

<b>HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY AND EDUCATION FACULTY OF FOREIGN LANGUAGES LANGUAGE SKILLS SECTION</b>		<b>FINAL TEST OF ADVANCED ENGLISH 2</b> <b>Course code: ADVE440235</b> <b>READING SECTION</b> <b>Term 2 – School year 2019-2020</b>	
Invigilator 1	Invigilator 2	Duration: 40 minutes	Date: 29/06/2020
Examiner 1	Examiner 2	Test code: N/A	This paper has <b>8</b> pages.
Raw score:	Raw score:	No materials whatsoever allowed.	
<b>Converted score</b>	<b>Converted score</b>	Student's name: .....	
		Student ID No.: .....	
		Ordinal No.: ..... Room: .....	

- There are **8** pages in this test paper.
- There are 2 parts with **27** question items in this test, simulating reading passages 2 and 3 of IELTS reading test.
- You will **NOT** have time at the end of the test to transfer your answers into the answer sheet.

## ANSWER SHEET

1		15	
2		16	
3		17	
4		18	
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11		25	
12		26	
13		27	
14			

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## READING PASSAGE 1

You should spend about 20 minutes on Questions 1-14, which are based on the following passage.

### ROBOTS

*Since the dawn of human ingenuity, people have devised ever more cunning tools to cope with work that is dangerous, boring, onerous, or just plain nasty. That compulsion has culminated in robotics - the science of conferring various human capabilities on machines.*

**A** The modern world is increasingly populated by quasi-intelligent gizmos whose presence we barely notice but whose creeping ubiquity has removed much human drudgery. Our factories hum to the rhythm of robot assembly arms. Our banking is done at automated teller terminals that thank us with rote politeness for the transaction. Our subway trains are controlled by tireless robo- drivers. Our mine shafts are dug by automated moles, and our nuclear accidents - such as those at Three Mile Island and Chernobyl - are cleaned up by robotic muckers fit to withstand radiation.

Such is the scope of uses envisioned by Karel Capek, the Czech playwright who coined the term 'robot' in 1920 (the word 'robota' means 'forced labor' in Czech). As progress accelerates, the experimental becomes the exploitable at record pace.

**B** Other innovations promise to extend the abilities of human operators. Thanks to the incessant miniaturisation of electronics and micromechanics, there are already robot systems that can perform some kinds of brain and bone surgery with submillimetre accuracy - far greater precision than highly skilled physicians can achieve with their hands alone. At the same time, techniques of long-distance control will keep people even farther from hazard. In 1994 a ten- foot-tall NASA robotic explorer called Dante, with video-camera eyes and with spiderlike legs, scrambled over the menacing rim of an Alaskan volcano while technicians 2,000 miles away in California watched the scene by satellite and controlled Dante's descent.

**C** But if robots are to reach the next stage of labour-saving utility, they will have to operate with less human supervision and be able to make at least a few decisions for themselves - goals that pose a formidable challenge. 'While we know how to tell a robot to handle a specific error,' says one expert, 'we can't yet give a robot enough common sense to reliably interact with a dynamic world.' Indeed, the quest for true artificial intelligence (AI) has produced very mixed results. Despite a spasm of initial optimism in the 1960s and 1970s, when it appeared that transistor circuits and microprocessors might be able to perform in the same way as the human brain by the 21st century, researchers lately have extended their forecasts by decades if not centuries.

**D** What they found, in attempting to model thought, is that the human brain's roughly one hundred billion neurons are much more talented - and human perception far more complicated - than previously imagined. They have built robots that can recognise the misalignment of a machine panel by a fraction of a millimetre in a controlled factory environment. But the human mind can glimpse a rapidly changing scene and immediately disregard the 98 per cent that is irrelevant, instantaneously focusing on the woodchuck at the side of a winding forest road or the single suspicious face in a tumultuous crowd. The most advanced computer systems on Earth can't approach that kind of ability, and neuroscientists still don't know quite how we do it.

**E** Nonetheless, as information theorists, neuroscientists, and computer experts pool their talents, they are finding ways to get some lifelike intelligence from robots. One method renounces the linear, logical structure of conventional electronic circuits in favour of the messy, ad hoc arrangement of a real brain's neurons. These 'neural networks' do not have to be programmed. They can 'teach' themselves by a system of feedback signals that reinforce electrical pathways that produced correct

responses and, conversely, wipe out connections that produced errors. Eventually the net wires itself into a system that can pronounce certain words or distinguish certain shapes.

**F** In other areas researchers are struggling to fashion a more natural relationship between people and robots in the expectation that some day machines will take on some tasks now done by humans in, say, nursing homes. This is particularly important in Japan, where the percentage of elderly citizens is rapidly increasing. So experiments at the Science University of Tokyo have created a 'face robot' - a life-size, soft plastic model of a female head with a video camera imbedded in the left eye - as a prototype. The researchers' goal is to create robots that people feel comfortable around. They are concentrating on the face because they believe facial expressions are the most important way to transfer emotional messages. We read those messages by interpreting expressions to decide whether a person is happy, frightened, angry, or nervous. Thus the Japanese robot is designed to detect emotions in the person it is 'looking at' by sensing changes in the spatial arrangement of the person's eyes, nose, eyebrows, and mouth. It compares those configurations with a database of standard facial expressions and guesses the emotion. The robot then uses an ensemble of tiny pressure pads to adjust its plastic face into an appropriate emotional response.

**G** Other labs are taking a different approach, one that doesn't try to mimic human intelligence or emotions. Just as computer design has moved away from one central mainframe in favour of myriad individual workstations - and single processors have been replaced by arrays of smaller units that break a big problem into parts that are solved simultaneously - many experts are now investigating whether swarms of semi-smart robots can generate a collective intelligence that is greater than the sum of its parts. That's what beehives and ant colonies do, and several teams are betting that legions of mini-critters working together like an ant colony could be sent to explore the climate of planets or to inspect pipes in dangerous industrial situations.

### Questions 1-6

*Reading Passage 1 has seven paragraphs A-G.*

*From the list of headings below choose the most suitable heading for each paragraph.*

*Write the appropriate numbers (i-x) in boxes 1-6 on your answer sheet.*

### List of headings

- i** Some success has resulted from observing how the brain functions.
- ii** Are we expecting too much from one robot?
- iii** Scientists are examining the humanistic possibilities.
- iv** There are judgements that robots cannot make.
- v** Has the power of robots become too great?
- vi** Human skills have been heightened with the help of robotics.
- vii** There are some things we prefer the brain to control.
- viii** Robots have quietly infiltrated our lives.
- ix** Original predictions have been revised.
- x** Another approach meets the same result.

### 1 Paragraph A

- 2 Paragraph B
- 3 Paragraph C
- 4 Paragraph D
- 5 Paragraph E
- 6 Paragraph F

<i>Example</i>	<i>Answer</i>
Paragraph G	<b>ii</b>

**Questions 7-11**

*Do the following statements agree with the information given in Reading Passage 1? In boxes 7-11 on your answer sheet write*

- YES**            *if the statement agrees with the information*
- NO**             *if the statement contradicts the information*
- NOT GIVEN** *if there is no information on this in the passage*

- 7. Karel Capek successfully predicted our current uses for robots.
- 8. Lives were saved by the NASA robot, Dante.
- 9. Robots are able to make fine visual judgements.
- 10. The internal workings of the brain can be replicated by robots.
- 11. The Japanese have the most advanced robot systems.

**Questions 12-14**

*Complete the summary below with words taken from paragraph F.*

*Use **NO MORE THAN THREE WORDS** for each answer.*

*Write your answers in boxes 12-14 on your answer sheet.*

The prototype of the Japanese ‘face robot’ observes humans through a **12**..... which is planted in its head. It then refers to a **13**..... of typical ‘looks’ that the human face can have, to decide what emotion the person is feeling. To respond to this expression, the robot alters its own expression using a number of **14**..... .

## READING PASSAGE 2

You should spend about 20 minutes on Questions 15-27, which are based on the following passage.

### THE ART OF HEALING

*As with so much, the medicine of the Tang dynasty left its European counterpart in the shade. It boasted its own 'national health service', and left behind the teachings of the incomparable Sun Simiao*

If no further evidence was available of the sophistication of China in the Tang era, then a look at Chinese medicine would be sufficient. At the Western end of the Eurasian continent the Roman empire had vanished, and there was nowhere new to claim the status of the cultural and political centre of the world. In fact, for a few centuries, this centre happened to be the capital of the Tang empire, and Chinese medicine under the Tang was far ahead of its European counterpart. The organisational context of health and healing was structured to a degree that had no precedence in Chinese history and found no parallel elsewhere.

An Imperial Medical Office had been inherited from previous dynasties: it was immediately restructured and staffed with directors and deputy directors, chief and assistant medical directors, pharmacists and curators of medicinal herb gardens and further personnel. Within the first two decades after consolidating its rule, the Tang administration set up one central and several provincial medical colleges with professors, lecturers, clinical practitioners and pharmacists to train students in one or all of the four departments of medicine, acupuncture, physical therapy and exorcism.

Physicians were given positions in governmental medical service only after passing qualifying examinations. They were remunerated in accordance with the number of cures they had effected during the past year. In 723 Emperor Xuanzong personally composed a general formulary of prescriptions recommended to him by one of his imperial pharmacists and sent it to all the provincial medical schools. An Arabic traveller, who visited China in 851, noted with surprise that prescriptions from the emperor's formulary were publicised on notice boards at crossroads to enhance the welfare of the population.

The government took care to protect the general populace from potentially harmful medical practice. The Tang legal code was the first in China to include laws concerned with harmful and heterodox medical practices. For example, to treat patients for money without adhering to standard procedures was defined as fraud combined with theft and had to be tried in accordance with the legal statutes on theft. If such therapies resulted in the death of a patient, the healer was to be banished for two and a half years. In case a physician purposely failed to practice according to the standards, he was to be tried in accordance with the statutes on premeditated homicide. Even if no harm resulted, he was to be sentenced to sixty strokes with a heavy cane.

In fact, physicians practising during the Tang era had access to a wealth of pharmaceutical and medical texts, their contents ranging from purely pragmatic advice to highly sophisticated theoretical considerations. Concise descriptions of the position, morphology, and functions of the organs of the human body stood side by side in libraries with books enabling readers to calculate the daily, seasonal and annual climatic conditions of cycles of sixty years and to understand and predict their effects on health.

Several Tang authors wrote large collections of prescriptions, continuing a literary tradition documented since the 2nd century BC. The two most outstanding works to be named here were those by Sun Simiao (581-682?) and Wang Tao (c.670-755). The latter was a librarian who copied more than six thousand formulas, categorised in 1,104 sections, from sixty-five older works and published them

under the title *Waitai Miyao*. Twenty-four sections, for example, were devoted to ophthalmology. They reflect the Indian origin of much Chinese knowledge on ailments of the eye and, in particular, of cataract surgery.

Sun Simiao was the most eminent physician and author not only of the Tang dynasty, but of the entire first millennium AD. He was a broadly educated intellectual and physician; his world view integrated notions of all three of the major currents competing at his time - Confucianism, Daoism and Buddhism. Sun Simiao gained fame during his lifetime as a clinician (he was summoned to the imperial court at least once) and as author of the *Prescriptions Worth Thousands in Gold* (*Qianjinfang*) and its sequel. In contrast to developments in the 12th century, physicians relied on prescriptions and single substances to treat their patients' illnesses. The theories of systematic correspondences, characteristic of the acupuncture tradition, had not been extended to cover pharmacology yet. Sun Simiao rose to the pantheon of Chinese popular Buddhism in about the 13th century. He was revered as paramount Medicine God. He gained this extraordinary position in Chinese collective memory not only because he was an outstanding clinician and writer, but also for his ethical concerns. Sun Simiao was the first Chinese author known to compose an elaborate medical ethical code. Even though based on Buddhist and Confucian values, his deontology is comparable to the Hippocratic Oath. It initiated a debate on the task of medicine, its professional obligations, social position and moral justification that continued until the arrival of Western medicine in the 19th century.

Despite or - more likely - because of its long-lasting affluence and political stability, the Tang dynasty did not add any significantly new ideas to the interpretation of illness, health and healing. Medical thought reflects human anxieties; changes in medical thought always occur in the context of new existential fears or of fundamentally changed social circumstances. Nevertheless, medicine was a most fascinating ingredient of Tang civilisation and it left a rich legacy to subsequent centuries.

**Questions 15-17** Choose the appropriate letters **A-D** and write them in boxes **15-17** on your answer sheet.

- 15.** In the first paragraph, the writer draws particular attention to
- A** the lack of medical knowledge in China prior to the Tang era.
  - B** the Western interest in Chinese medicine during the Tang era.
  - C** the systematic approach taken to medical issues during the Tang era.
  - D** the rivalry between Chinese and Western cultures during the Tang era.
- 16** During the Tang era, a government doctor's annual salary depended upon
- A** the effectiveness of his treatment.
  - B** the extent of his medical experience.
  - C** the number of people he had successfully trained.
  - D** the breadth of his medical expertise.
- 17** Which of the following contravened the law during the Tang era?
- A** a qualified doctor's refusal to practise
  - B** the use of unorthodox medical practices
  - C** a patient dying under medical treatment
  - D** the receipt of money for medical treatment

**Questions 18-24** Do the following statements agree with the information given in Reading Passage 2?

In boxes 18 -24 on your answer sheet write

**YES** if the statement agrees with the information

**NO** if the statement contradicts the information

**NOT GIVEN** if there is no information on this in the passage

18..... Academic staff sometimes taught a range of medical subjects during the Tang era.

19..... The medical knowledge available during the Tang era only benefited the wealthy.

20..... Tang citizens were encouraged to lead a healthy lifestyle.

21..... Doctors who behaved in a fraudulent manner were treated in the same way as ordinary criminals during the Tang era.

22..... Medical reference books published during the Tang era covered practical and academic issues.

23..... Waitai Miyao contained medical data from the Tang era.

24..... Chinese medical authors are known to have influenced Indian writing.

**Questions 25-27** Complete the sentences below with words taken from Reading Passage 2.

Use **NO MORE THAN THREE WORDS** for each answer. Write your answers in boxes 25 -27 on your answer sheet.

The first known medical writing in China dates back to the 25.....

During the Tang era, doctors depended most on 26..... and single substances to treat their patients. 27..... is famous for producing a set of medical rules for Chinese physicians.

-----The end-----

Chuẩn đầu ra HP	Nội dung kiểm tra
[CDR 1.1] Sử dụng kiến thức nền vào đọc.	Câu hỏi 1-27
[CDR 1.2] Sử dụng từ mới và các cấu trúc ngữ pháp vào đọc.	Câu hỏi 1-27
[CDR 1.3] Mở rộng kiến thức về các chiến thuật nghe, đọc, viết, nói trong các dạng bài thi của IELTS.	Câu hỏi 1-27
[CDR 2.3] Vận dụng các kỹ năng để đọc hiểu nội dung chung, nội dung chính, các thông tin chi tiết, trong các bài đọc để chọn câu trả lời đúng trong các dạng câu hỏi đọc của đề thi IELTS.	Câu hỏi 1-27

Ngày 29 tháng 06 năm 2020

**Thông qua Bộ môn**