英語(工学部・情報科学部・知的財産学部)

次の会話を読み、下記の設問に答えよ。(配点 25) Tom: Hi. I'm back. Aki: Hev, how was shopping with Daigo? How is he? He's OK. Actually, he's found a new job, so 1 . Ah, before I forget, he Tom: gave me this CD to return to you. Aki: Ha! He borrowed it about six months ago! Anyway, that's good news about his job, though. Where's he working? He got a job at a new bakery that's going to open up near the department Tom: store. He seems really excited and looks much happier. He can finally concentrate on baking bread, which is what he trained to do. Aki: Oh, that's great! He was so unhappy working at the bookstore. Tom: I know. He doesn't even like reading. Aki: What did his manager at the bookstore say when he told her he was going to quit? Apparently, his manager was OK with it. Actually, it was her who told him Tom: about the job at the bakery! She knew that he wasn't that happy at the bookstore and she knew about his long-term career plans. She heard about the new bakery and encouraged him to apply for a job. Oh. 2 ! So when will he start the new job? Aki: Tom: Well, the bakery wanted him to start now so that he could help them prepare for the grand opening next week, but his manager at the bookstore wanted him to work this week so that she had time to find someone to replace him. In the end, the bakery didn't mind if he started a week later and Daigo was willing to help the bookstore because they were so kind to him. Anyway, he said that we should go to the grand opening next week. They're going to give out loads of free bread and cakes to the customers.

(1) 空所 1 と 2 に入る最も適切なものを次の中からそれぞれ1つ選び、そ
の番号をマークせよ。
1 ① he's quite happy at the moment
② he's been feeling very ill recently
3 he doesn't like listening to music
he's extremely disappointed and bored
2 ① she loves music, too
② she sounds very unkind
3 that was really nice of her
4 I'm sure he's going to enjoy working with her
(2) <u>この会話の時点で</u> Daigo が働いているのはどこか。最も適切なものを次の中から1つ選
び, その番号をマークせよ。 3
① 本屋のみ
② パン屋のみ
③ 本屋とパン屋の両方をかけ持ちしている
④ 本屋でもパン屋でも働いていない
(3) 会話の内容に合うように、次の1)と2)の問いの答えとして、最も適切なものを下記の
中からそれぞれ1つ選び、その番号をマークせよ。
1) Why does Tom think Daigo will enjoy his new job?
① Daigo will have to learn completely new skills.
② Daigo will be able to use his knowledge and skills.
3 Daigo likes working in department stores.
Daigo can get free food at the bakery.
2) Which of the following statements is true? 5
1 Daigo will give the bookstore manager some CDs.
② The bakery is unhappy with Daigo.
3 Daigo thinks his old manager is unhelpful.
4 The bookstore manager needs time to find new staff.

KIRAN'S MANGROVE ADVENTURE TOURS

Come and join us on one of our fantastic Mangrove Adventure Tours! It's a fantastic way to experience some of Malaysia's famous mangrove forests. We have daily tours, led by one of our friendly and knowledgeable tour guides.

What's a mangrove?

Mangroves are trees which grow in salt water. They can be found in many of Malaysia's coastal areas.

We will visit a secret beach towards the end of the tour, so you may want to bring a swim suit and towel. It can get hot and sunny, so please bring any sun protection that you may require. Lunch is included and we will enjoy a delicious local curry on a floating restaurant.

Who will be my guide?

We have a team of ten native guides working for us. All of our guides grew up in the local area and have extensive knowledge of the mangrove forests. The tours are given mainly in English although some guides can speak additional languages, such as French, German, Spanish, Chinese, and Japanese. As long as there are more than 4 people in your group, we may be able to provide the tour in another language if necessary.

How eco-friendly are Kiran's Mangrove Adventure Tours?

We make sure that no garbage is left by our tours (in fact, your guide will pick garbage up if he or she sees it). We also do not feed any of the animals because this can damage the carefully balanced ecosystem. Feeding wild animals can make them obese, prevents younger animals from learning how to hunt and allows the numbers of the animals' natural prey to increase unnaturally.

① Near the sea	2 In fresh water rivers only
3 On mountain	On grasslands
(2) 空所 7	こ入る最も適切なものを次の中から1つ選び,その番号をマークせよ。
① How long d	oes the tour take?
② What do Ir	need to bring?
3 How can I	apply for the tour?
4 When do I i	need to pay?
(3) このツアーのガイ	「ドについて,本文の内容に合うものを次の中から2つ選び,その番号を
マークせよ。ただし	, 解答の順序は問わない。 8 9
① 全員が中国語を	話すことができる。
② マレーシア以外	♪の国で生まれ育ったガイドもいる。
③ 昼食にローカロ	1リーの昼食を調理してくれる。
④ 全員がマングロ	コープの森について豊富な知識を持ち合わせている。
⑤ 4人以上のグ)	シープには必ず 5 ヶ国語を話すガイドが含まれる。
⑥ 環境を守るため	りに,万一ツアー参加者がゴミを捨てたら拾う。
(4) 本文の内容に合う)ように,次の英文の空所に入る最も適切なものを下記の中から1つ選び,
その番号をマークセ	E.C.
According to the a	dvertisement, giving food to the local wildlife is bad because
10	
1 they do not g	et enough nutrients
2 it can cause	an imbalance in animal populations
3 it is bad for	other tour companies

(1) 次の問いの答えとして最も適切なものを下記の中から1つ選び、その番号をマークせよ。

Where can Mangrove trees usually be found? 6

4 younger animals are encouraged to hunt

Join a Tour of the ABC Today Osaka Head Office

ABC Today offers tours of its Osaka head office. A tour guide with a lot of experience as an editor will take you around the news rooms and printing facilities. You will learn how the ABC Today newspaper is

Days and Times

Tours are offered Monday through Friday (except on national holidays and the New Year holidays). The tours last for 90 minutes and are available twice a day. (7) tour starts at 10:00 and (4) at 13:30.

Admission

Free

13 Age Requirement

Eight years of age or older

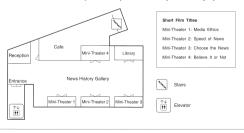
*Elementary school children must be accompanied by a parent or guardian.

Reservation

The tours of ABC Today require a reservation. Please call 06-6XXX-YYZZ.
Reservations may be made up to three months and at least six business days
in advance. Schools can make reservations prior to the regular booking date.
Each group should consist of between two and fifteen people. For elementary
schools, we consider one class as one tour group.

Visit the Learning Center

The Learning Center, which is located on the seventh floor of the building, offers many interesting 10-minute videos screened in Mini-Theaters. In addition, the Learning Center News History Gallery features an exhibition of historic moments covered by ABC Today and the history of our company.



(1) 空所 11 に入る最も適切なものを次の中から1つ選び,その番号をマークせよ。
1) produced 2 product 3 producing 4 production
(2) 空所(ア)と(イ)に入る組み合わせとして最も適切なものを,次の中から1つ
選び、その番号をマークせよ。 12
(7) - (1)
① One — two
② The first — the second
3 The other — the next
① Top — bottom
(3) 空所 13 に入る最も適切なものを次の中から1つ選び,その番号をマークせよ。
1 Old 2 Young 3 Minimum 4 Maximum
① Old ② Young ③ Minimum ④ Maximum (4) この見学ツアー案内の内容に合っているものを次の中から1つ選び、その番号をマークせ
©
(4) この見学ツアー案内の内容に合っているものを次の中から1つ選び、その番号をマークせ
(4) この見学ツアー案内の内容に合っているものを次の中から1つ選び,その番号をマークせよ。 14
 (4) この見学ツアー案内の内容に合っているものを次の中から1つ選び、その番号をマークせよ。 14 ① 見学ツアーは視日にも行われる場合がある。
 (4) この見学ツアー案内の内容に合っているものを次の中から1つ選び、その番号をマークせよ。 14 ① 見学ツアーは投日にも行われる場合がある。 ② 小学5年生は、大人同伴でなくても見学できる。
 (4) この見学ツアー案内の内容に合っているものを次の中から1つ選び、その番号をマークせよ。 14 ① 見学ツアーは投日にも行われる場合がある。 ② 小学5年生は、大人同伴でなくても見学できる。 ③ 学校向けの見学ツアーの予約は3ヶ月以上前でもできる。
 (4) この見学ツアー案内の内容に合っているものを次の中から1つ選び,その番号をマークせよ。 14 ① 見学ツアーは役日にも行われる場合がある。 ② 小学5年生は、大人同伴でなくても見学できる。 ③ 学校向けの見学ツアーの予約は3ヶ月以上前でもできる。 ④ 小学生は、1グループ15名が上限である。
 (4) この見学ツアー案内の内容に合っているものを次の中から1つ選び,その番号をマークせま。 14 ① 見学ツアーは祝日にも行われる場合がある。 ② 小学5年生は、大人同伴でなくても見学できる。 ③ 学校向けの見学ツアーの予約は3ヶ月以上前でもできる。 ④ 小学生は、1グループ15名が上限である。 (5) ラーニングセンターについて、ツアーの案内の内容に合うものを次の中から1つ選び,そ

3 The reception is next to the stairs.

4 The library is situated between Mini-Theaters 1 and 3.

Ⅳ 次の英文(南米大陸チリ北部のアタカマ砂漠に設置されたアルマ望遠鏡の紹介記事)を読み下記の診断に答えよ。(配立 55)

The world's largest and most powerful radio observatory opened in the world's coldest desert at an altitude of 5,000 meters in northern Chile. Located in the Atacama Desert, the observatory—known as ALMA—consists of 66 radio telescopes spread over an area of 16 km².

Japan, the United States and leading European countries have 16 some ¥100 billion on the ALMA project, with Japan shouldering ¥30 billion of the cost. It is hoped that ALMA will make great contributions to enhancing human knowledge of the birth and evolution of the 17.

The radio telescopes forming ALMA are actually parabola antennas, 54 of which are 12 meters in diameter and the remaining 12 antennas are 7 meters across. By spreading these antennas across a distance of 20 km, ALMA will have an observational power equivalent to that of a single radio telescope 20 km in diameter.

To prevent astronomers from being affected by altitude sickness, the telescopes will be remotely controlled from a facility at an altitude of 2.900 meters.

These radio telescopes will be able to catch weak radio millimeter waves (1 to 10 mm wavelength) and submillimeter waves (0.1 to 1 mm wavelength). They will be able to peer into the dust and gases that, though they fill the universe, optical telescopes can hardly capture.

Japan built a 45-meter-in-diameter radio telescope at the National Observatory's Nobeyama Solar Radio Observatory in Nagano Prefecture because the amount of vapor that absorbs millimeter waves is small there. Still, it is 18 the perfect site. Therefore, Japanese researchers searched for the best site and chose the Atacama Desert, which is 5,000 meters from the sea level, extremely dry and has flat land extending for a distance of more than 10 km.

Hopefully, ALMA will help accumulate data on how galaxies are formed, how organic molecules, which are the ingredients of life, are distributed in the universe and how planets, where life can be born and develop, are formed.

The resolution of ALMA is about 10 times better than that of both the Subaru Telescope placed at a 4,139-meter-high point on Mount Mauna Kea, Hawaii Island, and the Hubble Space Telescope orbiting at 559 km above the Earth. By combining data obtained by ALMA and those from optical telescopes such as Subaru and Hubble, it will become possible to study the evolution of the universe just after its birth.

(A new era in space observation, The Japan Times, April 6, 2013)

(1) 空所 16 ~ 18 に入る最	も適切なもの	を次の中から、	それぞれ1つ選び、そ
の番号をマークせよ。			
16 ① spend ② spend	ling 3	spends	4 spent
17 ① distance ② unive	rse 3	desert	4 power
18 ① because of ② in fac	et 3	not	4 exactly
(2) アルマ望遠鏡を構成する66基のパラボ	ラアンテナに:	ついて, 最も適	切なものを次の中から
1つ選び,その番号をマークせよ。 1	9		
① 直径12メートルの円を中心に54基が?	音集し,他の1	2基はそれから	7メートル離れた位置
にある。			
② 54基が直径12メートルの円の周囲に再	己置され、残り)の12基は7メ	ートル間隔で十文字に
並んでいる。			
③ 直径12メートルのものが54基と、直径	≧7メートルの)ものが12基設	置されている。
④ 54基は直径12メートルの大きさで、	5備の12基は直	紅径 7 メートル	である。
(3) 下線部1)"equivalent" と文脈を変え	ずに置きかえ	られる最も適い	切な語を次の中から1
つ選び、その番号をマークせよ。 20			
① equal ② related	3 uniqu	е 4	like
(4) 下線部2) "a facility" は,何を行うた	めの施設か。	最も適切なもの	のを次の中から1つ選
び,その番号をマークせよ。 21			
① パラボラアンテナの一部を格納する			
② アルマ望遠鏡を遠隔操作する			
③ 高山病になった観測者を回復させる			
④ 波長の短い電波を観測する			
(5) 下線部3) の和訳として最も適切なもの)を次の中から	っ1つ選び, そ	の番号をマークせよ。
22			
① これらの電波望遠鏡によって廊はとら	・チスニとがで	**************************************	スだろうが 宇宙会体

- ① これらの電波望遠鏡によって態はとらえることができるようになるだろうが、宇宙全体 を満たしているガスについては、光学望遠鏡による観測にほとんど頼らざるをえない。
- ② これらの電波望遠鏡によって、宇宙空間に満ちあふれているにもかかわらず光学望遠鏡ではほとんどとらえることができない塵やガスを、観測することができるだろう。
- ③ これらの電波は應やガスを通り抜けて広がることができるだろうが、光学望遠鏡が宇宙 全体に観測範囲を広げても、それをとらえることはほとんどできない。
- ④ これらの電波は廳を通り抜け、さらには宇宙空間に満ちあふれているガスも貫通することができるだろうが、その観測はほとんど光学望遠鏡にゆだねるほかはない。

① 標高5,000メートルという高い場所にあること
② きわめて乾燥していること
③ 平坦な土地が広がっていること
④ 都市部から10キロメートル以上離れていること
(7) アルマ望遠鏡による観測によって蓄積されるデータとして,本文中に述べられていないも
<u>の</u> を次の中から1つ選び,その番号をマークせよ。 24
① 銀河系はどのようにして形成されたのか
② 有機分子は宇宙空間でどのように広がっているのか
③ 人類が移住可能な惑星はどこか
④ 惑星はどのように形成されているのか
(8) 次の英文の空所に入る最も適切なものを下記の中から1つ選び,その番号をマークせよ。
The Hubble Space Telescope 25 .
① is located on Hawaii Island
② goes around the Earth
3 is placed at a 4,139-meter-high point
4 is better than ALMA in performance
(9) 下線部4)の "those" と置きかえることができるものを次の中から1つ選び, その番号
をマークせよ。 26
① data ② times ③ plants ④ telescopes

(6) チリ北部のアタカマ砂漠がアルマ望遠鏡の設置場所に選ばれた理由として、本文中に<u>述べ</u> られていないものを次の中から1つ選び、その番号をマークせよ。 23

V 次の英文を読み, 下記の設問に答えよ。(配点 20)

A growing number of people are choosing to keep cats as pets. I also have two cats. Why do I prefer cats to dogs? One of the reasons is that they are independent and need less attention, so they won't get upset even if I do not have $(\underbrace{0})$ to $\underbrace{2}$ time $\underbrace{3}$ spend $\underbrace{4}$ of $\underbrace{5}$ much) with them every day. If I have to travel for a few days, they will be fine alone in the house. All I have to do is to leave plenty of food and water for them.

I believe cats are less demanding compared to dogs. While I am busy working on the computer, for example, they lie still at my feet. They do not want to go outside and (① as much ② dogs ③ little ④ run ⑤ as) do. There is no need to walk them outside.

Another reason is that they are definitely cleaner than dogs. If you have cats, you will notice that they are always cleaning themselves. Indoor cats never have any bad smells $\underbrace{\textcircled{1}}_{3}$ from 2 bodies 3 their 4 emitting 5 its). Overall I would say cats are better for more relaxed and casual people like me.

(1) 下線部1)~3)を文脈に合うように並べかえる際、不必要なものが1つ含まれている。 その語句をそれぞれ1つ選び、その番号をマークせよ。

下線部 1) 27 下線部 2) 28 下線部 3) 29

(2) 次の問いの答えとして最も適切なものを下記の中から1つ選び,その番号をマークせよ。 30

Why does the writer choose cats as her pets?

- (1) Because they need only food and water when she is not at home.
- 2 Because they emit good smells when cleaning themselves.
- 3 Because they need more attention from her than dogs.
- (4) Because they go outside when she does not want to be disturbed.