〔Ⅲ〕次の英文を読み、下記の設問（A～C）に答えなさい。

Although the vast majority of robots in the world today—including those in research labs—are not humanoid, (ア)robots made in our likeness hold a special fascination. This is perhaps not surprising given that the word 'robot' was first used to describe a fictional humanoid robot. But (1)fiction aside, there are good reasons why robots that need to work with people might have to be humanoid: first, so they can use human tools and share human workspaces; and second, to be able to communicate naturally with humans (for instance, through speech, facial expressions, and gestures).

A robot is described as humanoid if it has a shape or structure that to some degree copies the human form. (2)Thus a robot head, with two vision sensors in approximately the correct place for eyes, positioned above a trunk, would be regarded as humanoid. If the robot has arms, then these would similarly need to be humanoid, attached by the shoulders to the trunk, with hands or grippers that resemble hands.

For a robot to be called humanoid, its form is more important than the detail of its components. If it has legs, for instance, it must be two-legged with some kind of hip joint, knee joint, and ankle joint—even if the legs may bear very little anatomical* resemblance to their human counterparts. Most humanoid robots are decidedly mechanical in their appearance and (イ)if formed of plastic components they may appear more like animation people or even animation impressions of what robots should look like.

A certain type of humanoid robot does, however, attempt a greater degree of accuracy to the human form and appearance, and these are referred to as *android*. They have artificial skin and hair, make-up and clothes, but like so many science fiction robots, (3)peel away their artificial skin and underneath are the circuit boards and motors of the robots. Except that these robots are real, the closest yet to what is for many the ultimate goal of robotics**: artificial people. Unfortunately, or perhaps fortunately, depending on your (4)point of view, today's android robots—although impressive on the surface—are far short of that dream.

In short, the problem is this: we can build the bodies but not the brains. Robot intelligence technology is behind robot mechatronics***—and (ウ)nowhere is the gap between the two so evident as it is in android robots. The problem is that if a robot looks realistically human, then we quite reasonably expect it to behave like a human. For this reason, whole-body android robots are, at the time of writing, disappointing.

*anatomical：解剖学上の

**robotics：ロボット工学

***mechatronics：機械電子工学

Based on Alan Winfield, *Robotics* (2012)

設　問

A．本文中の下線部（1～4）を置き換えるものとして最も適当なものを、それぞれ下記（a～d）の中から1つ選び、その記号をマークしなさい。

（1） fiction aside

a．along with fiction　　b．adding to fiction

c．regardless of fiction　　d．in opposition to fiction

（2） Thus

a．Therefore　b．Though　c．Instead of　d．In contrast

（3） peel away

a．paint well　b．take off　c．give up　d．look for

（4） point of view

a．perspective　b．sightseeing　c．discussion　d．definition

B．本文中の二重下線部（ア～ウ）が文中で表している内容に最も近いものを、それぞれ下記（a～d）の中から１つ選び、その記号をマークしなさい。

（ア） robots made in our likeness hold a special fascination

a．Some people are very interested in humanoid robots.

b．The majority of people are less interested in robots.

c．Special robots are very similar to humans.

d．Many people like robot technology.

（イ） if formed of plastic components they may appear more like animation people or even animation impressions of what robots should look like

a．By using plastic materials, humanoid robots will probably impress people.

b．The humanoid robots made of plastics resemble animation characters in their appearance.

c．Humanoid robots are made of plastic so that they are less like animation impressions.

d．Although plastic components are used in humanoid robots, the majority of people willingly choose to use them.

（ウ） nowhere is the gap between the two so evident as it is in android robots

a．There is no place in android robots where the gap between robot intelligence technology and robot mechatronics exists.

b．The bodies and brains of android robots are too complex for us to manufacture.

c．The difference between robot intelligence technology and robot mechatronics is clearly evident in android robots.

d．The problem of robot intelligence technology and robot mechatronics is caused by android robots.