

Unit 7. ARTIFICIAL INTELLIGENCE

1. activate /'æktyveɪt/(v): kích hoạt
2. algorithm /'ælgərɪðəm/(n): thuật toán
3. artificial intelligence /'a:tɪfɪʃl ɪn'telɪgəns/(n.phr): trí tuệ nhân tạo
4. automated /'ɔ:təmeɪtɪd/(a): tự động
5. call for /kɔ:l fɔ:(r)/(v): kêu gọi
6. cyber-attack /'saibərətæk/(n): tấn công mạng
7. exterminate /ɪk'stɜ:mɪneɪt/(v): tiêu diệt
8. faraway /'fa:rəwei/(a): xa xôi
9. hacker /'hækə(r)/(n): tin tặc
10. implant /ɪm'pla:nt/(v): cấy ghép
11. incredible /ɪn'kredəbl/(a): đáng kinh ngạc
12. intervention /ɪntə'venʃn/(n): sự can thiệp
13. malfunction /'mæl'fʌŋkʃn/(n): sự trục trặc
14. navigation /nævɪ'geɪʃn/(n): sự đi lại trên biển hoặc trên không
15. overpopulation /'əʊvə,pɒpju'leɪʃn/(n): sự quá tải dân số
16. resurrect /'rezə'rekt/(v): làm sống lại, phục hồi
17. unbelievable /ʌnbɪ'lɪ:vəbl/(a): khó tin

Question 1: A. return B. repair C. resurrect D. response

Question 2: A. garnish B. dip C. slice D. grill

Question 3: A. machine B. robot C. human D. fiction

Question 4: A. applicable B. automation C. artificial D. evolution

Question 5: High intelligent machines can be automated to operate without human ____.

A. intervene B. intervening C. intervention D. interventionist

Question 6: The old astronomer patiently made his ____ and wrote down what he saw.

A. observation B. observatory C. observe D. observer

Question 7: One of the popular ____ used in smartphones at present is voice recognition.

A. applicant B. applicable C. applications D. apply

Question 8: I wish you would ____ the TV and go outside and get some exercise.

A. call off B. give off C. put off D. turn off

Question 9: Scientists are trying to ____ out the ways to reduce pollution from aircraft.

A. break B. call C. turn D. work

Question 10: I'll ____ you ____ to our research department. Please hold on.

A. put - away B. put - out C. put - through D. put - up

Question 11: No wonder the vacuum cleaner isn't working. You haven't ____ it ____.

A. brought - in B. given - in C. plugged - in D. pulled - in

Question 12: Whoever ____ up with that idea should have won the Nobel Prize.

A. came

B. caught

C. kept

D. put

Question 13: After the power failure last night, the washing machine started to ___, so I had to wash the clothes by hands.

A. make noise

B. malfunction

C. operate

D. work

Question 14: The biggest fear is that humans might ___ control over robots.

A. gain

B. keep

C. lose

D. take

Question 15: Researchers have ___ to the conclusion that your personality is affected by your genes.

A. arrived

B. come

C. got

D. reached

Question 16: It is likely that artificial intelligence might decide to ___ an end to humanity simply because it surpasses human intelligence.

A. come

B. make

C. put

D. take

Question 17: My sister ___ her laptop serviced last weekend.

A. did

B. got

C. made

D. took

Question 18: The dishwasher isn't working again, so my mother is thinking of having ___.

A. it repaired

B. it repairing

C. repaired it

D. repairing it

Question 19: We ___ while we were on holiday.

A. had our alarm system stolen

B. had stolen our alarm system

C. got stolen our alarm system

D. were stolen our alarm system

Mark the letter A, B, C, or D on your answer sheet to indicate the word(s) CLOSEST in meaning
Question 20: Internet search engines can help to predict the weather as well as traffic jams in a city.

A. announce

B. expect

C. forecast

D. reveal

Question 21: Ray Kurzweil suggests that exponential technological development will lead to the inevitable rise of artificial intelligence.

A. inapplicable

B. unavoidable

C. unrecognizable

D. invisible

Mark the letter A, B, C, or D on your answer sheet to indicate the word(s) OPPOSITE in meaning

Question 22: The critical issue is whether genuine artificial intelligence can ever be truly realized.

A. authentic

B. fake

C. unpretentious

D. true

Question 23: Smart robots have replaced humans in stressful and hazardous jobs and in assembly lines.

A. dangerous

B. risky

C. safe

D. perilous

Question 24: A: Do you know how this machine works? B: _____

A. It's very expensive.

B. Will you call the mechanic tomorrow?

C. Plug it in and push the green button.

D. I think it's quite heavy.

Question 25: A: _____ B: Oh, the bulb went out when I switched it on.

A. Are there anything wrong?

B. What matters to the lamp?

C. Does the machine work properly?

D. What's wrong with the lamp?

Artificial Intelligence History

The term artificial intelligence was coined in 1956, but AI has become more popular today thanks (26)_____ increased data volumes, advanced algorithms, and improvements in computing power and storage.

Early AI research in the 1950s explored topics like problem solving and symbolic methods. In the 1960s, the US Department of Defense took interest in this type of work and began training computers to mimic basic human reasoning. (27)_____ , the Defense Advanced Research Projects Agency (DARPA) completed street mapping projects in the 1970s. And DARPA produced intelligent personal assistants in 2003, long before Siri, Alexa or Cortana were household names.

This early work paved the way for the automation and formal reasoning (28)_____ we see in computers today, including decision support systems and smart search systems that can be (29)_____ to complement and augment human abilities.

While Hollywood movies and science fiction novels depict AI as human-like robots that take over the world, the current evolution of AI technologies isn't that scary – or quite that smart. Instead, AI has evolved to provide many specific (30)_____ in every industry. Keep reading for modern examples of artificial intelligence in health care, retail and more.

Question 26: A. of

B. on

C. to

D. in

Question 27: A. For example

B. Moreover

C. Therefore

D. However

Question 28: A. whose

B. where

C. when

D. that

Question 29: A. designed

B. design

C. designing

D. to design

Question 30: A. benefits

B. factors

C. qualities

D. tools

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 as 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.

Question 31: 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

Question 32: The word "ones" in paragraph 1 refers to _____.

- A. questions
- B. reactions
- C. standards
- D. evaluations

Question 33: The word "it" in paragraph 1 refers to _____.

- A. the question
- B. your body
- C. the assumption
- D. the truth

Question 34: The word "assumption" in paragraph 1 could best be replaced with _____.

- A. belief
- B. faith
- C. statement
- D. imagining

Question 35: This passage was probably written by a specialist in _____.

- A. sociology
- B. anthropology
- C. criminal psychology
- D. mind reading

The word "robot" first appeared in a 1921 stage play by Czech writer Karel Capek. In the play, a man makes a machine that can think, which he calls a robot and which ends up killing its owner. In the 1940s, the American science fiction writer, Isaac Asimov, wrote a series of stories about robots and invented the term 'robotics', the science of robots. Meanwhile, in the real world, the first robots were developed by an engineer, Joseph F. Engelberger, and an inventor, George C. Devol. Together they started Unimation, a manufacturing company that produced the first real robot in 1961, called the Unimate. Robots of this type were installed at a General Motors automobile plant and proved to be a success. They worked reliably and saved money for General Motors, so other companies were soon acquiring robots as well.

These industrial robots were nothing like the terrifying creatures that can often be seen in science fiction films. In fact, these robots looked and behaved nothing like humans. **They** were simply pieces of computer-controlled machines, with metal "arms" or "hands". Since they were made of metal, they could perform certain jobs that were difficult or dangerous for humans,

particularly jobs that involve high heat. And since robots were tireless and never got hungry, sleepy, or distracted, they were useful for tasks that would be tiring or boring for humans. Industrial robots have been improved over the years, and today they are used in many factories around the world. Though the use of robots has meant the loss of some jobs, at the same time other jobs have been created in the design, development, and production of the robots. Outside of industry, robots have also been developed and put into use by governments and scientists in situations where humans might be in danger. For example, they can be sent in to investigate an unexploded bomb or an accident at a nuclear power plant. Researchers also use robots to collect samples of hot rocks or gases in active volcanoes. In space exploration, robots have performed many key tasks where humans could not be present, such as on the surface of Mars. In 2004, two robotic Rovers, small six-wheeled computerized cars, were sent to Mars.

Question 36: When did the word robot appear?

A. before the 1920s B. in the early 1920s C. in the mid-1920s D. in the late 1920s

Question 37: Which of these statements is TRUE about Karel Capek?

A. He is a famous American playwright. B. He was the first to create the word “robot”.
C. He invented a machine that can think like humans. D. He made a robot kill a person.

Question 38: What does the word **they** in paragraph 2 refer to?

A. terrifying creatures B. humans C. science fiction films D. industrial robots

Question 39: What are industrial robots like?

A. They are computer-controlled machines. B. They are built with metal arms and legs.
C. They behave like humans. D. They can think like humans.

Question 40: Which of the following is **NOT mentioned** as a characteristic of robots?

A. They never need food to survive. B. They can survive without any sleep.
C. They are tired like humans. D. They can do jobs involving intense heat.

Question 41: What can be inferred from the passage about robots?

A. Their appearance negatively affects the job market.
B. They can stop active volcanoes from erupting.
C. They help humans travel to the outer space.
D. They take away some jobs but offer some in return.

Question 42: What is the author's attitude towards robots in this passage?

A. He appreciates them. B. He dislikes them.
C. He thinks they are a nuisance. D. He is crazy about them.

Question 43: According to the futurist Ray Kurzweil, humans could have tiny computerized machines or nanobots invent thanks to future medical advances.

A. could B. computerized C. invent D. thanks to

Question 44: The owners of modern manufacturing plants had workers do heavy and repetitive tasks replacing by robots.

A. manufacturing plants B. do C. repetitive D. replacing

Question 45: Before the cotton gin had been invented in 1794, American farmers had cheap slaves remove seeds from the cotton fiber.

A. had been invented B. had C. slaves D. from

Mark the letter A, B, C, or D on your answer sheet to indicate the sentence that is closest in meaning to each of the following questions.

Question 46: Why don't we get someone to fix our computer?

- A. Fixing our computer is someone else's duty.
- B. Let's have someone to fix our computer.
- C. Someone will have our computer fixed.
- D. Why don't we have our computer fixed?

Question 47: Someone stole my dad's mobile phone last night.

- A. My dad had his mobile phone stolen last night.
- B. My dad got someone steal his mobile phone last night.
- C. My dad asked someone to steal his mobile phone last night.
- D. My dad was robbed of his mobile phone last night.

Question 48: Someone is checking my car tyres for me.

- A. I'm getting my car tyres checked. B. I'm having my car tyres to be checked by someone.
- C. I have my car tyres checked regularly. D. My car tyres are being checked by myself.

Mark the letter A, B, C, or D on your answer sheet to indicate the sentence that best combines each pair of sentences in the following questions.

Question 49: My car needed servicing. Therefore, I took it to a garage.

- A. I took my car to a garage to have it serviced.
- B. I took my car, which needed to be servicing, to a garage.
- C. I had a garage get serviced my car.
- D. My car was taken to a garage to have it serviced.

Question 50: We don't have to wash the dishes any more. We have just bought a new dishwasher.

A. It is not necessary for us to wash the dishes, even when we have bought a new dishwasher.

- B. No longer do we have to wash the dishes because we have just bought a new dishwasher.
- C. The new dishwasher we have just bought needs doing the washing-up.
- D. With the help of the new dishwasher, we won't have to do the washing-up very often.