



MINISTÉRIO DA EDUCAÇÃO
UNIVERSIDADE FEDERAL DO PIAUÍ – EDITAL 16/2017

Realização:



EXAME DE PROFICIÊNCIA DE LEITURA EM LÍNGUA ESTRANGEIRA

DATA: 22/10/2017

HORÁRIO: das 8 às 11 horas

CADERNO DE PROVA

Idioma:

INGLÊS

Área de Pesquisa:

(2) CIÊNCIAS EXATAS E DA TERRA, ENGENHARIAS

LEIA ATENTAMENTE AS INSTRUÇÕES

- Esta prova é constituída de um texto técnico-científico em língua estrangeira, seguido de 5 (cinco) questões abertas relativas ao texto apresentado.
- É permitido o uso de dicionário impresso, sendo vedados trocas ou empréstimos de materiais durante a realização do Exame.
- As respostas deverão ser redigidas em português e transcritas para a **Folha de Respostas**, utilizando caneta esferográfica com **tinta preta** ou **azul, escrita grossa**.
- A Folha de Respostas** será o único documento válido para correção, não devendo, portanto, conter rasuras.
- Será eliminado o candidato que se identificar em outro espaço além daquele reservado na capa da **Folha de Respostas** e/ou redigir as respostas com lápis grafite (ou lapiseira).
- Nenhum candidato poderá entregar o Caderno de Prova e a Folha de Respostas antes de transcorridos 60 minutos do início do Exame.
- Em nenhuma hipótese haverá substituição da **Folha de Respostas**.
- Ao encerrar a prova, o candidato entregará, obrigatoriamente, ao fiscal da sala, o Caderno de Prova e a Folha de Respostas devidamente assinada no espaço reservado para esse fim.

How can we manage Earth's land?

Overpopulation, climate change, mass migration... our relationship with terra firma has never been more complicated. Could Earth's land be an overlooked, increasingly precious resource?

By Richard Gray 29 June 2017

From the sky, it looks like an entire city is adrift in the Indian Ocean. A forest of tower-blocks rise above the emerald-coloured water while just a handful of trees poke through the canopy of concrete. Grand Challenges. In this special series, Future Now takes a close look at the biggest, most important issues we face in the 21st Century. For those living in Malé, the overcrowded capital of the Maldives, there is no choice but to build upwards. Caged by the sea, they have no more land to spread onto, yet the city's population has soared by nearly 52% since 2006. The last census in 2014 counted 158,000 people crammed into the city's 2.2 sq miles (5.7 sq km) of space, and officials say the figure has since grown further. "When people think of the Maldives, it is usually of a beautiful paradise with crystal clear lagoons and white sand beaches," says Shamau Shareef, the city's recently elected deputy mayor. "Malé is very different. We have very limited space and life is tough."

Space is such a premium in Malé that pavements are often less than three feet wide, forcing pedestrians to walk in single file, while many streets have no sidewalk at all. Malé, capital of the Maldives, is emblematic of modern-day land issues: A small, increasingly urbanising space with a skyrocketing population. Rents have risen exorbitantly and, in some of the poorest areas, up to 40 people can be crammed into buildings with just 250 sq feet (23.2 sq metres) of space - about the same size as a small studio flat. With so many people living under each others' feet, crime, drugs and domestic violence have risen alarmingly while the city frequently runs out of water. An entirely new island has risen out of the sea from the city's garbage. "In the early 1990s the tallest buildings in the city were only two storeys high," says Shareef. "Now the average height is eight storeys and some are 25 storeys high. People are coming here because this is where the health, education and jobs are, but overpopulation is leading to many socioeconomic problems."

Although extreme, Malé is an example in miniature of something that is happening on a far larger scale around the world. With 83 million more people appearing on the planet every year, rising populations are placing increasing pressure on the land. The UN's latest estimates state that there are 7.6 billion people jostling for space on Earth at present and that number will rise to 9.8 billion by 2050. By the end of the century, their projections say there could be 11.2 billion people on our planet. With 83 million more people appearing on the planet every year, rising populations are placing increasing pressure on the land. Each of those people will need somewhere to live, a place to work, fertile land to provide them with food. They will need water and energy to stay warm or to light their way at night. They will want roads to drive on and places to park. For the lucky ones, there will be space for their pastimes and leisure activities. But for all of them, there can be no doubt the impact they will all have on the land - and those impacts are managed - will be one of the grand challenges facing humanity in the coming century. Overcrowded Malé had to create an artificial island as a big landfill for the rubbish that threatens to overtake the tiny island capital.

At first, it can be easy to dismiss fears that mankind may one day run out of space as ridiculous. Physically, the land can easily accommodate 11 billion people - there are around 13.4 billion hectares of ice-free land (51.7 million sq miles) on the planet. But large tracts of land remain virtually uninhabitable due to their climate or their remote location: Enormous tracts of Siberia are too inhospitable to be lived upon. And the huge landmass at the centre of Australia is too arid to support many people, meaning the majority of its population is clustered along its coastline. Meanwhile, cities and urban areas, like Malé, cannot keep growing indefinitely. They are bound by the natural landscape that surrounds them, whether it's ocean or mountains. The land that is habitable faces challenges, like crowded cities and growing populations. "If you have that many people, there will obviously be a much greater demand for natural resources and food production," says John Wilmoth, director of the UN's Population Division. "But there has been a lot of misplaced attention that has tried to look at population control or limitation as a solution." Experts say it's misguided to just focus on population numbers, and whether there's enough space on the planet to fit everyone. Large swaths of Earth's land is uninhabitable for agriculture or human settlement - and there's no shortage of challenges facing livable land "The countries where populations are growing the most are actually using the least of the Earth's resources per person," warns Jonathan Foley, executive director of the California Academy of Sciences who has spent his career studying the impact human civilisation has on the environment. "Those of us in the rich and developed world consume far more than our fair share."

Adaptado de: <http://www.bbc.com/future/story/20170628-how-to-best-manage-earths-land/> extraído em 29/09/2017.

