortais foram encontrados.

- a) **V – F – V**
- b) F – V – F
- c) V – V – F
- d) F – V – V

07 – Considere o seguinte trecho do Parágrafo 04:

“TB1 is well preserved: the reassembled skeleton reveals 75% bone presence, with all teeth present and intact, and is **therefore** considered relatively complete in terms of representation of the skeletal elements and the condition of bone.”

Responda: A palavra em destaque no excerto apresenta:

- a) **uma consequência lógica da primeira parte do trecho**
- b) uma ressalva com relação à primeira parte do trecho
- c) uma nova informação
- d) uma condição que os pesquisadores não puderam explicar

08 – A partir da leitura do Parágrafo 04, é correto afirmar que:

- a) **os restos incluem 75% do esqueleto.**
- b) **os restos são de um indivíduo com cerca de 20 anos de idade.**
- c) os restos não incluem todos os dentes.
- d) os restos são de um indivíduo da espécie *Homo sapiens* do sexo masculino.

09 – Considere o termo destacado no excerto do Parágrafo 05:

“**Although** it is not possible to determine whether infection occurred after the surgery, this individual evidently did not suffer from an infection severe enough to leave permanent skeletal markers and/or cause death.”

Responda: Esse termo apresenta uma ideia de:

- a) Ressalva
- b) Comparação
- c) Adição
- d) Contradição

10 – A sigla TB1, utilizada ao longo do texto, designa:

- a) a fully articulated single adult inhumation
- b) prehistoric male individuals
- c) skeletons from Asia
- d) the burial feature

TEXTO 2 – Academic Achievement in Ghana

Parágrafo 01 Education is inevitable in human development since knowledge and talents are developed through education, making people fit nicely into every society. The fundamental goal of all education is to generate a positive change in the student's behavior. Stakeholders in education include government and its agencies, the family and the communities. The success of a child's education mostly depends on the type of support it receives from its family, making parents very important in the academic achievement of children. However, it has been shown that the positive environment created by the schools' administration also plays a significant role in academic success.

Parágrafo 02 In Ghana, every family wants its children to perform academically well. While economic pressures, among others, make some families less involved in their children's academic activities, most families are pretty much involved in their children's education. Research done in a distant district showed that most families communicate vital information such as children health status and educational history to school authorities; they also volunteer to support school programs, student excursions and technology learning in the schools; they help their children with their home learning and discuss their children's academic performances with teachers. In sum, families act as a socializer and provide vital support in financial, social, and emotional issues.

Parágrafo 03 Family/parents' involvement implies that members of the family work not only with their children but also with teachers. Parents' involvement may be in the form of assisting their children with homework, volunteering for school activities, supporting their children during sports and other club activities, attending parent, teachers, and students' events. Students of such families mostly feel cared for by their parents, which aids them in focusing on their academic work, leading to higher academic performance.

Parágrafo 04 Besides family/parents' involvement, a supportive school is also key for academic achievement. The management, norms, goals, relationships, and learning experiences, collectively are elements that create the climate of the school and classroom. Therefore, the classroom and school climate does not refer to only the physical structures of the school and well-organized classrooms. A supportive school and classroom create a safe environment for students and encourages student-teacher, teacher-parent relationships. Such an environment increases teachers' productivity and enhances students' understanding of lessons, leading to successful academic achievements.

Adaptado de: MANTE, D. et. Al The Influence of Family Structure on Academic Achievement in the Kwabre East Municipal Area, Ghana. *Open Journal of Social Sciences*, 2021, 9, 220-242.
Disponível em: <https://www.scirp.org/journal/paperinformation.aspx?paperid=113843>. Acesso em 15/09/2022.

Questões 11 a 13

11. No Parágrafo 02, são mencionados vários fatores que contribuem para o sucesso acadêmico de crianças/estudantes em Ghana. Selecione todas as alternativas que apresentam fatores citados no referido trecho:

a) envolvimento das famílias nas atividades escolares

b) apoio financeiro, social e emocional

c) pressões econômicas para alcançar sucesso escolar

d) saúde das crianças

12 – Considere o seguinte excerto do Parágrafo 03:

“Family/parents’ involvement implies that members of the family work not only with **their** children but also with teachers. Parents’ involvement may be in the form of assisting **their** children with homework, volunteering for school activities, supporting their children during sports and other club activities, attending parent, teachers, and students’ events. Students of such families mostly feel cared for by their parents, which aids **them** in focusing on their academic work, leading to higher academic performance.”

Responda: As palavras em destaque referem-se respectivamente a:

a) members of the family – parents – students

b) teachers – school – parents

c) teachers – activities – parents

d) school activities – students - students

13. A partir da leitura do Parágrafo 04, pode-se inferir que:

a) Há outros fatores, além do envolvimento das famílias, que desempenham papel importante no sucesso acadêmico dos estudantes.

b) A estrutura física das escolas não é importante para o sucesso acadêmico dos estudantes.

c) A interação entre professores e estudantes depende da interação entre familiares e professores.

d) A produtividade dos professores aumenta quando os estudantes são bem-sucedidos academicamente.