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## بخش پنجم

راهنمایی:

این بخش، مربوط به سوالات آزمون زبان انگلیسی – عمومی (خاص) است.

### Part A. Grammar

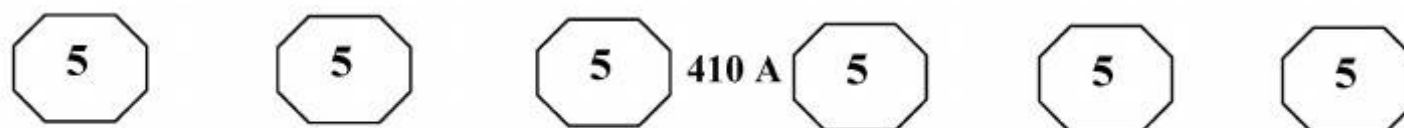
**Directions:** Select the answer choice (1), (2), (3), or (4) that could best complete the blank in the following questions. Then mark your answer on your answer sheet.

- 131- There are around 300 million kids around the world who can't read or write a word after going to school. The enormity of the problem is ..... you cannot possibly build enough schools and train enough teachers to teach these kids. Software is the future of learning.
- 1) in that                      2) that which                      3) such that                      4) that much
- 132- They have signed an open letter offering cautious advice for the field of artificial intelligence, ..... a reputable research organization.
- 1) this week the Future of Life Institute published  
2) the Future of Life Institute the publication of which is by  
3) was scheduled to be published the Future of Life Institute  
4) which was published this week by the Future of Life Institute
- 133- Throughout cosmic time, galaxies age a little like humans do: they start out small, grow bigger, stronger and more productive, ..... they dwindle towards death.
- 1) and eventually shrink and run out of energy as  
2) for they shrink and eventually run out of energy and  
3) only to shrink and run out of energy eventually since  
4) and eventually shrinking and running out of energy before
- 134- Dubbed FLARECAST, it uses the latest in solar physics and high-performance computing to create space weather forecasts .....
- 1) similar in accuracy to those are on Earth  
2) made as accurately as those are on Earth  
3) so accurate that it does on Earth  
4) as accurate as those for Earth
- 135- The asymmetrical groove in humans was also known, but the new study, in which 177 people and 73 chimps had brain scans, revealed .....
- 1) that the other primates lack almost completely  
2) it is almost completely lacking in the other primates  
3) that which almost completely lacking in other primates  
4) the fact the other primates are lacking in it almost completely



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148- If the postal system does not receive a/an ..... from its debts, it will not be able to operate much longer.

- 1) abnegation      2) reprieve      3) oblivion      4) polemic

149- But as the days go on it seems the already strained relationship between much of the community and the local police continues to grow increasingly .....

- 1) adventitious      2) taut      3) tumid      4) vehement

150- Even Chinese officials, usually reluctant to ..... friendly Southeast Asian countries publicly, have criticized the Malaysians' handling of the inquiry.

- 1) aggrandize      2) exacerbate      3) expound      4) upbraid

### Part C. Reading Comprehension

**Directions:** Read the following two passages and select the choice (1), (2), (3), or (4) that best answers each question. Then mark your answer on your answer sheet.

#### Passage 1:

Why are women underrepresented in many areas of science, technology, engineering, and mathematics (STEM)? This is a question with no easy answers. In science, as in many areas of life, bias against women exists, but researchers disagree on how much bias matters: Some suggest that the effects of bias accumulate over time to shape careers, whereas others argue that gender differences in preferences are much more important. However, it is likely impossible to disentangle the effects of societal bias and individual preferences, because people's understanding of gender differences shape their preferences. Research suggests differences in innate ability are unlikely to play a major role, but one route to more equal representation across academic fields might be convincing both women and men that this is true. Leslie et al. show that how ability is viewed within a field plays a key role in how well women are represented.

Two puzzles complicate typical explanations of women's underrepresentation in science. First, race and gender interact in ways that are problematic for one-size-fits-all approaches. In the United States, for example, although Asian women choose physical science majors at lower rates than Asian men, they do so at similar rates to white men, and at nearly twice the rate of white women. Of U.S. Asians who earned Bachelor's degrees in 2011, 1.9% of women and 2.4% of men majored in the physical sciences, compared to 2.1% of white men and 1.0% of white women. Second, gender representation varies considerably both within STEM and within non-STEM fields. As noted by Leslie et al., in 2011 women received 54% of U.S. Ph.D.'s in molecular biology, compared with 18% in physics, 72% in psychology, and 31% in philosophy.

Leslie et al. offer a novel framework for understanding this second puzzle by showing that how ability is viewed in different fields correlates with the degree to which women are represented. In philosophy and physics, which are dominated by men, ability is considered to be innate. In molecular biology and psychology, in which women are well represented, effort is viewed as important. This intriguing finding accounts for gender sorting into STEM versus non-STEM fields. It also explains why women are more represented in some STEM fields than others. Further, it avoids a problem plaguing many popular accounts for the underrepresentation of women in STEM, which fail to explain why women now pursue law degrees at similar rates to men, even though Law school has a competitive culture, lawyers work long hours, and law firms are not yet as family friendly as one might hope.





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**151- What is the best title for the passage?**

- 1) Gender Inequality in Science
- 2) Ways to Forestall Gender Bias
- 3) Origins of a Misconception in STEM
- 4) Women's Innate Tendency towards non-STEM Field

**152- It can be inferred from paragraph 1 that gender-related preconceptions .....**

- 1) are the outcome of the interaction among the effects of societal bias and individual preferences, an interaction that is unfortunately overlooked by researchers
- 2) ,as viewed by those who argue gender differences in preferences account for women underrepresentation in STEM, tend to inflate the problem
- 3) cannot be accounted for, as suggested by Leslie et al., by a reference to differences in innate ability between the two genders
- 4) become more conspicuous when they show up in scientific fields

**153- According to the passage, the fact that gender representation is NOT fixed in both STEM and non-STEM field .....**

- 1) is proof that the debate between the proponents and opponents of gender underrepresentation of women in STEM is unwarranted
- 2) makes it even more difficult to propose a comprehensive explanation for women's being underrepresented in science
- 3) offers a challenge in the interpretation of women's status in science in that it conflicts with the available facts and figures
- 4) is a complication that is commonly invoked to counter the claim about the existence of gender bias in STEM

**154- Which of the following best describes the function of the last paragraph in relation to the second paragraph?**

- 1) It acknowledges the very existence of one of the puzzles mentioned in the second paragraph but forewarns against any overgeneralization of the implications of that puzzle to the other areas of inquiry.
- 2) It postulates a research-based model to disprove a point made in the second paragraph, thereby paving the way for a well-rounded explanation of gender bias in STEM and no-STEM fields.
- 3) It offers evidence in an attempt to shed light on a problem alluded to in the second paragraph.
- 4) It provides information to confirm that the puzzle referred to in the second paragraph is well-founded.

**155- The word "it" in paragraph 3 refers to .....**

- 1) finding
- 2) gender sorting
- 3) ability
- 4) innateness

**Passage 2:**

Two decades ago, a team led by the Italian neuroscientist Giacomo Rizzolatti noticed something peculiar in the premotor cortex of macaque monkeys. In addition to firing during the monkey's own actions, some neurons also fired when an experimenter performed comparable actions. These cells, which came to be known as "mirror neurons," generated tremendous scientific interest and the most-cited neuroscience paper of the past decade. After the initial report, two mirror neuron "cultures" developed side by side. Most





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neuroscientists focused on basic questions in their scientific publications: where in the brain do mirror neurons exist; what do they respond to; do humans have them? At the same time, journalists, bloggers, and even some scientists, speculated enthusiastically about the function of these cells in popular culture outlets, implicating mirror neurons in everything from obesity to autism, despite the fact that many of these claims so far remain untested.

*The Myth of Mirror Neurons* reflects author Gregory Hickok's frustration with the persistence of exaggerated claims about these cells. As a cognitive scientist specializing in language, Hickok has clearly been irritated by attempts to reduce the complexities of human language acquisition and comprehension into something that can be explained by mirror neurons alone. He is equally unimpressed with the claim that mirror neurons are all that is necessary for us to infer intent from the actions of others, an ability known as action understanding.

If mirror neurons in the motor circuitry by themselves explain all of language and action understanding, he argues, then patients with impaired motor circuitry should be unable to understand the language and the actions of others. Referencing a 2008 study, Hickok points out that while some patients with damage to the motor circuitry show subtle impairments in language perception and action understanding, others do not. He then elaborates further, pointing out that speech perception is possible in patients who have suffered damage to motor speech centers in the brain and that we can understand actions that we cannot, ourselves, perform. His arguments are compelling refutations of the pop culture claims that mirror neurons are necessary and sufficient for language and action understanding.

Unfortunately, these examples are not exceptions but are reflective of Hickok's methods throughout. He presents and then deconstructs dramatically oversimplified claims about mirror neurons, implying that these reflect the proposals of the scientists working in this field. His refutations of these claims are passionate and compelling but, ironically, lead down the very path of mystification he tries to denounce.

Although Hickok fails to address the current state of understanding about the function of mirror neurons, it does make it clear how urgent it has become for the field of neuroscience to ramp up efforts to determine what mirror neurons contribute to our mind and behavior. The truth is that a scarcity of evidence is not evidence for the scarcity of their contribution.

**156- Which of the following best describes the author's attitude towards those scientists who attribute a wide range of phenomena, from obesity to autism, to mirror neurons?**

- |                         |                         |
|-------------------------|-------------------------|
| 1) Unleashed enthusiasm | 2) Uncritical rejection |
| 3) Resigned acceptance  | 4) Profound Skepticism  |

**157- According to the passage, which of the following is buttressed by the pop culture?**

- 1) The existence of the mirror neurons is a necessary but not sufficient condition for language acquisition.
- 2) Understanding the intent of others is a phenomenon that can be accounted for by reference to one variable only.
- 3) Mirror neurons are required for action understanding, but not for understanding the intent of others in conversation in general and language acquisition in particular.
- 4) The inability of the pop culture to delineate the varied steps involved in human communication is to a great extent due to the exaggerated claims by such non-experts such as journalists, bloggers and the like.





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**158- Which of the following does the author of the passage state is a shortcoming in Hickok's argumentation?**

- 1) His arguments against those advocating the contribution of mirror neurons to language acquisition is tinged with passion and partiality.
- 2) He dares to make comments in relation to a topic in a field of science which seems to be outside his own specialty.
- 3) He has focused on the most complicated and controversial issues in neuroscience to reject the function of mirror neurons.
- 4) In refuting the claims made about mirror neurons, he has not considered the works of those well versed in the field.

**159- The passage provides sufficient information to answer which of the following questions?**

- 1) How does the 2008 study Hickok cite help to solidify his main argument?
- 2) Why is an analogy drawn between macaque monkeys and humans misleading?
- 3) What tangible evidence is put forward by Hickok to attest to the complexity of language acquisition?
- 4) Why is it that the hypotheses proposed in popular culture outlets have not yet been adequately tested?

**160- The last sentence of the passage, "The truth is that a scarcity of evidence is not evidence for the scarcity of their contribution," is primarily intended to .....**

- 1) accentuate the need for further research
- 2) advise the reader not to underestimate the importance of mirror neurons
- 3) demonstrate that the story of mirror neurons is actually finished
- 4) excoriate scholars for their indifference to gaps of knowledge in neuroscience

کتاب شگفت انگیز لغات زبان انگلیسی کنکورهای ارشد و دکتری

\*\*\*تالیف استاد مهرداد زنگیه وندی\*\*\*

برای زبان عمومی کنکور ارشد و دکتری فقط یک کتاب بخوانید!

شما باید زبان عمومی را ۱۰۰٪ بزنید!

برای دانلود رایگان یک فصل از کتاب کلیک کنید

This is the end of Section 5

صفحه ۲۴

## پاسخ کلیدی سؤالات آزمون دکتری ۱۳۹۴

زبان گروه زبان - کد رشته های 2807 تا 2810

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