YBM(한상호)



8.Living with Robots_YBM(한상호)



◇「콘텐츠산업 진흥법 시행령」제33조에 의한 표시

1) 제작연월일 : 2019-10-24

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3) 이 콘텐츠는 「콘텐츠산업 진흥법」에 따라 최초 제작일부터 5년간 보호됩니다.

◇「콘텐츠산업 진흥법」외에도「저작권법」에 의하여 보호 되는 콘텐츠의 경우, 그 콘텐츠의 전부 또는 일부를 무 단으로 복제하거나 전송하는 것은 콘텐츠산업 진흥법 외에도 저작권법에 의한 법적 책임을 질 수 있습니다.



핵심문법 │ 전치사+관계대명사, 목적격보어로 쓰인 to부정사

- 문장에서 관계대명사가 전치사의 목적어 역할을 할 때 [전치사+관계대명사]의 형태로 바꾸어 쓸 수 있다.
 - ex. HUBO failed on its first attempt on the fifth task. + It had to use a drill to cut through a wall for the fifth task.
 - → HUBO failed on its first attempt on the fifth task which it had to use a drill to cut through a wall for.
 - → HUBO failed on its first attempt on the fifth task **for which** it had to use a drill to cut through a wall.
 - 이때 관계대명사 that은 [전치사+관계대명사]의 형태로 쓸 수 없음에 주의해야 한다.
- 5형식 문장은 [주어+동사+목적어+목적보어]의 형태로 쓰는데 이때 allow, ask, tell, teach 등의 동사는 목적보어로 to부정사 를 취한다.
 - ex. This awkward move cause them to lose their balance.
 - →목적보어는 목적어를 보충 설명하므로 '이 불편한 동작은 그들이 균형을 잃도록 만들었다'로 해석해야 한다.



대표유형 시험에 자주 출제되는 유형의 문제를 꼭 확인하세요!!

- ★① 글의 순서로 적절한 것 고르기
 - ② 글을 읽고 알 수 없는 내용 고르기
 - ❸ 괄호 안에서 문맥상 맞는 낱말 고르기
- ★4 빈칸에 들어갈 적절한 말 고르기
- **⑤** 주어진 문장이 들어갈 적절한 곳 고르기
- **6** 괄호 안에서 어법상 적절한 말 고르기
- ★️ 밑줄 친 부분 중 어법상 틀린 것 고르기

독해유형 글의 순서로 적절한 것 고르기

(4) (D)-(A)-(C)-(B)

⑤ (D)-(C)-(B)-(A)

1.

For the final task, climbing stairs, it was important that the robot be able to see its feet.

다음 글의 (A)~(D) 순서로 가장 적절한 것은?

- (A) But how did it see the steps if it was moving backwards? By rotating its upper body 180 degrees.
- (B) Other robots had difficulty doing this because they had to bend their bodies forward to see over their knees to scan the stairs.
- (C) That way, the robot's knees did not block the camera's view of either the feet or the floor.
- (D) This awkward move caused them to lose their balance. HUBO solved this problem in a clever way. It climbed the stairs backward.

After scanning the stairs, the robot set off to climb to the top, completing the task effortlessly.

- ① (A)-(C)-(D)-(B)
- ② (A)-(D)-(C)-(B)
- ③ (B)-(D)-(A)-(C)

독해유형 글을 읽고 알 수 없는 내용 고르기

다음 글을 읽고 '2015 DARPA Robotics Challenge 대회'에 대해 알 수 없는 것은?

Since then, there has been renewed emphasis on developing robots that can serve in dangerous situations. In response to Japan's nuclear disaster, the 2015 DARPA Robotics Challenge was created to speed up the development of robots that could work in disaster-stricken areas. The competition attracted 25 teams from around the world. The winner was a Korean team from KAIST who developed a robot called HUBO.

During the competition, the robots had to solve a series of problems they might come upon in a disaster situation. The tasks were: driving a vehicle, getting out of the vehicle, opening a door, locating and closing a leaking valve, using a drill to cut through a wall, pulling a plug out of a wall socket and then plugging it in, navigating rough terrain, and climbing stairs. HUBO completed all the eight tasks in the shortest time of all the competitors - 44 minutes and 28 seconds. The key to its success was its ability to move from a standing position to a kneeling position. HUBO had wheels attached to its knees and feet. When kneeling, HUBO was able to use these wheels to move around quickly and decisively.

- ① 대회가 생긴 이유
- ② 대회에 참가한 팀의 수
- ③ 대회에서 수행해야 할 과제의 수
- ④ HUBO가 가장 빨리 완수한 과제
- ⑤ 대회의 우승자 HUBO의 성공 비결

독해유형 괄호 안에서 문맥상 맞는 낱말 고르기

(A), (B), (C)의 각 괄호 안에서 문맥에 맞는 낱말 로 가장 적절한 것은?

During the competition, the robots were given a series of tasks they might (A)[avoid / encounter] in a disaster situation: driving a vehicle, getting out of the vehicle, opening a door, locating and closing a leaking valve, using a drill to cut through a wall, pulling a plug out of a wall socket and then plugging it in, navigating rough terrain, and climbing stairs. HUBO completed all eight tasks in the (B)[longest / shortest] time of all the competitors. The key to HUBO's success was its

ability to move from a standing position to a kneeling position. HUBO had wheels (C)[attracted / attached] to its knees and feet. When kneeling, HUBO was able to use these wheels to move around quickly and decisively.

(A)	(B)	(C)
① avoid	shortest	attracted
② avoid	longest	attached
3 avoid	shortest	attached
④ encounter	shortest	attached
⑤ encounter	longest	attracted

독해유형 빈칸에 들어갈 적절한 말 고르기

다음 글의 빈칸에 들어가기에 적절한 것은?

In 2011, an earthquake and its accompanying tsunami destroyed Japan's Fukushima nuclear power plant. The resulting nuclear disaster released large amounts of radioactive material into the surrounding area. Since it was impossible for humans to work in this environment, the Japanese government considered sending in robots to handle the situation. The robots the Japanese were using, however, were not up to the task. Eventually, _____.

- 1) robots were suitable for the extremely difficult work
- 2) it was proved that natural disaster could be prevented
- 3 robots did many things instead of humans in the nuclear power plant
- 4) the government decided to put some robots to destroy the nuclear power
- (5) robots couldn't take the place of humans in dealing with the dangerous situation

5. 다음 빈칸에 들어갈 말로 가장 적절한 것을 고르 시오.

The amazing robot, HUBO, is ______. The KAIST team had already built four HUBOs and had been improving them for years. They practiced outdoors, in good weather and bad, and on rough terrain. They burned up motor after motor, but never gave up. They approached each failure as a challenge to make a faster, stronger, and better robot. The DARPA Robotics Challenge eventually ended, but it is only the beginning. In the future, there will be other robots like HUBO. They will be called upon to perform complicated tasks that will be too dangerous for humans. Scientists expect that these robots will save lives and reduce the damage caused by future disasters.

- ① the most powerful creation to perform complicated tasks
- ② useful for us because it has been improved almost like a human
- 3 often made with the purpose of testing human limitations
- ① not the only one that can save people's lives and reduce the damage by disasters
- ⑤ a product of years of efforts and a future alternative for performing complex tasks

독해유형 주어진 문장이 들어갈 적절한 곳 고르기

6. 글의 흐름으로 보아, 주어진 문장이 들어가기에 가장 적절한 곳을 고르시오.

That way, the robot's knees did not block the camera's view of either the feet or the floor.

For the final task, climbing stairs, it was important that the robot be able to see its feet. (①) Other robots had difficulty doing this because they had to bend their bodies forward to see over their knees to scan the stairs. (②) This awkward move caused them to lose their balance. (③) HUBO solved this problem in a clever way. It climbed the stairs backward. (④) But how did it see the steps if it was moving backwards? By rotating its upper body 180 degrees. (⑤) After scanning the stairs, the robot set off to climb to the top, completing the task effortlessly.

*다음 글을 읽고 물음에 답하시오.

For the final task, climbing stairs, it was important that the robot (A)[be / to be] able to see its feet. Other robots had difficulty (B)[doing / to do] this because they had to bend their bodies forward to see over their knees to scan the stairs. This awkward move caused them to lose their balance. HUBO solved this problem in a clever way. It climbed the stairs backward. But how did it see the steps if it was moving backwards? By rotating its upper body 180 degrees. That way, the robot's knees did not block the camera's view of either the feet or the floor. After scanning the stairs, the robot set off to climb to the top, (C)[completing / completed] the task effortlessly.

문법유형 괄호 안에서 어법상 적절한 말 고르기

7. 글의 밑줄 친 (A), (B), (C)에 들어갈 가장 적절한 것은?

(A)	(B)	(C)
① be	doing	completing
② be	to do	completing
③ to be	doing	completing
④ to be	to do	completed
⑤ to be	doing	completed

*다음 글을 읽고 물음에 답하시오.

From the beginning, HUBO was better than the other robots at performing the tasks. It was able to drive a vehicle fast and when it @was encountered a barrier, it was able to turn the vehicle smoothly to avoid it. Next, it was able to get out of the car in less than four minutes and, once out of the vehicle, **b**getting on its knees and sped away.

As the series of eight tasks became © progressively more difficult, HUBO's performance on the tasks reflected the growing difficulty. On the fifth task, for @which it had to use a drill to cut through a wall, HUBO failed on its first attempt. Generally speaking, it was difficult for a robot to hold a drill in the right position and simultaneously press an on/off button. On the second trial, however, HUBO successfully completed the task. The task that took the longest time for HUBO was the sixth one, pulling a plug out of a wall socket and @put it back into another. It takes a human less than ten seconds to perform the task, but it took HUBO 13 minutes and 30 seconds.

문법유형 밑줄 친 부분 중 어법상 틀린 것 고르기

윗글의 밑줄 친 @~@ 중, 어법상 <u>틀린</u> 것은 몇 개인가?

- ① 1개
- ② 2개
- ③ 3개
- 4가
- ⑤ 5개

정답 및 해설

1) [정답] ③

[해설] 계단을 오르기 위해 로봇이 자신의 발을 볼 수 있는 것이 중요하다는 내용의 주어진 글 뒤에 다른 로봇은 어려움이 있었다는 내용의 (B)가 온 뒤, (이러한 어려움 때문에) 이와 같은 불편한 동작은 그들이 균형을 잃게 만들었지만 HUBO는 현명하게 해결했다는 내용의 (D)가 와야 한다. 그다음으로 HUBO가 어떻게 그 문제점을 해결했는지를 말하는 (A)가 온 뒤 마지막으로 이에 대한 부연설명을 하는 (C)가 와야 한다.

2) [정답] ④

[해설] ①일본의 핵 재난에 대한 대응으로 생겨났다. ②25팀이다. ③8가지의 과제이다. ⑤서 있는 자세 에서 무릎을 꿇고 있는 자세로 움직이는 능력이 다.

3) [정답] ④

[해설] (A) 로봇들이 '마주칠' 어려운 상황이라는 뜻이 므로 encounter이 적절하다. avoid는 '피하다'는 의미이다. (B) 뒤의 문장에서 HUBO의 성공 비결에 대해 이야기 하고 있으므로 HUBO가 가장 '짧은' 시간에 일을 마쳤음을 알 수 있다. (C) 무릎과 발에 바퀴가 '붙어있는' 것이므로 attached가 옳다. attracted는 '~에 끌리는'의 의미이다.

4) [정답] ⑤

[해설] 위험한 상황을 해결하기 위해 일본 정부는 로 봇을 보냈지만, 로봇이 그 일을 하기에는 적절하 지 않다고 했으므로 ⑤'로봇은 위험한 상황을 다 루는 데에 있어 인간을 대체할 수 없었다'가 적 절하다.

5) [정답] ⑤

[해설] 빈칸 뒤에서 카이스트 팀이 각고의 노력 끝에 HUBO를 만들었으며 이것이 미래에 인간을 위해 위험하고 복잡한 일을 해낼 수 있을 것이라고 했으므로 ⑤'수년간의 노력의 산물이며 복잡한 과업을 수행하기 위한 미래의 대체'가 적절하다.

6) [정답] ⑤

[해설] 주어진 문장의 That way는 문맥상 '상체를 180도 회전하는 것'을 의미하므로 ⑤에 들어가는 것이 가장 적절하다. (또한 ⑤ 뒤의 scanning과 도 문맥상 연결됨)

7) [정답] ①

[해설] (A) [It is+형용사+that~]구문에서 당연, 필요, 중요 등을 나타내는 형용사가 보어로 사용되는 경우 이어지는 절에는 당위를 나타내는 조동사 should가 생략되어 있으므로 동사를 반드시 원형으로 써야 한다. 따라서 be가 들어가야 한다. (B) '~하는데 어려움을 겪다.'라는 뜻을 가진 표현 「have trouble/difficulty/hard time +~ing」을 사용한 부분이므로 doing이 들어가야 한다. (C) 분사구문이 사용된 자리로 주절의 주어인 로봇은 스스로 과제를 완수한 것임으로 능동의 뜻을 갖는 현재분사 completing을 사용한다.

8) [정답] ③

[해설] @는 로봇이 장애물을 마주했으니 was encountered → encountered로 변경해야하고, ⓑ는 문맥상 sped와 병렬구조를 이뤄야 하므로 getting → got으로 변경해야하고, ⓒ는 앞의 pulling과 병렬구조니까 put → putting으로 변경해야한다.