

文部科学省後援

# 技術英検

## プロフェッショナル試験問題

実施日：20xx年X月X日(x)

開始時刻：14時00分

終了時刻：16時00分

### <注意事項>

1. 受験番号、氏名をこのページ下欄に必ず記入してください。  
記入漏れの場合は無効となります。
2. 問題はIからVまで(全5問)あります。すべての問題を英語で解答してください。
3. 合計で60%以上の得点(120点以上)で準プロフェッショナル認定となります。  
記入漏れの場合は、無効となります。
4. 合計で75%以上の得点(150点以上)でプロフェッショナル認定となります。  
ただし、得点が50%未満の解答が1問でもあると、合計得点に関わらずプロフェッショナル認定されません。白紙解答の設問がないよう、気を付けてください。
5. 解答は「解答用紙」に書いてください。
6. 「試験問題」「解答用紙」はお持ち帰りにならず、提出してください。

受験番号	—P—
氏名	

I Read the article and answer questions (1) and (2) below in English. (50 点)

Ever since the Federal Aviation Administration issued new regulations in 2016 making it easier for news organizations to use flying robots, drones have become a new news-gathering tool. Prior to the change, a drone had to be piloted by someone trained and licensed for manned aircraft, requiring hours of cockpit experience. The new rules only require an operator to study and pass a test to be certified for drones. The updated rules “resolved a lot of uncertainty about TV station use of drones,” Henry H. Perritt, Jr., a professor at Chicago-Kent College of Law says in an email.

In fact, some journalism training programs are making big investments in a drone future. Matt Waite is a journalism professor at the University of Nebraska-Lincoln who heads the school’s Drone Journalism Lab. He has trained 390 journalists across the nation in the past year on how to use drones, and he says that probably about half of them have gone on to obtain FAA certification. He estimates that somewhere between “dozens to low hundreds” of U.S. news outlets — not just TV stations, but newspapers and radio stations, too — now use unmanned aircraft in news gathering.

Drone use is rising at a time when the once seemingly ubiquitous news helicopter is in decline. While definitive numbers are not available, TVNewsCheck, an industry publication, estimated in 2013 that there were only 100 to 120 news choppers still flying around the country, down from 180 before the late-2000s economic downturn.

For news outlets, drones are a far less expensive news-gathering tool than helicopters, which can cost \$3 million-\$4 million apiece, including the cost of cameras and equipment, and consume a significant amount of fuel. “You can buy a really good drone kit for about \$1,800,” says Waite. “That’s about what it would cost you to fly a helicopter for an hour.”

Waite says that drones are a more affordable way to supply the ever-increasing demand for video clips that can be posted on websites, and that the technology is well-suited for covering certain types of news events: “tornadoes, hurricanes, floods, massive traffic backups, stories like that,” he says.

Perritt adds, “Drones have the potential to supplant news helicopters to some degree and to provide aerial coverage for stations that cannot afford helicopters.” Because of their lower cost, he says, “the main advantage is that every news crew can go out with one and decide when its coverage might be useful.”

Drones have another advantage as well — since they are unmanned, journalists do not face the same risks that they would in news choppers. A recent helicopter accident in New Mexico, for example, claimed the life of a veteran TV reporter for a local station.

But drones also have limitations that give helicopters an advantage for other types of stories, according to Waite. For example, the FAA prohibits operators from flying drones directly over people, which would make it difficult to get close to a massive protest rally or a celebratory parade for a sports championship win. Most drones’ electric battery packs only allow them to stay aloft for 20 minutes, while helicopters can

stay in the air for hours at a time. And FAA regulations require that drone operators on the ground maintain visual contact with the unmanned aircraft.

Drones, Waite points out, would have been ill-equipped to cover what is perhaps the most famous aerial-footage story ever — 1994’s two-hour police pursuit of football star-turned-murder suspect O.J. Simpson’s white Ford Bronco on the Los Angeles-area freeway system. News copters were able to transmit live video of the chase, and it aired nonstop on TV viewers’ screens.

That is why there probably will be room for both copters and drones in journalism for the foreseeable future. Some news organizations, such as Jacksonville, Florida-based TV station WJXT, rely on both.

“We use our Sky4 helicopter here in Jacksonville to cover breaking news and to get to a scene quickly,” explains Bob Ellis, the station’s vice-president and general manager, in an email. “But drones often provide far better pictures and can help tell a much better story. In our coverage after Hurricane Irma just last week we used drone footage to show damaged areas that showed exactly what happened far better than using a helicopter could.”

“I believe there’s a place for all these technologies to be utilized,” he says. “I prefer to look at it from a content standpoint, ‘What is the technology that helps best tell the story?’ That’s how we look at it here at my station.”

“Drones won’t ever completely replace news helicopters. Because they are so much cheaper, they will be used in some markets instead of helicopters, and stations in big markets may renegotiate their helicopter contracts over time to use less helicopter time, filling the gap with drones,” Perritt says.

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(1) Create a sentence-form title that succinctly describes the content of this article within 15 words. (10 点)

(2) Summarize the article in English in around 120 words. (40 点)

## II Translate the following Japanese passage into English. (30 点)

太陽フレアは、磁気エネルギーの解放による放射線の大爆発で、黒点と密接な関係がある。フレアはこの太陽系における最大の爆発現象である。太陽面上の黒点周辺が明るく輝き、数分から数時間にわたって続くこともある。一般的に、太陽フレアは、フレアが放つ光子、つまり光によって見ることができる。フレアを監視する主な方法には X 線と可視光がある。フレアは、粒子（電子、陽子、さらに重い粒子）が加速されるところでもある。

III The following email contains five pieces of information the recipient needs to know. The information is numbered and sorted for you. Summarize the Japanese email in English in around 100 words. All the information must be included in your summary, but do not simply itemize them. Your summary must be written in an appropriate and paragraphed email style. (40 点)

X 様

お世話になっております。

先日のお打ち合わせではいろいろとご提案をいただき、ありがとうございました。

ご提案の内容を改めて社内で検討させていただきました。

① まず部品 A の価格なのですが、1 個 12 円ですと、弊社の予算を少し超えてしまいます。こちらを 1 個 10 円まで下げていただくことは可能でしょうか。② 部品 B はお見積り通りの価格でお願いいたします。③ ただ、2 万 5 千個を発注予定とさせていただいているかと思いますが、5 千個減らし、2 万個でお願いできませんでしょうか。

(③の続き) 弊社工場と打ち合わせた結果、御社からの部品到着後の最初の生産が 2 万台までしかできないことがわかりました。そうなりますと、5 千個ほどその次の生産まで部品を保管しなければならなくなるのですが、現在弊社の倉庫のスペースに余裕がありません。どうかご検討いただければと思います。

④ ご提案の、部品 B の中央に穴を開け、そこから配線を通す方法ですが、弊社の技術者は穴を開けた場合、耐用年数が下がるのではないかと心配しております。⑤ 過去、部品 B に穴を開けて使用した事例やその際のデータはお持ちでしょうか。

お返事お待ちしております。

どうぞよろしくお願いたします。

IV Read the passage below and answer questions (1) to (3). (40 点)

Clarity is an important factor in technical writing, but we always need to be careful in distinguishing between clarity and too much detail. It may be good to say “Click the Start button, which is located in the bottom left corner of your desktop” to a novice Windows user but saying just “Click the Start button” saves time for most users. “The JSTC R8000 color laser printer” may be good if you need to designate a specific type of printer out of many others but it can be replaced with “this printer” in its user manual without sacrificing clarity. When communicating information, you may feel like being generous and presenting everything you know. But remember that the reader is always busy. Try to give just as much information as is needed.

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- (1) Generally, the design specifications of a certain product require more detail than the user manual for the same product. Why is this? (10 点)
- (2) How will the reader be affected if you give too much detail in a user manual, for instance, as much detail as is required in design specifications? (10 点)
- (3) Rewrite the following instructions by eliminating unnecessary detail, making each step concise, and reordering the steps appropriately. (20 点)

Applying an underline to a letter, word, or phrase

It is often effective to apply underlines to letters, words, and phrases so that certain information is emphasized. If that is what you want to do, you can easily draw underlines by following the steps described below.

1. Make sure that the Home tab is selected on the ribbon, which is a set of toolbars at the top of the window, and locate the Font group.
2. Find and click the Underline icon in the Font group. The letters, words, or phrases you have selected beforehand will be underlined.
3. To use a different type of underline, click the small arrow pointing downward, which is located next to the Underline icon, and a dropdown list of underlines, including double underlines and dotted underlines, will be shown. In the dropdown list, click the underline that you want to use.
4. Before following the above steps, select a word, phrase, or paragraph to which you want to apply an underline.

- V The sentences in the following paragraph each contain one piece of information (therefore, a total of five pieces of information in the paragraph). Itemize each piece of information concisely. The information in the first sentence is already itemized for you. (40点)

Before using the air conditioner for the first time, please turn on the unit and run it in “ventilation” mode for 10 minutes. Please be sure that the air conditioner is mounted in a spot where it does not move easily. When you clean the machine, please make sure the power supply is disconnected first. Except in an emergency, please do not remove the power plug when the unit’s power is on and it is venting cool air. Also make sure you have a power outlet in your house that can be used exclusively for this unit, so that it does not have to share an outlet with another appliance.

- Run the air conditioner in “ventilation” mode for 10 minutes before your first use.

無断複製転載を禁ず