# 南京理工大学

# 2016年硕士学位研究生入学考试试题

科目代码: 857 科目名称: 翻译与写作 满分: 150 分

注意:①认真阅读答题纸上的注意事项;②所有答案必须写在答题纸上,写在本试题纸或草稿纸上均无效;③本试题纸须随答题纸一起装入试题袋中交回!

### I. Translate the following sentences. (20 points, 2 points each)

## A. From English to Chinese. (10 points, 2 points each)

- 1. Scientific and technological advances are enabling us to comprehend the furthest reaches of the cosmos, the most basic constituents of matter, and the miracle of life.
- 2. Men come closest to their true selves in the sober moments of life, under the shadows of sorrow and loss.
- 3. It is odd to watch with what feverish ardor the Americans pursue prosperity and how they are ever tormented by the shadowy suspicion that they may not have chosen the shortest route to get it.
- 4. Lulled by the gentle motion and soothed by the rippling music of the waves, the babies soon fell asleep.
- 5. A senior executive's instinctive capacity to empathize with and gain insights from customers is the single most important skill he or she can use to direct technologies product and service offerings, indeed all elements of a company's strategic posture.

#### B. From Chinese to English. (10 points, 2 points each)

- 1. 与会者对这个问题的观点差别太大,以致发生了争吵,一时会场的气氛紧张起来。
- 2. 这种床垫工艺先进,结构新颖,造型美观,款式多样,舒适大方,携带方便。
- 3. 现在最大的问题就是日本的某些军国主义分子违背本国人民的意志,妄图掩盖侵华战争中"南京大屠杀"的滔天罪行。
- 4. 在一个奢侈浪费的年代,我希望能向世人表明,人类真正的需要是如此之少。
- 5. 能不能充分发挥广大知识分子的才能,在很大程度上决定着我们民族的盛衰和现代化建设的进程。
- II. Translate the following passages. (60 points, 30 points each)
- A. From English to Chinese.

For millennia, buildings have waged an ongoing battle with the implacable forces of nature. As high-rises stretch higher, the advantage increasingly goes to nature. First, there is gravity. In a high-rise, a typical column at street level must support not only the nearby area on the second floor but also the cumulative weight of each respective portion of every storey above that.

But the real test of a building is its ability to withstand hurricanes and earthquakes. To prevent those natural forces from toppling a structure, its base must be sufficiently wide. For stability, the height of a skyscraper divided by its width typically must be between six and eight. Thus, the footprint of a superskyscraper could easily consume multiple city blocks.

Already structural engineers have been rethinking their strategies for combating the wind, perhaps the most important factor in the design of supertall structures. Consider that as a building's height rises, the wind effects increase dramatically. Wind speeds are greater at higher elevations, and the wind pressure is related to the square of the velocity. Taller buildings also have a larger surface area for the wind to push against, and their additional height gives the wind a longer lever to topple them.

#### B. From Chinese to English.

许多本质上的不同造成了美语从英语中分离出来。而主要的不同是两种语言根植于两个完全不同的社会环境和文化传统。自从17世纪来,美国人和英国人在这两方面的差异十分明显。英国人相对说来生活在一个相对稳定的社会秩序里。这种秩序印刻在他们心灵里的是对习惯上和名誉上的东西有一种特有的尊敬。虽然第一次世界大战改变了他们大多数的风俗习惯,但在这之前,他们的全部生活,或许比其他任何民族的生活(除西班牙人),都更受到先例的制约。而虽然美国人中一部分的祖先是英国人,但他们没有这种约束,也没有这种一致性习惯的要求。相反,他们走到了另一个极端,因为他们国家的生活状况使他们看重的是好奇和冒险这种恰恰相反的品质,这样他们养成的是不安现状,厌烦形式主义,藐视旧势力影响的个性,这些个性在他们身上普遍反映出来。

#### III. Writing (70 points)

# A. Write a summary on the following passage in about 150 words. You should use your own words to generalize the main idea. (30 points)

Now, scientists claim to have made a giant leap towards creating 3D organs that could be simply printed out in hospitals when needed for a transplant. An international team has created the first organs that include a full vascular network for transporting blood through organs. They say it could even allow organs damaged by cancer to be simply replaced.

Scientists from the Universities of Sydney, Harvard, Stanford and MIT have now bio-printed artificial vascular networks mimicking the body's circulatory system that are necessary for growing large complex tissues. Using a high-tech bio-printer, the researchers fabricated a multitude of interconnected tiny fibres to serve as the moid for the artificial blood vessels. They then covered the 3D printed structure with a cell-rich protein-based material, which was solidified by applying light to it. Lastly they removed the bio-printed fibres to leave behind a network of tiny channels coated with human endothelial cells, which self organised to form stable blood capillaries in less than a week.

The eye is one of the most complex yet delicate parts of the human body. Now engineers claim to have designed a range of synthetic eyes that may one day let us replace and even enhance our own sense of vision. Italian bio-designers have unveiled the project MHOX which has been working on 3D print organic tissues to

produce working body parts that can replace the eyes of people suffering from disease. It could mean rather than getting glasses to correct their vision, people would be able to replace their entire eye.

Filippo Nassetti and Alessandro Zomparelli, the two Italian designers leading the project MHOX, said: "Latest developments in bioprinting and biohacking let us imagine that in the near future it would be possible to easily print organic, functional body parts, allowing the human to replace defected districts or enhance standard performance. 'This project is based on the idea of augmenting the sight sense, increasing the functionalities of the eye with ones currently handled by other body segments or external devices."

The group plans to combine the biological tissue with microscopic wireless technology to provide additional functions and give super human eyesight. While currently still just a concept, the project raises the prospect of what bio-engineering may make possible in years to come. The team behind MHOX says their synthetic eyes, which include lenses that improves the image sharpness and can put filters over the vision, could be available by 2027.

Under MHOX designs, patients with eye disease will in the future be able to replace their eye with a synthetic one printed in a laboratory. For those looking to improve their vision, they could buy the "Enhance" model that features a "hyper retina" to give 15/10 vision ---significantly better than normal 20/20 vision.

They say it could also include a gland that can filter the visual signal to the brain by producing vintage or black and white effects much like a modern camera. They say these could be turned on or off by swallowing a pill that alters the state of this gland.

The Eye Advance model adds a wifi connection that allows what the eye is seeing to be recorded and shared with others. It could also connect to external devices to act like a camera.

They say a socket that connects the eye to the brain - which would require a surgical operation - would allow eyes to be interchangeable.

The concept sounds a little like something out of the science fiction hit *Blade Runner* where bioengineers built new eyes for robotic replicants.

Writing on their website, Mr. Nassetti and Mr. Zomparelli said: 'The installation of the EYE augmentations needs a first surgical operation aimed at installing the Deck, the technology that actually connects the eye to the brain. "After that, augmented eyes can be easily interchanged by their own users without the need of additional surgery. Besides allowing to use different augmentations in different contexts, this system is suitable for easy hardware upgrade."

Following Will.i.am claims on the ethical challenges of advanced bioprinting, MHOX decided to remove confidentiality on a concept the office has been working on in the last year: EYE, a 3D bioprinted sight augmentation.

EYE (Enhance Your Eye) product range includes three models: EYE HEAL, EYE ENHANCE, EYE ADVANCE. EYE HEAL replaces standard eye functionality, providing a cure to sight diseases and traumas. EYE ENHANCE sharpens sight up to 15/10, thanks to its hyper-retina. Moreover, the included visual gland allows the opportunity to aesthetically filter the visual signal. Filters (vintage, black and white, ...) can be activated or changed swallowing EYE pills. EYE ADVANCE, on top of the other models' offer, provides the ability to record and share the visual experience, thanks to the included gland that supports wifi communication. Once activated the wifi mode through the EYE connection pill it is possible to connect the EYE like an external camera for several devices.

All EYE models are 3D bioprinted. 3D bioprinting technologies allow biodesigners to directly print fully functional organ and organisms. The printer uses a special needle that drops different kinds of cells needed to recreate the different tissues of the EYE. These cells are contained in a special substance called bio-ink and the printer can switch between different bio-inks to recreate differentiation of tissues. Once the cells are dropped they automatically gather together. Thus, EYEs are completely organic. The EYE products are expected to be available on the market by January 2027.

B. Write an essay of about 400 words on the following topic. Make sure your essay has a clear thesis statement and convincing supporting details. And it should be unified, coherent, and distinctive, with few grammatical and spelling mistakes. (40 points)

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Many people visit museums when they travel to new places. Why do you think people visit museums? Use specific reasons and examples to support your answer.

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