

【2025 年度 松山大学 人文学部英語英米文学科 一般編入学・学士入学試験】

(60 分)

次の英語文を読んで、以下の I、II の問いに答えなさい。

NASA, America's space agency, is serious about going to the Moon and Mars*. Unlike with space exploration programs from earlier eras, NASA is partnering more closely with private-sector companies to develop and operate the equipment involved.

The eventual goal is Mars, but could humans really live there? Ice on the Red Planet could provide water and the atmosphere could be converted into breathable air. Robots sent before humans could use 3D printers to create construction materials from the Martian soil. Human homes will have to provide comfort and personal space for long-term life on Mars. Some current designs are small homes, while others are huge domed cities.

One danger on Mars is natural radiation* that is much stronger (1) on Earth. Human homes will have to block it, along with meteorites* that fall regularly. Home maintenance will be very important, and like construction, will probably (2) significantly handled by autonomous* robots.

But before building cities on Mars, NASA is looking to the Moon for settlements and a base for sending future mission to Mars, perhaps within the next decade. Recently discovered water on the Moon's poles* could provide hydrogen* for fuel and oxygen for air. However, (3) the Moon is much closer to Earth than Mars, its environment is far more dangerous. Since the Moon has almost no atmosphere, lunar structures will have to withstand micrometeorites* that fly as fast as bullets, temperatures ranging from 127°C in the day to -173°C (4) night, and much

(全 4 枚中その1)

higher levels of radiation than on Mars. The Moon even has quakes that shake the ground (5) hours. And on most of the Moon, day and night each lasts 13.66 days, or 354.35 hours!

So why explore and colonize the Moon and Mars in the first place? One idea is that Mars could be a backup home for humans in case Earth becomes too crowded or uninhabitable. Also, the technological advancements from building lunar* and Martian* structures could teach us how to make architecture on Earth more resistant to the extreme weather that could become more frequent as climate change progresses.

Notes:

Mars = 火星

radiation = 放射線

meteorite = 隕石

autonomous = 自動の

pole = 極

hydrogen = 水素

micrometeorite = 微小隕石

lunar = 月の

Martian = 火星の

I. (1) ~ (5) の中に入る最も適切な単語を、解答用紙に記入しなさい。

II. 各質問に対して正答を選び、その記号を解答用紙に記入しなさい。

問 1 : What is the ultimate purpose of NASA?

- A) Exploring the Moon
- B) Making a base on the Moon
- C) Making water from Ice on Mars
- D) Building cities on Mars

(全 4 枚中その2)

問 2 : Why is it believed that humans can live on Mars?

- A) Because NASA has already developed the equipment indispensable for living on Mars
- B) Because NASA has just built solid buildings to protect humans from meteorites falling on Mars
- C) Because an adequate amount of water and air could be produced from the existing materials on Mars
- D) Because comfortable personal space for long-term life was discovered on Mars

問 3 : Which of the following is NOT mentioned as a problems of living on Mars?

- A) Natural radiation
- B) Meteorites
- C) The maintenance of houses
- D) Repairing autonomous robots

問 4 : Which of the following is NOT mentioned as a problem of living on the Moon?

- A) Lack of hydrogen and oxygen
- B) Fast-flying micrometeorites
- C) A climate that is both too hot and too cold
- D) High levels of radiation and long quakes

問 5 : Where can we take advantage of the technology for building lunar and Martian structures?

- A) In building durable houses and facilities on Earth.
- B) In solving the problem of overpopulation on Earth.
- C) In finding a more comfortable planet than Earth.
- D) In constructing architecture on planets farther away from Earth than Mars.

Ⅲ. 次のテーマで、3段落構成の英語エッセイを作成してください。各段落は、3文以上あればよいので、簡潔に書いてください。

第一段落：本学科の4つの専門分野（英米文学、国際文化、英語学・言語学、英語教育学）のうち、一番興味のあるものはどれで、とくに何について研究してみたいか、具体的なテーマや内容を説明してください。

第二段落：なぜ、あるいは、どのようなきっかけで、そのテーマに興味を持ったのかを説明してください。すでにそのテーマについて、自分で勉強し始めているのであれば、そのことも言及してください。

第三段落：あなたがその専門分野を学んだあと、その知識をどのように活かしたいですか？将来就きたい仕事と結び付けてもよいですし、仕事と関係なくとも、自分にとって、どのような点がプラスになるか、説明してください。