مسابقة في مادة اللغة الإنكليزية

المدة: ساعتان ونصف

الاسم: .....

الرقم:.....

Part One: Reading Comprehension **(Score: 12/20)**

The selection below explains the importance of biological intelligence in human life. Read it carefully, and then answer the questions that follow.

Biological Intelligence: Hidden Capacities

1 Biological intelligence is a new concept that is nearly four billion years old. How does your body develop and use knowledge? Biological intelligence teaches your body to teach itself. Just like you educate your brain, you can teach your body. But why haven't you heard about biological intelligence? **That** is because most of biological intelligence is quiet and unconscious: you see your hair grow, but you do not see your body gets to this.

2 Immunity, for example, is your ability to fight infection and cancer. Your ability to fight infections like flu is not something you know about — unless you get sick. Taking cases like cancer, we probably form dozens of tiny tumors each and every day. However, we destroy almost all of them so effectively without even knowing **that**. Biological intelligence engages all of immunity's important tasks. One of its basic tasks is to teach the body to identify cancers. It can follow the missed ones and it makes the immune system go after them.

3 However, biological intelligence is much more than destroying viruses and tumors. Biological intelligence is the basic ability that keeps you going. It teaches your body to do what it needs to do. It is so big and so important. It is useful to compare it with artificial intelligence.

4 Artificial intelligence is the ability to transform our lives and economy. Computers and robots are two examples of artificial intelligence. Biological intelligence engages all the conscious and unconscious knowledge of a human being. That immense field deals with genetics, culture, society and psychology. Much of it is hardly understood. For instance, your mother's tender arm that holds you in a warm embrace and the little gestures that tell "you are loved" will prove how our bodies can detect human emotions, and how robots cannot do.

5 That is why it is the intelligence connected to everything inside you — every system you use. You have an immune system, a cardiovascular system, a hormonal system, a muscular system, and dozens of interconnected systems. Unlike most robots, the body does not do one thing at a time; it coordinates all the different information systems at the same moment. The size of your body's information systems lessens the complexity of the entire Internet. Biological intelligence is more effective than medical attempts and acts better to keep us healthy and not ill.

6 In addition, biological intelligence has different goals from those of artificial intelligence. In our case, it is the survival of human kind. For example, diabetes

genes may keep us stay alive during famines; otherwise, we may really lose our life. Biological intelligence wants all living beings to survive — not just us.

7 Unlike the artificial intelligence you experience in malfunctioned software, biological intelligence has survived almost everything thrown at it. It survived the asteroids that cleared the dinosaurs. It survived volcanoes that scorched and destroyed the earth for millions of years. It survived dangerous diseases and epidemics; many species have disappeared, but life has continued.

8 In fact, biological intelligence is built to challenge unexpected things that may happen. We are built to survive comets, earthquakes and disasters that we have never seen — and that may never happen. Our genes and physiology are built to survive stresses that do not yet exist and may never exist. When AIDS first hit, it was terrifying, yet many of us had inbuilt systems to defend **it**, even before one effective drug was produced.

9 Unlike artificial intelligence, biological intelligence does not function just within us, but over a huge ecosystem. There are at least 40 trillion bacteria in your digestive tract. **They** not only digest food but also appear to change your mood, your ability to fight off infections, and the way cancer drugs work. At least, there are 10 times more non-human cells in your body than human ones.

10 Thus, biological intelligence is big, and it does amazing things. Because we have not thought of the body as intelligent and constantly learning, we do not even know what many of those capacities are. That is the power of a system built on chance, a system developed through billions of years of failures and triumphs. The robots are advancing, at work and play. Artificial intelligence is getting smarter every day. So should you.

Questions

A. Answer each of the following questions in 2- 4 sentences in your own words.

1. Based on Paragraph 2, identify two roles played by biological intelligence. **(01)**
2. Based on Paragraph 5, in what way does biological intelligence perform better than technology? **(01)**
3. Based on Paragraphs 7 and 8, explain how biological intelligence helps in facing difficulties. **(01)**
4. The writer compares biological intelligence to artificial intelligence. What does this comparison show? **(01)**

B. Answer the following questions in complete sentences.

1. **Biological intelligence is a new concept that is nearly four billion years old.**

   The above sentence contains paradox. Explain how. **(01)**

2. a. Paragraphs **5** and **6** are linked with a **direct cohesive link**. Write it. **(0.5)**

   b. Paragraphs **7** and **8** are linked with an **indirect cohesive link**. Write it **(0.5)**

3. Give two types of evidence the writer uses to achieve credibility **(01)**

C. The table below compares between the attributes of natural and artificial intelligences. Read the table carefully, and then **answer the question that follows in 3-4 sentences.** **(02)**

A Comparison between Natural and Artificial Intelligences		
Attributes	**Natural Intelligence (Human)**	**Artificial Intelligence (Machine)**
Using senses (eyes, ears, touch, smell, taste)	*High*	*Low*
Making complex calculations	*Low*	*High*
Using a variety of information sources	*High*	*High*

What conclusion can you draw from the comparison above?

D. Each of the following extracts (A and B) is the correct ending of ONE paragraph in the selection. Read them carefully, and then choose the correct answer that fits with each extract. **(01)**

Extract A: Consequently, it triggers the immune system to track the sick cells.

a. Paragraph 2 b. Paragraph 5

Extract B: Whatever the cells are, biological intelligence rules them all.

a. Paragraph 6 b. Paragraph 9

E. Scan Paragraphs **7, 8,** and **10** to find words that best replace the words/ phrases underlined in the following sentences. **(01)**

1. The <u>defective</u> machine urged the scientists to use another device. (Paragraph **7**)
2. The surrounding area was <u>burnt</u> due to an explosion in a huge laboratory. (Paragraph **7**)
3. If the medicine is not effective, the patient will not <u>stay alive</u> till the end of the year. (Paragraph **8**)
4. His <u>success</u> in the field of artificial intelligence led to significant advances in robotics. (Paragraph **10**)

F. What does each of the following pronouns, **bold-typed** in the selection, refer to? **(01)**

1. **That** (Paragraph 1) 2. **that** (Paragraph 2) 3. **it** (Paragraph 8)
4. **They** (Paragraph 9)

Part Two: Writing **(Score: 08/20)**

(Choose ONE of the following prompts.)

Prompt A: *Artificial intelligence (robotics, electronic devices, computers, etc.) is getting smarter every day.* **Write a well-organized expository essay of 250-300 words in which you:**

- develop the statement above

- give positive and negative effects of artificial intelligence in any field of your choice (educational, social, industrial, medical, etc.).

Outline for prompt A

I. 1. Define artificial intelligent.
2. State its effects
3.Thesis statement

II. **Topic sentence 1: Positive Effects**
a. Supporting detail: Positive effect 1 on the chosen field
b. Supporting detail: Positive effect 2 on the chosen field

III. **Topic sentence 2: Negative Effects**
a. Supporting detail: Negative effect 1 on the chosen field
b. Supporting detail: Negative effect 2 on the chosen field

IV. **Conclusion: restate the thesis statement**

Prompt B: *Many scientists believe that artificial intelligence will continue to develop to an extent we, human beings, turn* to be *slaves to it.* **In a well-organized argumentative essay of 250-300 words, argue for or against this point of view.** Make sure that your essay supports your position and refutes the opposite point of view.

Outline for prompt B

I. **Write a thesis statement in which you state your position, and the opponents' position towards artificial intelligence.**

II. **First body paragraph:**
Restate your position and support it with two examples

III. **Second body paragraph**

a. **State the counterargument and support it with two examples.**

b. **Mention a refutation that supports your point of view.**

IV. **Conclusion: restate the thesis statement**

Content and organization of ideas (3.5), language and style (3.5), tidiness and legible handwriting (01)