

## Unit 7. ARTIFICIAL INTELLIGENCE

### TEST YOURSELF

#### I. Find the word which has a different sound in the part underlined.

1. A. spread      B. cream      C. bread      D. head
2. A. exterminate      B. extend      C. expand      D. example
3. A. sugar      B. stew      C. sauce      D. steam
4. A. interfere      B. incredible      C. intervention      D. ending
5. A. grate      B. shallot      C. marinate      D. staple
6. A. navigation      B. activate      C. faraway      D. mafunction

#### II. Choose the word which has a different stress pattern from the others.

1. A. futurist      B. malfunction      C. consequence      D. activate
2. A. promote      B. diverse      C. language      D. combine
3. A. exterminator      B. singularity      C. technological      D. similarity
4. A. librarian      B. experiment      C. historical      D. entertain
5. A. incredible      B. exterminate      C. exponential      D. humanity

#### III. Choose the best answer A, B, C or D to complete the sentences.

1. I'll have another key \_\_\_\_\_.  
A. made      B. making      C. to make      D. make
2. Do you have a newspaper \_\_\_\_\_ to your home?  
A. deliver      B. delivered      C. to deliver      D. delivering
3. I have not had the film \_\_\_\_\_ yet.  
A. develop      B. to develop      C. developing      D. developed
4. She had her hair \_\_\_\_\_ yesterday.  
A. done      B. do      C. to do      D. doing
5. Have her \_\_\_\_\_ these letters, please.  
A. type      B. to type      C. typed      D. typing
6. Robots can act as 24/7 \_\_\_\_\_ to children with disabilities or the elderly.  
A. equipment      B. devices      C. aids      D. contribution
7. Artificial intelligence is often the technology deployed to \_\_\_\_\_ the type of fraud that may be committed on your bank account.  
A. monitor      B. listen      C. request      D. recognize
8. We have just had the carpenter \_\_\_\_\_ this chair.

- A. made                      B. make                      C. to make                      D. making
9. What did you do this morning? We \_\_\_\_ the room whitewashed.
- A. had                      B. have                      C. got to                      D. order
10. I have had my room \_\_\_\_ today.
- A. clean                      B. cleaning                      C. cleaned                      D. being cleaned
11. \_\_\_\_ robots are machines, there is no need for sleep.
- A. Although                      B. As                      C. Therefore                      D. When
12. The students got the librarian \_\_\_\_ books for them.
- A. buy                      B. to buy                      C. bought                      D. buying
13. John had just had his brother \_\_\_\_ a house for him on Fifth Avenue.
- A. building                      B. build                      C. to build                      D. built
14. Let's have our waiter \_\_\_\_ some coffee.
- A. bring                      B. to bring                      C. bringing                      D. brought
15. You ought to have your coat \_\_\_\_.
- A. clean and press                      B. cleaned and pressed  
C. cleaning and pressing                      D. cleaning and pressed
16. The term 'Artificial Intelligence' was originally \_\_\_\_ by John McCarthy at a conference in which he \_\_\_\_ it as "the science and engineering of making intelligent machines".
- A. formed - defined                      B. formed - explained                      C. shaped - explained                      D. shaped - defined
17. He couldn't afford to \_\_\_\_ his car repaired.
- A. pay                      B. make                      C. do                      D. get
18. The teacher had the students \_\_\_\_ their test.
- A. hand in                      B. handed in                      C. handing in                      D. having handed in
19. The students got the librarian \_\_\_\_ books for them.
- A. buy                      B. to buy                      C. bought                      D. buying
20. Why don't you have that coat \_\_\_\_?
- A. cleaned                      B. clean                      C. cleaning                      D. to clean
21. Artificial Intelligence (AI) \_\_\_\_ to the "intelligence" of machinery.
- A. talks                      B. adds                      C. mentions                      D. refers
22. We had a professional photographer \_\_\_\_ pictures of everyone who participated in our wedding.
- A. take                      B. to take                      C. took                      D. takes
23. She doesn't like having her picture \_\_\_\_.

- A. take                      B. taken                      C. taking                      D. to take
24. I'm sorry I'm late, but I \_\_\_\_ my watch \_\_\_\_ on the way here.  
A. have/ cleaned      B. had/ clean      C. had/ cleaned      D. had/ to clean
25. Please have the cleaner \_\_\_\_ this meeting room.  
A. sweep                      B. swept                      C. sweeping                      D. to sweep
26. There is no doubt that the technology of artificial intelligence in the wrong \_\_\_\_ can cause mass destruction.  
A. persons                      B. controls                      C. fingers                      D. hands
27. Intelligent robots carry out many different tasks such as \_\_\_\_ delivery in a factory, pipe inspection, and exploration of dangerous environments.  
A. independent                      B. automatic                      C. automating                      D. automated
28. I'd like to have my shoes \_\_\_\_ at one.  
A. repair                      B. repairing                      C. repaired                      D. being repaired
29. My grandmother had a tooth \_\_\_\_ last week.  
A. fill                      B. filling                      C. filled                      D. to be filled
30. We had the roof \_\_\_\_ last year.  
A. mend                      B. mending                      C. mended                      D. being mended

#### IV. Give the correct form of the words.

- The concept of the artificial intelligence system is based on ..... Darwinian. EVOLUTING
- Insecticides are agricultural chemicals that ..... insects harmful to plants. EXTERMINATION
- We hope that cancer will not be ..... as a life- threatening disease. RECOGNIZE
- The intelligence of machines would exceed that of humans - a moment that futurists call the ..... SINGULAR
- The burglar alarm is ..... by movement. ACTIVATE
- He has succeeded in ..... his career in television. RESURRECT
- The drug caused a ..... in the brain. FUNCTION
- So far, only one person has survived an operation to .....an artificial heart. IMPLANTING

#### V. Choose the word or phrase among A, B, C or D that best fits the blank space in the following passage.

*customer                      package                      electronic                      artificial                      robots*  
*delivery                      communicate                      ingenious                      chores                      example*

Some robots may take care of the dishes, do your laundry, keep the house clean, or even go to the store to do your shopping. Robots that use (1) ..... intelligence are the ones that a lot of people are holding out for. Not only will these robots be able to take care of, but they will be able to learn as well.



There are some types of robots that already use a form of (2) ..... artificial intelligence called "swarm intelligence". As a(n) (3) ..... of how this works, scientists have created underwater robots that will be used to repair coral reefs that have been damaged. What these robots do is work together to rebuild damaged reefs. As they (4) ....., each one knows what has been done in one area of a reef and can help build other areas or build onto something that another robot has done. Working together, the (5) ..... create a new reef that can then be left to grow and thrive on its own.

Amazon, the major (6) ..... commerce company, has recently come out an (7) ..... idea. Instead of having a package delivered to a (8) ..... via delivery truck, Amazon will send out flying drones that will bring a package to a person's house for (9) ..... almost immediately. Just think about how amazing it would be when you order a small item from Amazon, choose immediate delivery, and within an hour a drone lands in your front yard and leaves your (10) ..... for you. These types of robots could turn out to be a dream come true for customers who like to get their orders super fast.

**VI. Choose the word or phrase among A, B, C or D that best fits the blank space in the following passage.**

It's only natural that people want to use the latest innovations to better themselves. Smart devices can truly do incredible things and (1) \_\_\_\_ simplify our day. They can also enhance our (2) \_\_\_\_, arms us with knowledge, and transform themselves to become cyborgs.

Cyborg is a term used to describe a being that is half human and half (3) \_\_\_\_\_. This may sound like something out of science-fiction novels, but some people have already adapted this lifestyle. One is artist Neil Harbisson. He was born completely colour-blind, and could only see black and white images. It seemed that he would never (4) \_\_\_\_\_ colour. After attending a cybernetics talk in college, he met an inventor who agreed to make a special device for him. They designed an eyeborg, a mechanical eye that converted colours into sound frequencies. This enabled Harbisson to hear colour and perceive the world in a different way. He (5) \_\_\_\_\_ going to museums to "hear" classic paintings. In fact, a simple walk in a different way. He started going to museums to hear classic paintings. In fact, a simple walk down a grocery store filled with colourful products produces some catchy tunes. Harbisson loves his eyeborg so much that he rarely takes it (6) \_\_\_\_\_. He now gives talks urging others to consider adding their own mechanical improvements.

In 1998, British scientist Kevin Warwick conducted his own experiment. He implanted a chip inside of his arm, which he used to control lights and other appliances at home. He later expanded the project (7) \_\_\_\_\_ placing electrodes inside his nervous system and linking it to the Internet. This allowed him to control external objects including robotic arms, amplifiers, and loudspeakers. His work remains influential as this example of extended sensory input was the first of its kind.

If you're interested in becoming a cyborg and you're (8) \_\_\_\_\_, a good place to start might be with a pair of Google Glass. Users wear it like ordinary eyeglasses, yet Google Glass is equipped with state-the-art electronics. Using voice (9) \_\_\_\_\_ you can have it take a picture of what you see, see directions right in front of you, or translate your voice into other languages. Hopefully, this experience will help you decide whether becoming a cyborg is right for you, or if you're content to remain a human like the (10) \_\_\_\_\_ us.

1. A. help on                      B. help to                      C. help over                      D. help out

- |                 |                |                   |               |
|-----------------|----------------|-------------------|---------------|
| 2. A. jobs      | B. perceptions | C. careers        | D. offices    |
| 3. A. model     | B. copy        | C. representation | D. machine    |
| 4. A. speak     | B. write       | C. share          | D. experience |
| 5. A. started   | B. gone away   | C. stayed         | D. survived   |
| 6. A. with      | B. by          | C. off            | D. for        |
| 7. A. by        | B. out in      | C. out with       | D. over       |
| 8. A. willing   | B. asking      | C. making         | D. doing      |
| 9. A. causes    | B. provides    | C. commands       | D. transmits  |
| 10. A. make out | B. make out    | C. rest of        | D. turn in    |

**VII. Read the following passage and choose among A, B, C or D the correct answer to each of the questions**

Although the "lie detectors" are being used by governments, police departments, and businesses that all want guaranteed ways of detecting the truth, the results are not always accurate. Lie detectors are properly called emotion detectors, for their aim is to measure bodily changes that contradict what a person says. The polygraph machine records changes in heart rate, breathing, blood pressure, and the electrical activity of the skin (galvanic skin response, or GSR). In the first part of the polygraph test, you are electronically connected to the machine and asked a few neutral questions ("What is your name?", "Where do you live?"). Your physical reactions serve the standard (baseline) for evaluating what comes next. Then you are asked a few critical questions among the neutral ones ("When did you rob the bank?"). The assumption is that if you are guilty, your body will reveal the truth, even if you try to deny it. Your heart rate, respiration, and GSR will change abruptly as you respond to the incriminating questions.

That is the theory; but psychologists have found that lie detectors are simply not reliable. Since most physical changes are the same across all emotions, machines cannot tell whether you are feeling guilty, angry, nervous, thrilled, or revved up from an exciting day. Innocent people may be tense and nervous about the whole procedure. They may react physiologically to a certain word ("bank") not because they robbed it, but because they recently bounced a check. In either case the machine will record a "lie". The reverse mistake is also common. Some practiced liars can lie without flinching, and others learn to beat the machine by tensing muscles or thinking about an exciting experience during neutral questions.

1. What is the main idea of this passage?

- A. Lie detectors distinguish different emotions
- B. Physical reaction reveal guilty
- C. Lie detectors make innocent people nervous
- D. How lie detectors are used and their reliability

2. According to the test, polygraph \_\_\_\_.

- A. measure a person's thoughts
- B. always reveal the truth about a person



C. make guilty people angry

D. record a person's physical reactions

3. According to the passage, what kind of questions is asked on the first part of the polygraph test?

A. incriminating

B. critical

C. emotional

D. unimportant

4. The word "**ones**" in paragraph 1 refers to \_\_\_\_.

A. questions

B. reactions

C. standards

D. evaluations

5. The word "**it**" in paragraph 1 refers to \_\_\_\_.

A. the question

B. your body

C. the assumption

D. the truth

6. The word "**assumption**" in paragraph 1 could best be replaced with \_\_\_\_.

A. belief

B. faith

C. statement

D. imagining

7. This passage was probably written by a specialist in \_\_\_\_.

A. sociology

B. anthropology

C. criminal psychology

D. mind reading

**VIII. Read the following passage and choose among A, B, C or D the correct answer to each of the questions.**

There has been much debate over the past few decades concerning fears that nation will lead to robots replacing human workers on a massive scale.

The increasing use of robotics, computers and artificial intelligence is a reality, but its full implications are far from cut and dried. Some forecasts present the future in a utopian way, claiming that robots will take over the tedious heavy work thus freeing up human time and potential, allowing for more creativity and innovation w the other end of spectrum are those who foresee an employment apocalypse, predicting that almost fifty percent of all American jobs could vanish within the next few decades. Former Microsoft chairman Bill Gates states that in 20 years robots could be in place in a number of job categories, particularly those at lower end of the scale in terms of skills.

The bottom line is that while the future is always uncertain, robots are a fixture of our society, which is not going to disappear. As with the Industrial Revolution, where machines were utilized in many tasks in place of manual laborers and social upheaval followed, the Digital Revolution is likely to place robots in various jobs. In spite of that, many of today's jobs were not in existence before the Industrial Revolution, such as those of programmers, engineers and data scientists. This leads other experts to criticize this alarmist approach of robot scare-mongering, which is invariably compared to the 19<sup>th</sup>-century "Luddites". This group was textile workers who feared being displaced by machines and resorted to violence, burning down factories and destroying industrial equipment - their rejection of inevitable progress has come to symbolize mindless ignorance.

Needless to say, exactly what new kinds of jobs might exist in the future is difficult to envision at present. Therefore, the **crux** of the issue is not whether jobs will be lost, but whether the creation of new vacancies will outpace the ever-increasing number of losses and what skills will be required in the future.

It is clearly not all doom and gloom, as demand for employees with skills in data analysis, coding, computer science, artificial intelligence and human-machine interface is rising and will continue to do so. Furthermore, the demand for skills in Jobs where humans surpass computers, such as those involving care,

creativity and innovative craftsmanship, are likely to increase considerably. Ultimately, the key lies in the adaptation of the workforces, through appropriate education and training, to keep pace with our world's technological progress.

1. What is the main concern associated with technological advances in the workplace?
  - A. safety at work
  - B. increased unemployment
  - C. the use of artificial intelligence
  - D. robots taking over the world
2. What do optimists predict technology will allow?
  - A. workplaces to become more relaxing
  - B. a greater enjoyment of life
  - C. flexible working hours
  - D. higher quality products
3. What can be inferred from the comments made by Bill Gates?
  - A. Changes will occur for many decades.
  - B. There will be increasing amounts of unskilled workers.
  - C. Highly skilled workers have less to worry about.
  - D. Technology will have a negative effect in the workplace.
4. Why is the example of the Industrial Revolution given?
  - A. It was also a time of great change in the workplace.
  - B. It had far less of an effect than the Digital Revolution.
  - C. It led to widespread unemployment in the world.
  - D. It resulted in a more violent society.
5. What is the modern-day view of the Luddites?
  - A. They managed to protect their jobs.
  - B. Their refusing to adapt to change is seen in a negative way.
  - C. Their adapting to new technology saved their jobs.
  - D. Their actions are inspiring many workers today.
6. Which of the following is closest in meaning to *crux* in paragraph 4?
  - A. The most complex part
  - B. The hidden message
  - C. The least understood part
  - D. The most important part
7. According to the article, which quality will technology never be able to replace?
  - A. teamwork
  - B. human compassion
  - C. the desire to manufacture goods
  - D. human intelligence
8. What is the main idea of this article?
  - A. There are few negative consequences to the Digital Revolution.

- B. Learning about technology is a natural part of human development.
- C. Workers will need to adapt to technological changes.
- D. Unemployment will increase dramatically as technology advances.