

工 学 部

入 学 試 験 問 題

B日程2月22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. 次の英文は、タンザニアのセレンゲッティ自然保護区に設置されたカメラが自動撮影した写真について述べた文章の一部である。これを読み、問 A. 問 B. に答えよ（なお、*印を付した語句には注がある）。

Hundreds of thousands of Serengeti “selfies*” are giving researchers a candid*, and often amusing, picture of what life is like on the African plain. Zebras eat dried grass, lion cubs play with their mother, elephants go for a stroll, and birds hitch a ride on the back of a wart hog.

The images were captured by 225 “camera traps” set up throughout Tanzania’s Serengeti National Park. The cameras took a picture when they detected motion nearby. Often, the photos were snapped with the animals staring directly into the lens.

Ecologist Alexandra Swanson set up the cameras in 2010, when she was a graduate student* at the University of Minnesota and wanted to observe how the Serengeti’s predators* interacted with* other species. She spent years driving from camera to camera, changing their memory cards and batteries every two months.

“When we first started getting these photos, they were just breathtaking*,” said Swanson, who is now a researcher at the University of Oxford in England. “You’re seeing these animals at their most authentic*.” Those animals include some of the Serengeti’s most famous animals, such as lions, cheetahs, baboons and hippopotamuses. The cameras also spied lesser-seen species such as honey badgers, zorillas and aardwolves.

Camera traps allow researchers to observe wildlife in remote locations and to monitor species as they move across vast areas. The results are often as amusing as they are enlightening. “You just see things you’d never otherwise see — these animals making funny faces, staring into the camera, running toward the camera,” Swanson said.

From a research standpoint, the automatically triggered cameras are appealing because they’re cheap and not very invasive to wildlife (though every once in a while, an elephant might smash a camera or a hyena might eat one).

However, they produce a massive volume of images, making it difficult to process the results. “A lot of people who use camera traps often overwhelmed by the number of photos they have to go through,” Swanson said. In three years, Swanson’s cameras amassed 1.2 million sets of images, which were published and described this week in the journal *Scientific Data*.

Analyzing such a large number of images too much for one person. Swanson initially recruited a dozen undergraduates* to help, but still they couldn’t keep up. Swanson asked fellow ecologist Margaret Kosmala, whose background is in computer science, there was a way for a computer to analyze the photos.

“I said no,” said Kosmala, who is now a researcher at Harvard University. “Computer vision research isn’t actually capable yet in terms of identifying* animals in pictures.”

But Kosmala saw the images and was blown away*. She thought maybe the researchers could enlist* volunteers — hundreds of them — to help. So the pair

teamed up with Zooniverse, a website that hosts citizen-science projects, to create Snapshot Serengeti. Since its start in 2012, 30,000 people have joined Snapshot Serengeti to help analyze 10.8 million images. found animals in more than 300,000 images and identified 40 species.

(出典：“Stealth ‘Selfies’ from Serengeti,” *The Japan News*, June 22, 2015 より抜粋，一部
改変)

注：selfies 「自撮り」写真 candid ありのままの
graduate student 大学院生 predators (ライオン等の) 捕食者
interacted with ～と互いに影響しあう breathtaking 息を呑むような
authentic 本物の undergraduates 学部生 identify ～を識別する
was blown away 感心した enlist ～を募集する

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

① is ② are ③ was ④ were

① was ② were ③ take ④ have

① that ② or ③ about ④ if

① when ② as ③ then ④ them

① The pictures ② The cameras ③ The undergraduates ④ The volunteers

問B. 以下の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 photos were taken by 225 cameras in Serengeti Park.
7. The cameras took a picture even when they sensed nothing moving nearby.
8. Many pictures were taken when the animals were looking into the lens.
9. Swanson set up the cameras because she wanted to know how the predators react to machines.
10. Swanson spent years changing cameras every two months.
11. Swanson was impressed with the first photos she had taken.
12. The cameras only took pictures of popular animals like lions and cheetahs.
13. Thanks to camera traps, researchers can remote-control the animals in faraway areas.
14. Swanson suggests that some of the pictures show animals doing what we wouldn't see if there were no camera traps.
15. Some of the cameras were broken or eaten by animals.

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. 男の子がトラックに轢かれたのはここだ。

It was by a truck.

① was ② here ③ that ④ the boy ⑤ over ⑥ run

2. 5年前スイスで買った時計を昨日失くしてしまった。

Yesterday I lost in Switzerland.

① bought ② the watch ③ 5 years ④ had ⑤ before ⑥ I

3. 地球温暖化がいわゆる温室効果により引き起こされることは良く知られている。

It is is called the greenhouse effect.

① that ② global warming ③ well known ④ is caused ⑤ what
⑥ by

4. このバスは次のサービスエリアで10分間停車します。

This bus 10 minutes.

① for ② service area ③ will be ④ the next ⑤ at ⑥ stopping

5. その単語の意味は皆目見当がつかない。

I means.

① idea ② no ③ the ④ have ⑤ word ⑥ what

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。下の語群から選んでマークせよ。

1. He tried to cut the rope a knife.

2. Finishing the work by tomorrow is next impossible.

3. The movie always reminds me my happy days.

4. Do you know what this sign stands ?

5. I was a loss what to do next.

[語群 : ① with ② at ③ in ④ for ⑤ of ⑥ to]

IV. 1.～5.の英文の説明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. the start of life as a physically separate being

=

2. the state of being known by many people

=

3. something that is difficult or impossible to understand or explain

=

4. sudden uncontrollable fear or anxiety, often causing wildly unthinking behavior

=

5. a person harmed, injured, or killed as a result of a crime, accident, or other event or action

=

[語群 : ① feature ② victim ③ quality ④ welfare
 ⑤ fame ⑥ panic ⑦ resistance ⑧ birth
 ⑨ mystery ⑩ weapon]

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

36. ac · cu · rate
 ① ② ③

37. cre · a · tive
 ① ② ③

38. e · lec · tron · ic
 ① ② ③ ④

39. ex · per · i · ment
 ① ② ③ ④

40. im · me · di · ate · ly
 ① ② ③ ④ ⑤