

工 学 部

入 学 試 験 問 題

A 日程 1 月 29 日

英 語

注 意 事 項

1. 試験監督者の指示があるまで、問題冊子を開かないこと。
2. 問題冊子に落丁、乱丁があった場合は、試験監督者に申し出ること。
3. 試験監督者の指示に従って、解答用紙の受験番号欄に受験番号を記入し、その下のマーク欄にもマークすること。
4. 受験番号が正しくマークされていない場合は、採点できないことがある。
5. マーク方式の解答方法は、下の『解答上の注意』をよく読むこと。
6. 試験終了後、問題冊子は持ち帰ること。

解 答 上 の 注 意

マーク方式での解答例

〔英語〕 解答群より、③をマークするときは、次の〔例〕のように解答欄の③にマークする。

〔例〕

1	①	②	●	④	⑤	⑥	⑦	⑧	⑨	⑩
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# 英 語

I. 次の英文を読み、問 A. 問 B. に答えよ（\*印を付した単語には注がある）。なお英文の内容は 2015 年 7 月 7 日時点のものである。

More and more companies are developing robots for the service industry, as demand is expected to rise among nonmanufacturers, who want robots for such physical work as nursing care and transporting luggage.

Demand for such robots is  to be on par with\* that for industrial robots widely used in manufacturing. The government aims to promote the use of robots as a solution for the country's labor shortage against the background of the graying\* population.

Cyberdyne Inc. , an emerging robot development firm based in Tsukuba, Ibaraki Prefecture, said Thursday it will introduce artificial intelligence-aided cleaning robots and porter robots for passengers for Haneda Airport's terminals.

The robots will know their own position at the airport and automatically move around the facility if their destination information is input in  , avoiding people and obstacles. The porter robots will carry passengers' bags and merchandise belonging to vendors\* in the airport buildings.

For human workers at the airport, power-assisted suit-type\* robots will be introduced to help them carry heavy luggage easily. Under a lease contract between the airport operator and Cyberdyne, 11 robots will be installed at the passenger terminals by September.

“We're providing technologies that will change the airport staff's  of working,” Cyberdyne Chief Executive Officer Yoshiyuki Sankai said proudly.

Wearable\* robots are believed to be gaining popularity in the nonmanufacturing sector, as they reduce the physical burden on workers in charge of such tasks as transporting luggage and nursing care.

Activelink, a Nara-based subsidiary\* of Panasonic Corp. , announced Thursday that its power-assist suit-type robot for mass production will go on sale from September. The company minimized the robot's weight by making the body with carbon fiber. The firm plans to aggressively market the product to logistic operators and construction companies.

Some robots produced for the service sector can communicate with people. In June, SoftBank Group Corp. started marketing Pepper, a robot that can be used for corporate promotion activities such as handing out packs of tissues in the street, in addition to family tasks. A Toshiba Corp. robot developed last year uses sign language\* for  with difficulty hearing.

Under the national strategy announced in January, the government aims to enlarge the market size to ¥2.4 trillion in 2020 from the current ¥660 billion. For nonmanufacturers — including service providers, and medical treatment and nursing care service providers — the government forecasts sharp market growth to ¥1.2 trillion from the current  of ¥60 billion.

(出典：Saori Kuramoto, “Firms promote robots for service industry,” *The Japan Times*, July 7, 2015, 一部改変)

注：on par with ～ ～と同等の      graying 高齢化する      vendors 販売店  
suit-type 着用型の      wearable 着用できる      subsidiary 子会社  
sign language 手話

問A. 文中の  ～  に入れるのに最も適当なものを、①～④の中から選び、  
解答欄にマークせよ。

- ① hardly      ② likely      ③ occasionally      ④ constantly
- ① advance      ② confidence      ③ difference      ④ ignorance
- ① drops      ② envelopes      ③ roads      ④ ways
- ① that      ② these      ③ those      ④ this
- ① character      ② figure      ③ failure      ④ exposure

問B. 6.～15. の各文が本文の内容に合っていれば解答欄の①にマークし、合っていなければ解答欄の②にマークせよ。

6. The number of companies developing robots for nonmanufacturers is now increasing.
7. The price of the robots for the service industry is getting higher and higher day by day.
8. The Japanese government expects the use of the robots to be an aid to solving the country's labor shortage problem.
9. The introduction of the power-assisted suit-type robots will enable the workers at Haneda Airport to carry heavy luggage more easily.
10. The robots introduced to Haneda Airport will guide passengers around the terminals.
11. The robots will be operated by remote control at Haneda Airport.
12. The burden on the workers who are engaged in transporting luggage and nursing care is becoming lighter thanks to wearable robots.
13. The robots for medical institutions are made with carbon fiber for considerable weight reduction
14. It is quite difficult, if not impossible, for companies to develop a robot which can communicate with us.
15. SoftBank Group Corp. robot Pepper can fill the role of corporate promotion activities.

II. 次の1.～5.の日本語の意味の英文を、書き出しの語句に続けて下にある語句を並べかえて作るとした場合、に入れるべきものはどれか。解答欄にマークせよ。

1. 彼女は史実にもとづく小説を書いた。

She wrote      fact.

① on    ② which    ③ based    ④ a novel    ⑤ was    ⑥ a historical

2. 期末試験は思っていたより簡単だった。

The term examination      expected.

① had    ② I    ③ than    ④ was    ⑤ easier    ⑥ much

3. イヤホンをしたまま自転車に乗ってはダメだ。

You      on.

① earphones    ② a bicycle    ③ must    ④ ride    ⑤ not    ⑥ with

4. いかにして二酸化炭素量を減らすかが問題だ。

The      of carbon dioxide.

① the amount    ② problem    ③ is    ④ reduce    ⑤ to    ⑥ how

5. 大雨の影響で高崎線は30分程度遅れているらしい。

It seems      the heavy rain.

① of    ② about 30 minutes    ③ is delayed    ④ that    ⑤ the Takasaki line

⑥ because

III. 次の1.～5.の英文の意味が通じるためには、の中にどのような語を入れたらよいか。下から選んでマークせよ。

1. The building is in harmony  the natural environment.

2. The terrible heat kept us  going out in the daytime.

3. I think it absurd to believe  ghosts.

4. There was nothing  100 yen left in my pocket.

5. He is leaving  Osaka next week.

[ 語群：① from    ② but    ③ to    ④ for    ⑤ with    ⑥ in ]

IV. 1. ~ 5.の英文に該当する英単語を下の語群 [①~⑩] から選び、解答欄にマークせよ。

1. a thing that is kept as a reminder of a person, place, or event

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2. the process by which different kinds of living organism are believed to have developed from earlier forms during the history of the earth

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3. a large number of people gathered together in a disorganized or unruly way

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4. fine, dry powder consisting of tiny particles of earth or waste matter lying on the ground or on surfaces or carried in the air

=

5. a person who writes for newspapers or magazines or prepares news to be broadcast on radio or television

=

[ 語群 : ① journalist    ② souvenir    ③ condition    ④ evolution  
          ⑤ target        ⑥ competitor    ⑦ crowd        ⑧ president  
          ⑨ dust            ⑩ infection ]

V. 36. ~ 40. の英単語のいちばん強く発音する箇所はどこか。解答欄にマークせよ。

36. am · a · teur  
      ①    ②    ③

37. con · fi · dent  
      ①    ②    ③

38. e · mer · gen · cy  
      ①    ②    ③    ④

39. nec · es · sar · y  
      ①    ②    ③    ④

40. dis · a · bil · i · ty  
      ①    ②    ③    ④    ⑤