## 2020 年度日本政府(文部科学省) 奨学金留学生選考試験

# QUALIFYING EXAMINATION FOR APPLICANTS FOR THE JAPANESE GOVERNMENT (MEXT) SCHOLARSHIP 2020

学科試験 問題

**EXAMINATION QUESTIONS** 

(研究留学生)

RESEARCH STUDENTS

英 語

**ENGLISH** 

注意 ☆試験時間は60分。

PLEASE NOTE: THE TEST PERIOD IS 60 MINUTES.

(2020)

### ENGLISH

| Nationality |   | No. |  |
|-------------|---|-----|--|
| Name        | (Please print your full na<br>underlining your family r |     |  |

|       | (2020) |
|-------|--------|
| Marks |        |

| T | Choose i | the word | or phrase | that best | completes | each sentence. |  |
|---|----------|----------|-----------|-----------|-----------|----------------|--|
| T | CHOOSE I | me word  | or pinase | mai besi  | Completes | each semente.  |  |

| 1 | This is a story about a man who has dedicated his life to ( ) our a and cultural heritage. |                   |                          |          |                        |  |
|---|--|-------------------|--------------------------|----------|------------------------|--|
|   | A compromise   | _                 | C preserve               | D        | register               |  |
| 2 | At that delivery product, not the w  | veight.           | es are determined by     |          | ) of the way           |  |
| 3 | They made a dinr<br>the park.<br>A cooked  | ner ( ) B cooking | for five people at thei  |          |                        |  |
| 4 | This new product those trees.  | has been (        | ) to be an extre         | mely eff | fective fertilizer for |  |
|   | A examined   | -                 | C searched               |          | sold                   |  |
| 5 | Mary has earned also of the clients  |                   | ) not only of her colle: | agues ir | n the company, but     |  |
|   | A belief   | B fund            | C respect                | D        | salary                 |  |
| 6 | No new investme directors.   | nt will be made   | e without the (          | ) of     | the firm's board of    |  |
|   | A adoption   | B consistenc      | y C reception            | D        | sanction               |  |
| 7 | According to som   | e experts in th   | e field, it is highly (  |          | ) that those two       |  |

|    |    |              | confident                 |          | nce pians<br>potentia |        | C         | C           | 9       | D         | threatened      |    |
|----|----|--------------|---------------------------|----------|-----------------------|--------|-----------|-------------|---------|-----------|-----------------|----|
| ;  | 8  |              | ease remem                |          |                       | ling o | n your c  | ircumstar   | ices, y | ou o      | ean (           | )  |
|    |    | A            | choose on                 | В        | opt for               |        | C sepa    | rate from   |         | D         | yield to        |    |
| 9  | 9  |              | know tha                  |          | anders so             | meti   | mes (     |             | ) to o  | offen     | sive behavior b | y  |
|    |    | A            | bring a cas               | se B     | give a b              | reak   | C ta      | ke a look   | D       | tui       | rn a blind eye  |    |
|    | 10 |              | any people<br>npany looke |          |                       |        |           |             |         | the       | president of th | ıe |
|    |    | A            | in person                 | В        | in prese              | ence   | C in      | privacy     | D       | in        | prominence      |    |
|    |    |              |                           |          |                       |        |           |             |         |           |                 |    |
| II | (  | Cho          | ose the wor               | d or ph  | rase that             | best   | complete  | es each sei | ntence  | <i>9.</i> |                 |    |
| 1  | Γ  | id y         | you see a st              | ranger   | (                     |        | ) the bus | s stop last | night   | ?         |                 |    |
|    | A  | s S          | tanding at                | B sta    | anding in             | С      | to stand  | at D t      | to star | nd ir     | 1               |    |
| 2  | "V | Vhi          | ch are your               | boots?"  | ""(                   |        | ) with    | red stripe  | es."    |           |                 |    |
|    | A  | . It         | t                         | B Th     | nat                   | С      | The one   | D '         | The or  | nes       |                 |    |
| 3  |    | ne v<br>elin | was certair<br>gs.        | nly the  | only per              | rson   | (         | )           | he sta  | arte      | d to describe h | is |
|    | A  | b            | y whom                    | B to     | whom                  | C      | who       | D ,         | whom    |           |                 |    |
| 4  |    |              | e end of th               | ne mee   | ting, I w             | as (   |           | ) I d:      | idn't l | nave      | the right to sa | ıy |
|    | A  | g            | ot felt                   | B go     | t to feel             | C      | made fe   | eling D     | mad     | e to      | feel            |    |
| 5  | D  | on't         | fail (                    |          | ) off the             | radio  | when yo   | ou leave tl | he roo  | m.        |                 |    |
|    |    | A 1          | rememberir                | ng to tu | ern B                 | ren    | nemberin  | ng turning  | 5       |           |                 |    |
|    | (  | С -          | to remembe                | er to tu | rn D                  | to r   | emembe    | r turning   |         |           |                 |    |

| 6  | (            | ) to be confirmed as head of the company. |       |                                    |  |  |  |
|----|--------------|---|-------|------------------------------------|--|--|--|
|    | A            | A It is likely that Ms. Meg               | ha s  | Sharma B It seems Ms. Megha Sharma |  |  |  |
|    | (            | C Ms. Megha Sharma is co                  | erta  | in D Ms. Megha Sharma is probable  |  |  |  |
|    |              |   |       |                                    |  |  |  |
| 7  | The          | e population of the town is               | (     | ) as that of my hometown.          |  |  |  |
|    | A            | twice bigger                              | В     | twice as many                      |  |  |  |
|    | $\mathbf{C}$ | two times as large                        | D     | two times more                     |  |  |  |
|    |              |   |       |                                    |  |  |  |
| 8  | It's         | too late. You should (                    |       | ) him before he got upset.         |  |  |  |
|    | A            | apologize                                 | В     | apologize to                       |  |  |  |
|    | $\mathbf{C}$ | have apologized                           | D     | have apologized to                 |  |  |  |
|    |              |   |       |                                    |  |  |  |
| 9  | (            | ) going to a mov                          | vie t | onight?                            |  |  |  |
|    | A            | What about                                | В     | What do you say                    |  |  |  |
|    | $\mathbf{C}$ | Why don't you                             | D     | Why not                            |  |  |  |
|    |              |   |       |                                    |  |  |  |
| 10 | (            | ) late, please st                         | art ( | dinner without me.                 |  |  |  |
|    | A            | If I had been                             | В     | If I were                          |  |  |  |
|    | $\mathbf{C}$ | Should I be                               | D     | Would I be                         |  |  |  |

- III In the following paragraphs, one of the underlined parts is grammatically incorrect.

  Choose the incorrect part.
- A A meteorologist has presented the weather with her one-year-old son on her back.

  B She said she had her son on camera with her to celebrate International Babywearing Week. C The footage was broadcast by news networks across the country. D The response from the public on social media was overwhelming positive.
- 2 A Earlier this morning, Wall Street suffered it's worst trading day in eight months.

  B Every sector fell heavily, with big-name technology stocks among the biggest drags on the US market. C The negative sentiment was also reflected in European markets, D with Paris, London, and Frankfurt ending their sessions firmly in the red.

- 3 A Science has been particularly susceptible to "truth decay" B a term coined of the Rand Corporation c to describe the rise in the use of opinion over fact in political debates and public discourse. D Truth decay is characterized by increasing disagreement about facts and a decline in trust in experts.
- 4 A Somewhere between 2 and 3 billion years ago the Great Oxidation Event took place, B caused the mass extinction of anaerobic bacteria, the dominant life form at the time. C Cyanobacteria had now emerged, D which had the photosynthetic ability to produce glucose and oxygen out of carbon dioxide and water using the power of the sun. Oxygen was toxic to many anaerobic cousins, and most of them died off.
- 5 A For almost seventy years, we've routinely feed antibiotics to the animals we eat. B That's just a few years less than we've taken antibiotics ourselves. C And for just about as long, it's been clear that those antibiotic doses have been creating drug-resistant bacteria D that pass from meat animals to make humans sick.
- 6 A <u>The Lake Serpent</u>, an eight-year-old, 47-foot sailing ship, left Cleveland in September 1829 for the 55-mile trip to the Lake Erie Islands. B Having arrived, the ship's crew collected a load of stone to take back to Cleveland. C The ship never made it back, one of thousands to sink the Great Lakes. D <u>The Lake Serpent</u> was lost forever at the bottom of the lake.
- A Born into slavery in 1853, Bill Traylor witnessed the Civil War and Emancipation.

  B After seven decades of toil, too old to work any longer, he decided to pick up a pencil and paintbrush. C He produced more than a thousand images over the next four years. D His striking works on discarded cardboard attract the eye of professional artists who encouraged and collected his work.
- 8 A A fossil tooth study published today analyzes some of the old human remains ever found on the Italian Peninsula. B The teeth, which are some 450,000 years old, have some telltale features of the Neanderthal lineage of ancient humans. C Dating back to the Middle Pleistocene, D the fossils help to fill in gaps in a complex part of the hominid family tree.
- 9 Hong Kong is one of the densest cities on Earth. A Consisting of more than 200 islands, metropolis is bounded by the ocean and by the border with mainland China.

B There are 7.3 million people and nowhere to go but up. C But what if we could just make more islands? D That's exactly what a think tank recently proposed, claiming an artificial island could house up to 1.1 million more people.

10 A It may seem like little can be done to lessen the blow of a hurricane. B But according to new research, help in tempering the power of hurricanes could one day come from an unexpected source: offshore wind farms. C The idea of deliberately modifying the weather with wind turbines has been around in decades, D but little work has been done to calculate whether or not it could really work.

IV Choose the most suitable word or phrase from the list to fill each of the numbered blanks in the passage below.

The 20th century was a remarkably (1 ) one for physics. (2 ), Albert Einstein's general theory of relativity helped us view gravity not as a force but as a distortion of space. Then Max Planck, Erwin Schrödinger, and Werner Heisenberg gave us quantum mechanics — and a fresh understanding of the subatomic world.

( 3 ) the middle of the century, two new forces were discovered deep within the atom (the strong and weak nuclear forces). Finally, in the century's last decades, we got the Standard Model of particle physics — an accounting of all the particles and forces ( 4 ) in our universe.

But the new century brought (5 ). Yes, there have been some remarkable findings, (6 ) the 2012 discovery of the Higgs Boson and the discovery of gravitational waves four years later. But those triumphs were (7 ) theories developed decades earlier — a full century earlier in the case of gravitational waves. And new ideas like string theory (which holds that matter is made up of tiny vibrating loops of energy) (8 ) unverified.

"All of the theoretical work that's been done ( 9 ) the 1970s has not produced a single successful prediction," says Neil Turok, director of the Perimeter Institute for Theoretical Physics in Waterloo. "That's a very shocking state of affairs."

This doesn't mean physicists aren't busy; the journals are publishing more research than ever. But all that research isn't doing much to advance our understanding of the universe — ( 10 ) not the way physicists did in the last century.

| 1  | A            | produced             | В    | product       | $\mathbf{C}$ | production             | D | productive   |  |
|----|--------------|----------------------|------|---------------|--------------|------------------------|---|--------------|--|
| 2  | A            | First                | В    | However       | $\mathbf{C}$ | In sum                 | D | Ultimately   |  |
| 3  | A            | At                   | В    | In            | $\mathbf{C}$ | Until                  | D | Upon         |  |
| 4  | A            | knowing as existence |      |               |              | knowingly for existing |   |              |  |
|    | $\mathbf{C}$ | known to exist       |      |               | D            | unknown of existent    |   |              |  |
| 5  | A            | a kind of optin      | nisn | ı             | В            | a lot of discoveries   |   |              |  |
|    | $\mathbf{C}$ | a rough patch        |      |               | D            | a series of successes  |   |              |  |
| 6  | A            | as such              | В    | contained     | $\mathbf{C}$ | including              | D | likely       |  |
| 7  | A            | based on             | В    | coming throug | h            | C evolving into        | D | resulting in |  |
| 8  | A            | become               | В    | go            | $\mathbf{C}$ | keep                   | D | remain       |  |
| 9  | A            | before               | В    | during        | $\mathbf{C}$ | in                     | D | since        |  |
| 10 | A            | at all               | В    | at hand       | $\mathbf{C}$ | at least               | D | at most      |  |

V Part I:Read the following passage and select the best answer to each question listed below it.

To see an audience closing its eyes doesn't always mean that your listeners are asleep. It may simply mean they're concentrating hard or wishing to avoid eye contact. In some cultures it's a well-established behaviour. I've talked to audiences (e.g., in Japan) where most of the people had their eyes closed most of the time. It's disturbing, if you're used to audiences who keep their eyes on you – as if each person is willing you to look back at them individually – and who give you lots of visual feedback.

Speaking abroad, to people with a different cultural or linguistic background, can seriously alter your delivery. They say humour doesn't travel. Nor, sometimes, does eloquence. Even if you and your audience all speak English, you need to be cautious. You may share the same language, but you don't share the same culture.

The contrast can manifest itself in all kinds of little ways, such as the colloquial expressions and idioms you use without thinking. Many of these depend on an understanding of a knowledge of local culture. I recall being in a seminar audience where a speaker from the USA was eloquently expounding his subject to an international group of teachers. He paused and asked if there were any questions. A participant asked one that evidently took him by surprise, because he was silent for a

few moments before saying, 'Hmm, that was from out of left field.' And he paused again.

The person sitting next to me nudged me and whispered: 'What does that mean?' I whispered back: 'I've no idea.' The lecturer noticed the whispering. 'Is there a problem?' 'We don't know what "from out of left field" means,' I said. 'Huh?' he exclaimed. His face was a picture. It had never occurred to him that this common American expression, from baseball (as I later learned), would not be understood. He had to explain, and he didn't find it easy. Eloquent he wasn't. Apparently, the left part of the outfield is furthest from the first base, so that if the ball is hit in that direction the fielder has the longest distance to throw it back. The expression thus means 'unexpected' or 'out of the ordinary'. I thanked him, adding: 'You played that with a straight bat.' Another facial picture. 'Huh?'

My cricketing idiom was just as opaque to him as the baseball idiom had been to a Brit. We both learned something about each other's sporting cultures that day. But here's the point: after the interchange, the speaker was far less eloquent than before. He seemed to be checking himself mentally to ensure that he didn't use any more culturally loaded expressions. And in the bar afterwards, he acknowledged that this was exactly what he had been doing.

Cultural differences affect far more than individual words and phrases. They can influence the content and delivery of your speech. Some cultures want to hear hard facts, data, scholarly references (e.g., Germany, Scandinavia); some want a lot of personal background (e.g., Italy and other Romance-speaking countries); some value eloquence and a high style of speaking (e.g., those in the subcontinent of India); some value emotional content and personal enthusiasm (e.g., many Latin American countries); some emphasize solidarity with the audience, such as a shared educational or locality background (e.g., the USA); some like humour, light-heartedness, and self-effacement (e.g., Britain); some expect formality, with explicit respect paid to the chairperson and any patrons present (e.g., East Asian countries).

- 1 According to the article, you don't have to be worried even if audiences closed their eyes during your talk because
  - A it is a habitual manner in some cultures.
  - B people usually give lots of feedback after the talk.
  - C that is a typical attitude in the USA.
  - D they will keep their eyes on you sooner or later.

| 2 | In<br>to | the article, the lecturer in the seminar had to adjust his style of speech according |
|---|----------|--|
|   | A        | the degree of formality.   |
|   | В        | the kind of audience.  |
|   | C        | the number of participants.  |
|   | D        | the type of topics.  |
| 3 | In       | the article, the sentence "You played that with a straight bat" spoken by the        |
|   | au       | thor was not understood by the addressee because                                     |
|   | A        | the addressee confused a baseball idiom with a cricket idiom.                        |
|   | В        | the addressee was not familiar with the local culture of the author.                 |
|   | C        | the author didn't know the language and culture of the addressee well.               |
|   | D        | the author misled the addressee by using a local idiom from the USA.                 |
| 4 | Aft      | ter the conversation between the author and the lecturer, the lecturer became less   |
|   | elo      | quent because  |
|   | A        | he attempted to use the idioms that are familiar with the audience.                  |
|   | В        | he became careful about using more formal language.                                  |
|   | C        | he realized that they share the same language and culture.                           |
|   | D        | he tried to avoid using culturally specific words and phrases.                       |
| 5 | Ace      | cording to the article, cultural differences influence both the content and delivery |
|   | of       | the speech. For example, evidence and loyalty to an organizer are highly valued      |
|   | res      | pectively  |
|   | A        | in Britain and the subcontinent of India.  |
|   | В        | in Germany and East Asian countries.   |
|   | C        | in Latin American countries and Japan.   |
|   | D        | in Scandinavia and Romance speaking countries.                                       |
|   |          |  |

V Part II: Read the following passage and select the best answer to each question listed below it.

Space flight will mark an important milestone this year – when NASA celebrates the 50th anniversary of US astronauts reaching the moon. In December 1968 Frank Borman, Jim Lovell, and Bill Anders – on Apollo 8 – swept over the

lunar surface and captured bright blue images of Earth rising above the grey plains of the moon. It was one of the most dramatic space missions ever flown. Manned landings followed, but after a few years, the US lost interest in lunar space flights.

But now NASA has revealed plans to return to the Moon and has asked European scientists and industry leaders to join the agency in a bold plan aimed at rebooting humanity's conquest of the solar system – in the form of an international manned station that will orbit the moon within the next decade.

The proposed station, the Lunar Orbital Platform-Gateway – known as Gateway – will allow astronauts to develop techniques that will open up the lunar surface to exploration and exploitation. At the same time, the station will help humans hone survival skills in deep space in preparation for future manned missions to Mars, says NASA.

Taking part in the station's construction would cost Europe more than \$1.3bn and a decision on whether to become involved will be taken at a meeting of European science ministers next year. If ministers give the go-ahead, the European Space Agency (ESA) would then join other international partners that NASA is recruiting to its Gateway project. These include the space agencies of Russia, Canada, and Japan.

"Essentially, Gateway will be a robotic outpost that will be visited by groups of astronauts – initially for weeks and then for months at a time," says David Parker, director of human spaceflight and robotic exploration for ESA and a keen supporter of the project. "They will learn how to survive in deep space and deal with problems such as radiation and meteorites. At the same time they will also direct robot craft that will explore the moon's surface."

A go-ahead for Gateway would also end the hiatus in manned space exploration that has lasted for almost a decade. Since the grounding of the space shuttle, human space flights have been restricted to launches of Russia's Soyuz space capsule, which is used to ferry crew and supplies to the International Space Station (ISS), and the few missions taken by astronauts on China's fledgling spacecraft.

Gateway should change that — and it will do so by taking advantage of a major advance in US space engineering that will occur when NASA begins flights with its new deep-space capsule, Orion, and its launcher, the Space Launch System in a few years. These will form the core components of Gateway along with modules similar to those now used as stores and crew quarters on the ISS, though NASA stresses

Gateway will be considerably smaller than the current Earth-orbiting space station.

And key to operation of their lunar station will be the extraction, from lunar soil, of minerals, chemicals and – most important – water. "Recent evidence suggests comets and asteroids have bombarded the moon for billions of years, depositing water – in the form of ice – on to its polar regions," said Mahesh Anand, reader in planetary science and exploration at the Open University.

Scientists like Anand believe it should be possible to use that water to turn the moon into a refueling station for long-term missions to Mars and beyond. Ice would be harvested, melted and electrolyzed – using power generated by solar panels – into its hydrogen and oxygen components. "You could then use that hydrogen and oxygen as liquid propellants," added Anand. "That is what powered the space shuttle's main engines after all. Then you could use the moon as a refueling post to power spaceships to Mars."

#### 1 Which statement is TRUE about Apollo 8?

- A A decade after the Apollo 8 mission, NASA finally succeeded in the first manned landing on the moon.
- B The Apollo 8 crew walked on the surface of the moon and captured bright blue images of the earth from there.
- C Frank Borman, one of the Apollo 8 crew, was not given a chance to walk on the moon on the mission.
- D In 1968 NASA launched Apollo 8 to celebrate the 50th anniversary of its moon exploration.

#### 2 Which statement is FALSE about Gateway, the proposed station?

- A It will enable astronauts to explore the moon's surface.
- B It will help astronauts to learn survival skills in deep space.
- C The European Space Agency will take over its construction from the Russian, Canadian, and Japanese space agencies.
- D The European Space Agency will take part in its construction together with other international partners, if European science ministers give the go-ahead.

#### 3 What will happen if Gateway is given the go-ahead by European science ministers?

- A Manned space exploration will be resumed, taking advantage of a major advance in US space engineering.
- B NASA will have to modify the plan of its new deep-space capsule, Orion, and its

- launcher, the Space Launch System.
- C Russia's space capsule and China's spacecraft will stop transporting crew and supplies to the International Space Station.
- D The program for manned space exploration that has lasted for nearly 10 years will be suspended.
- 4 According to the article, which of the following will be the most important to the operation of Gateway?
  - A It will be used to develop a new way of turning water into oil for the missions to Mars.
  - B It will demonstrate that smaller stations are more efficient than current Earth-orbiting stations.
  - C It will make it possible to obtain water from the soil of the moon along with minerals and chemicals.
  - D It will prove that water exists in the form of ice outside of the polar regions of the moon.
- 5 According to the article, what do scientists like Anand believe about the moon?
  - A They can install solar panels on the moon to generate electricity to be used as propellants for the space shuttle's engines.
  - B They can make the moon into a refueling post for space missions to Mars, using the water extracted from lunar soil.
  - C They can use the hydrogen in the polar regions of the moon as a substitute for other chemicals and minerals.
  - D They can use the water in the moon as propellants for space shuttles to fly faster than the current ones.