

Type B 日本語訳なし スマホの方は横にしてご覧下さい。日本語付はスクロールダウンするとございます

4[B] Robot Manners Lesson 14 G2 Chobun Type B eTOC のレッスン以外で使用禁止 11.1(4B)A2E

1. As robot technology improves, robots are becoming an increasingly important part of
2. our daily lives.
3. Robots, of course, have many advantages over human beings.
4. They work hard, never need to rest, do not complain, and do not need to be paid.
5. Moreover, by performing simple tasks, they make it possible for human workers to
6. focus on jobs that require more skill.
7. Yet as more robots enter the work place, their creators face a new problem—how to
8. design them so that human beings can get along with them.

Further Questions & Sample Answers

9. **1)** What're some advantages of using robot workers over human workers?
10. *Robots will work harder, don't need to rest and don't need to be paid.*
11. A typical robot today is TUG, which is now used in more than 50 hospitals in the
12. United States.
13. TUG is a box-like robot on wheels that is able to carry things, push carts, and deliver
14. messages.
15. TUG is programmed to remember all the places in a hospital.
16. When a nurse wishes to send something to another nurse, for example, instead of
17. having to waste time carrying it, he or she puts it on TUG, selects the destination, and
18. the robot goes there on its own.
19. Hospital managers like TUG because it allows hospital workers to concentrate on the
20. jobs they were originally trained to do.

Further Questions & Sample Answers

21. **2)** What's TUG?
22. *TUG's a robot designed for bringing items from one place to another in a building so*
23. *that people can concentrate on their own jobs.*
24. **3)** What kind of things does TUG do?
25. *TUG can carry items, push carts and deliver messages and remember how to find its*
26. *way through the building.*
27. **4)** How does a person use TUG?
28. *They put the item on the robot and select where they want it to go.*



USE & PRINTING outside of eTOC are strictly PROHIBITED.

29. Unfortunately, not all hospital workers like TUG.
30. Bilge Mutlu, a specialist in human-robot interactions at the University of
31. Wisconsin—Madison, studied the reaction of workers to TUG in one hospital.
32. He found that many people disliked the robot's lack of manners.
33. For example, when a human being delivers a message to someone who is talking on
34. the telephone, he or she will usually wait until the person on the phone is free.
35. TUG simply interrupts the call and loudly announces, "TUG has arrived."

Further Questions & Sample Answers

36. **5)** Why do workers feel that TUG is impolite?
37. *TUG will interrupt them when they're on the phone and used to continue to be just as*
38. *loud at night as during the day.*

39.

40. Aethon, the company that makes TUG, is taking Mutlu's research seriously.

41. Aethon already programmed TUG to speak more quietly at night. However, it is very
42. difficult to program a robot to be polite.

43. One possible answer, being developed by scientists at the University of Washington, in
44. Seattle, is a program that allows robots to analyze and imitate human behavior.

45. This will only work, however, if the human beings that the robots copy are themselves
46. behaving politely.

Further Questions & Sample Answers

47. **6)** What's the goal of the team of scientists at the University of Washington mentioned
in this article?

48. *They want robots to be able to learn human behavior and copy it.*

49. **7)** What would you do with a robot if you had one?

50. *I would want a robot that would do the grocery shopping for me and do cooking for me.*

51. **8)** What's a rule you could teach to a robot to help it be more polite?

52. *Call people by their own names and recognize people's moods and respond to them
53. differently accordingly.*

54. **(37)** What will robot designers need to do from now on?

55. **1** Pay robots for performing simple tasks.

56. **2** Prevent robots from replacing human beings.

57. **3** Build robots that can concentrate on highly skilled jobs.

58. **4** Create robots that people feel comfortable working with.



59. **(38)** Why do people who run hospitals like TUG?

60. **1** It can guess what task it should do next.

61. **2** It can move easily from one hospital to another.

62. **3** It can stop workers from wasting time on simple jobs.

63. **4** It can help new nurse finds their way around the hospital.

64. **(39)** Bilge Mutlu discovered that people in one hospital

65. **1** felt that the way TUG acted as impolite.

66. **2** disliked it when TUG came too close to them.

67. **3** refused to listen to TUG's messages.

68. **4** thought that TUG worked too hard.

69. **(40)** What are some scientists trying to do?

70. **1** Use robots to teach people how to be more polite to each other.

71. **2** Program robots to behave more like human beings.

72. **3** Analyze the reasons why robots sometimes stop working.

73. **4** Design robots that do more work at night than they do in the day.

Review Questions

74. **1)** What're some advantages of using robot workers over human workers?

75. *Robots will work harder, don't need to rest and don't need to be paid.*

2) What's TUG?

TUG's a robot designed for bringing items from one place to another in a building so that people can concentrate on their own jobs.

3) What kind of things does TUG do?

TUG can carry items, push carts and deliver messages and remember how to find its way through the building.

4) How does a person use TUG?

They put the item on the robot and select where they want it to go.

5) Why do workers feel that TUG is impolite?

TUG will interrupt them when they're on the phone and used to continue to be just as loud at night as during the day.

6) What's the goal of the team of scientists at the University of Washington mentioned in this article?

They want robots to be able to learn human behavior and copy it.

7) What would you do with a robot if you had one?

I would want a robot that would do the grocery shopping for me and do cooking for me.

8) What's a rule you could teach to a robot to help it be more polite?

Call people by their own names and recognize people's moods and respond to them differently accordingly.

解答:(37)4(38)3(39)1(40)2



Not for use outside Flex English Community



English Teachers On Call

日本語訳付

4[B] – Robot Manners



Lesson14 G2 Chobun dokkai 11.1(4B)A2E

95. As robot 科学技術 (かがくぎじゆつ) technology よくなる improves, robots are becoming an ますます increasingly 大切 (たいせつ) な important

96. part of our 毎日 (まいにち) の 生活 (せいかつ) daily lives .

97. Robots, もちろん of course, have many 利点 (りてん) advantages over 人類 (じんるい) human beings. They work hard,

98. 一度 (いちど) も~ない never 休 (やす) み need to rest , do not 不満 (ふまん) を言う complain , and do not need to be 払 (はら) う paid .

99. Moreover, by さらに performing 実行 (じっこう) する simple 仕事 (しごと) tasks , they make it 可能 (かのう) な possible for human workers

100. to 集中 (しゅうちゆう) する focus on ~を必要 (ひつよう) する jobs that 製作者 (せいさくしゃ) ~に直面 (ちょくめん) する require ~の仕方 (しかた) more skill. Yet as more robots enter the

101. work place, their ~するために creators うまくやっていく face うまくやっていく a new problem— ~の仕方 (しかた) how to ~の仕方 (しかた) design them

102. so that human beings can うまくやっていく get along with them.

Further Questions& Sample Answers

103. 1) What are some 利点 (りてん) advantages of using robot workers over human workers?

104. 人間 (にんげん) の労働者 (ろうどうしゃ) を超えて (こ) ロボット (ろぼと) を使う (つか) 利点 (りてん) は何 (なに) ですか。

105. Robots will work harder, do not need to rest and do not need to be paid.

106. A typical robot today is TUG, which is now used in more than 50 hospitals in
107. the United States.

108. TUG is a box-like robot on wheels that is able to carry things, push carts, and
109. deliver messages. TUG is programmed to remember all the places in a hospital.

110. When a nurse wishes to send something to another nurse, for example, instead of
111. having to waste time carrying it, he or she puts it on TUG, selects the destination,
112. and the robot goes there on its own.

113. Hospital managers like TUG because it allows hospital workers to
114. concentrate on the jobs they were originally trained to do.

Further Questions& Sample Answers



115. 2) What is TUG? TUGは何ですか。
116. TUG is a robot designed for bringing items from one place to another in a building so
117. that people can concentrate on their own jobs.

118. 3) What kind of things does TUG do? TUGはどのような事をしますか。
119. TUG can carry items, push carts and deliver messages and remember how to find its
120. way through the building.

121. 4) How does a person use TUG? どのようにTUGを使いますか。
122. They put the item on the robot and select where they want it to go.

123. Unfortunately, not all hospital workers like TUG. Bilge Mutlu, a specialist in
124. human-robot interactions at the University of Wisconsin—Madison, studied the
125. reaction of workers to TUG in one hospital. He found that many people disliked
126. the robot's lack of manners.

127. For example, when a human being delivers a message to someone who is talking on
128. the telephone, he or she will usually wait until the person on the phone is free.
129. TUG simply interrupts the call and loudly announces, "TUG has arrived."

Further Questions& Sample Answers

130. 5) Why do workers feel that TUG is impolite? なぜ労働者はTUGを無礼と感じるのですか。
131. TUG will interrupt them when they are on the phone and used to continue to be
132. just as loud at night as during the day.

134. Aethon, the company that makes TUG, is taking Mutlu's research seriously.

135. Aethon already programmed TUG to speak more quietly at night.
136. However, it is very difficult to program a robot to be polite.

137. One possible answer, being developed by scientists at the University of
138. Washington, in Seattle, is a program that allows robots to analyze and imitate
139. human behavior.

140. This will only work, however, if the human beings that the robots copy are themselves
141. behaving politely.

Further Questions& Sample Answers



142. **6)** What is the ^{目標 (もくひょう)} goal of the team of scientists at the University of Washington mentioned in this ^{言及 (げんきゅう) した} article? ^{記事 (きじ)} この記事を ^{言及 (げんきゅう) した} ワシントン大学の ^{だいがく} 科学者の ^{かがくしゃ} チームの ^{もくひょう} 目標は何ですか。
 143. *They want robots to be able to learn human behavior and copy it.*
 144. **7)** What would you do with a robot if you had one? もしあなたがロボットを ^も 持っていたら ^{なに} 何がしたいですか。
 145. *I would want a robot that would do the ^{食料品料 (しょくりょうひんりょう)} grocery shopping for me and do cooking for me.*
 146. **8)** What is a rule you could teach to a robot to help it be more polite?
 147. あなたがロボットにもっと ^{れいぎ} 礼儀 ^{ただ} 正しくなるよう ^{おし} 教えることができる ^{ほうそく} 法則は何ですか。
 148. *Call people by their own names and recognize people's ^{見分 (みわ) ける} moods and ^{気分 (きぶん)} respond to them ^{答 (こた) える} differently ^{それに応 (おう) じて} accordingly.*

(37) What will robot designers need to do from now on?

149. **1** Pay robots for performing simple tasks.
 150. **2** Prevent robots from ^{防 (ふせ) ぐ} replacing ^{入 (い) れ替 (か) え} human beings. ^{人類 (じんるい)}
 151. **3** Build robots that can concentrate on highly ^{熟練 (じゅくれん) した} skilled jobs.
 152. **4** Create robots that people feel ^{付 (つ) き合 (あ) いやすい} comfortable working with.

(38) Why ^{なぜ} do people who run hospitals like TUG?

153. **1** It can ^{推測 (すいそく) する} guess what task it should do next.
 154. **2** It can move easily from one hospital to another.
 155. **3** It can stop workers from ^{時間 (じかん) を無駄 (むだ) にする} wasting time on simple jobs.
 156. **4** It can help new nurse finds their way around the hospital.



(39) Bilge Mutlu discovered that people in one hospital

157. **1** felt that the way TUG ^{行動 (こうどう) した} acted as impolite.
 158. **2** disliked it when TUG came too close to them. ^{嫌 (きら) った}
 159. **3** refused to listen to TUG's messages. ^{拒否 (きょひ) した}
 160. **4** thought that TUG worked too hard.

(40) What are some scientists trying to do?

161. **1** Use robots to teach people how to be more polite to each other.
 162. **2** Program robots to ^{振 (ふ) る舞 (ま) う} behave ^{～のように} more like human beings.
 163. **3** Analyze ^{分析 (ぶんせき) する} the reasons why robots sometimes stop working. ^{時々 (ときどき)}
 164. **4** Design robots that do more work at night than they do in the day. ^{～より}

Review Questions



169. **1)** What are some advantages of using robot workers over human workers?
 170. *Robots will work harder, do not need to rest and do not need to be paid.*
 171. **2)** What is TUG?
 172. *TUG is a robot designed for bringing items from one place to another in a building so*
 173. *that people can concentrate on their own jobs.*

174. **3)** What kind of things does TUG do?

175. *TUG can carry items, push carts and deliver messages and remember how to find its way through the building.*

177. **4)** How does a person use TUG?

178. *They put the item on the robot and select where they want it to go.*

179. **5)** Why do workers feel that TUG is impolite?

180. *TUG will interrupt them when they are on the phone and used to continue to be just as loud at night as during the day.*

182. **6)** What's the goal of the team of scientists at the University of Washington mentioned in this article?

183. *They want robots to be able to learn human behavior and copy it.*

184. **7)** What would you do with a robot if you had one?

185. *I would want a robot that would do the grocery shopping for me and do cooking for me.*

186. **8)** What's a rule you could teach to a robot to help it be more polite?

187. *Call people by their own names and recognize people's moods and respond to them differently accordingly.*

解答:(37)4(38)3(39)1(40)2

