

1. 次の英文を読み、それに続く設問 A-1 から A-5 までに答えなさい。解答は、それぞれの設問に続く選択肢 1 から 3 までの中から、答えとして最も適切なもの一つずつ選び、その番号のマーク欄を塗りつぶしなさい。

A team of French doctors took to the skies to make history on Wednesday. The five-man medical team performed the first operation on a human being in zero-gravity conditions. A small growth was removed from the arm of a man on board an aircraft as it flew like a roller coaster in the sky.

The operation took more than three years to plan. This is the first step in a three-stage plan toward one day performing surgery in space. It is possible that these future operations could be performed by either a surgeon or a remotely controlled robot. The flight lasted three hours, but the operation took just over eight minutes. That is about the same amount of time that such an operation would have taken in a hospital.

The medical team and a cameraman flew on board a specially designed airplane. The plane had to fly in a roller coaster like way in order to create the zero-gravity conditions. At the top of the curve, there were between 20 and 22 seconds of weightlessness. This was repeated around 30 times over the three-hour flight.

The patient Philippe Sanchot was chosen because he is a keen bungee jumper. Bungee jumpers are used to the shocks of G-force strains. He was given only a local anesthetic and remained awake throughout the operation.

The relatively minor procedure was meant to give an idea of what surgery in space might be like. The purpose of the operation was to provide information about how blood flows in zero gravity or whether special equipment was needed.

<注> zero-gravity 無重力 growth 腫瘍 roller coaster (遊園地の)ジェットコースター G-force 重力や加速度によって物体にかかる力 strain (心身の)緊張・負荷 local anesthetic 局部麻酔薬

(設問)

A-1 Why was this operation so historic?

1. It was the first ever operation performed on board a moving aircraft.
2. The doctors performed an operation in space.
3. The operation was performed in weightless conditions.

A-2 Which of the following sentences is correct?

1. The doctors are planning to do another operation in three years' time.
2. The operation was part of a plan to do surgery in space.
3. The operation was planned as a case of robotic surgery in severe G-force conditions.

A-3 How long would the operation have taken in a normal hospital?

1. It would have taken three hours.
2. It would have taken around eight minutes.
3. It would take more than three years to plan.

A-4 Why was the man chosen to be the patient for this operation?

1. He was in very poor health.
2. His body was used to the sudden physical stresses expected during the flight.
3. The main reason the man was chosen was that he lived locally.

A-5 What do we know about the procedure that was performed?

1. It was not very major.
2. It was very minor but the patient lost a lot of blood during the operation.
3. It was very simple but the doctors needed to use more special equipment.

2. 次の英文 A-6 から A-9 までは、航空通信に関する国際文書の規定文の趣旨に沿って述べたものである。この英文を読み、それに続く設問に答えなさい。解答は、それぞれの設問に続く選択肢 1 から 3 までの中から、答えとして最も適切なものを一つずつ選び、その番号のマーク欄を塗りつぶしなさい。

A-6 At the commencement of any subsequent communication in distress and urgency traffic, it shall be permissible to use the radiotelephony distress and urgency signals.

<注> subsequent その後の

(設問) What is said about such communication in distress and urgency traffic?

1. Subsequent communication in distress and urgency traffic should not use the distress and urgency signals.
2. It is usual to use the radiotelephony distress and urgency signals only at the commencement of the first communication.
3. The radiotelephony distress and urgency signals may be used at the beginning of any such communication.

A-7 Distress and urgency traffic shall normally be maintained on the frequency on which such traffic was initiated until it is considered that better assistance can be provided by transferring that traffic to another frequency.

<注> initiate 開始する

(設問) At what point should distress and urgency traffic be transferred to another frequency?

1. It is usual to change the frequency when that is expected to make the assistance more effective.
2. It is considered that better assistance can be provided by immediately transferring to another frequency.
3. Distress and urgency traffic must not at any time be transferred to another frequency.

A-8 The station in distress, or the station in control of distress traffic, shall be permitted to impose silence, either on all stations of the mobile service in the area or on any station which interferes with the distress traffic.

(設問) Which of the following statements is true?

1. Only the station in distress may impose silence on all other stations.
2. Silence may be imposed by either the station in distress or the station in control of distress traffic.
3. It is the sole responsibility of the station in control of distress traffic to impose silence on any station which interferes with that distress traffic.

A-9 The distress communication and silence conditions shall be terminated by transmitting a message, including the words “DISTRESS TRAFFIC ENDED”, on the frequency or frequencies being used for the distress traffic.

(設問) At what times should the phrase “DISTRESS TRAFFIC ENDED” be used?

1. The words should be used to terminate distress communication and begin silence conditions.
2. This phrase is necessary at the end of all transmissions on frequencies being used for distress traffic.
3. These words shall be included in the transmission that ends the distress communication and silence conditions.

3. 次の設問 B-1 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-1 旅行者は、いわゆる『エコノミークラス症候群』を予防するために、機内を歩き回ることによって脚の筋肉を使うよう勧められている。

Travelers (ア) advised to try to exercise their leg muscles by walking (イ) the aircraft cabin (ウ) to (エ) what is (オ) as “economy class syndrome.”

- | | | |
|-----------|--------------|-------------|
| 1. around | 2. called | 3. circle |
| 4. had | 5. have been | 6. in order |
| 7. known | 8. predict | 9. prevent |

4. 次の設問 B-2 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-2 当ヘリコプターは、銚子沖を貴船に向けて飛行中です。貴船には、およそ 10 分後に到着する予定です。当ヘリコプターは、貴船の甲板に着陸することが出来ますか。

Our helicopter is (ア) off Choshi towards your ship. We will reach you (イ) around ten minutes. Is it (ウ) (エ) our helicopter to (オ) on the deck of your ship?

- | | | |
|------------|-----------------|-------------|
| 1. can do | 2. flight above | 3. flying |
| 4. for | 5. in | 6. land |
| 7. landing | 8. later | 9. possible |

5. 次の設問 B-3 の日本文に対応する英訳文の空欄（ア）から（オ）までに入る最も適切な語句を、その設問に続く選択肢 1 から 9 までの中からそれぞれ一つずつ選びなさい。解答は、選んだ選択肢の番号のマーク欄を塗りつぶしなさい。

（設問）

B-3 航空機局は、飛行中、権限を有する当局によって要求される聴守を継続し、安全上の理由による場合を除き、関係航空局へ通知することなく聴守を中止してはならない。

During (ア), aircraft stations shall maintain watch as (イ) by the appropriate authority and shall not cease watch, (ウ) (エ) reasons of safety, without (オ) the aeronautical stations concerned.

- | | | |
|-----------------|--------------------|--------------|
| 1. by | 2. except | 3. flight |
| 4. flown | 5. for | 6. informing |
| 7. notification | 8. requesting them | 9. required |