

الاسم:	مسابقة في مادة اللغة الإنكليزية
الرقم:	المدة ساعتان ونصف

**Part One: Reading****(Score: 11/20)**

The following selection presents many attitudes towards the increasing number of women graduating in science. Read it carefully, and then answer the questions that follow.

**Women Graduates Increase in Science**

- 1 More than 420 students from the College of Science, University of Arizona (UA), will be able to wear a navy blue cap and gown this year at the university's commencement ceremony. Fewer than half will be women. But that long-standing trend may be changing. The proportion of women earning undergraduate degrees in science, technology, engineering and mathematics increased by almost 4 percentage points nationally from 1995 to 2004, and by almost 10 points at UA from 1995 to 2006, an Arizona Daily Star analysis shows.
- 2 The shift is "huge," said Anne Padias, a chemistry professor and director of academic services for the department. "That is especially true," she said, "because percentage shifts work both ways. If you see a 5 percent increase, that means men went 5 percent down, too." In addition to the obvious benefits for women, the increase is a benefit for science, those involved say, because it means a wider range of people working on the world's problems.
- 3 Ekaterina Spriggs is graduating from UA with a double major in computer science and mathematics, with minors in computer engineering and physics. "My mother is a mechanical engineer," Spriggs said. "She had so many math books that she joked that I was reading linear algebra when I was two." Spriggs attended a high school in Bulgaria that focused on math and science. Her generation has seen increased support and encouragement for women interested in science, technology, engineering and math. "I never thought, 'I am in a classroom with all males.' When I walk into a class or meeting, I see students, I do not see that this is an all-male field and that I should not be here," Spriggs said.
- 4 "The increase is a result of institutional and cultural changes," said Lisa Frehill, executive director of the Commission on Professionals in Science and Technology, a New York-based nonprofit. "Title IX of the Education Amendments of 1972 allowed women the opportunity to enter these fields," Frehill said, adding, "before that, engineering schools could ban women and some medical schools had percentage caps on the number of the women they would admit." Culturally, ideas about what is appropriate for men and women to do have changed. She said, "Women expect they need to have a career or job and pursue areas where they can have gainful employment."
- 5 All of it means there is less bias against women now, said Gail Burd, associate dean in the UA College of Science. "Students can see they can be anything they want to be and we make it a welcoming environment," she said. But with women accounting for 52.5 percent of all UA undergraduates in fall 2006, some students and faculty members say the statistics show women still have more ground to gain.
- 6 Jeff Goldberg, an associate dean of academic affairs in the UA College of Engineering, considered that, "One frequently cited reason for the lower number of women earning undergraduate degrees in these fields is the smaller number of female professors, which means fewer role models. You see a lot of men, but not many women." Goldberg added, "To get more women faculty, we need more women graduate students in engineering. To get more graduate students, we need more women undergraduate students and that is a problem because that's what I am trying to solve in the first place." According to him, "If you only have white, middle-age guys solving problems, you only get their solutions. We have to have people of color and women at the table."

- 7 "Another issue being addressed is the tendency of female students to drop out of majors such as engineering at a faster rate than male students, even though they usually enter college with higher grades and SAT scores than their male counterparts," Goldberg said. "Something in our process is anti-woman," he added. "The track for careers in science, technology and similar fields starts in sixth or seventh grade. Girls are told that 'it is OK, you do not have to solve that problem' while boys are told they need to work harder to figure out the same problem," Goldberg explained. When students stop taking math or science classes, sometimes as early as ninth grade, they are making career choices and are inevitably done with engineering.
- 8 "Women usually have preconceived notions about computer scientists, too," said Suzanne Westbrook, senior lecturer and associate head in the Department of Computer Science. "They have this vision of a geeky, nerdy guy gulping energy drinks and living out of a vending machine, which is not appealing to most women," Westbrook said. She shares in the execution of competitions and sponsorships for national conferences and other events designed to welcome women. "This is where you make your career decisions, at the undergraduate level, based on whether you think it is possible; if you are discouraged from that at this level, you will not continue," she said.

### Questions

- A.** Answer each of the following in 1- 4 sentences of your own.
1. What message can men get from the analysis of Anne Padias? Justify your answer. **(Score:01)**
  2. What two reasons stand behind Spriggs' choice of scientific majors ? **(Score:01)**
  3. Refer to Paragraphs 5 and 6 to identify two types of discrimination, and then provide an example of each. **(Score:01)**
  4. In what sense are the opinions of Goldberg and Westbrook similar? Explain. **(Score:01)**
- B.**
1. What type of introduction does the writer of the above selection use? What purpose(s) does this type serve? **(Score:1.5)**
  2. What thematic relationship do you find between Paragraphs 4 and 5? Support your answer with evidence. **(Score:1.5)**
  3. Identify the pattern of each of the following sentences. **(Score:01)**
    - a. Sentence 1 of Paragraph 7, "Another issue being addressed... "Goldberg said.
    - b. Sentence 4 of Paragraph 8, " This is where you make your career decisions,...it is possible ; "
- C.** Copy the table, and then, using phrases, refer to Paragraphs 4, 6, and 7 to fill it with factors that encourage and others that discourage the presence of women in the field of science. **(Score:02)**

Encouraging Factors	Discouraging Factors
1.	1.
2.	2.

- D.** Select from Paragraphs 4 and 8 words that have the following meanings. **(Score: 01)**
- |   |                                 |
|---|---------------------------------|
| 1. having administrative responsibility | 2. to prohibit                  |
| 3. formed or thought of in advance      | 4. a formal assembly or meeting |

### Part Two: Writing

**(Score: 09/20)**

*Women's interest in various fields of life has offered social, economic and personal benefits for women and their community. In an essay of 250-300 words, discuss the above statement, and then state two personal and two social or economic benefits of encouraging women's participation in all fields of life that were once thought to be strictly "male" areas or privileges. Make sure that you write a unified, coherent, and properly sequenced paragraphs. See that, in your introduction, you put your reader in the general atmosphere of your topic and clearly provide a thesis statement, and that each of your body paragraphs starts with a topic sentence which you back up with relevant supporting details. Your writing will be assessed for both ideas and form. [Score: 05 for ideas, 03 for language and style, and 01 for tidiness and legible handwriting]*

Part of the Q	Answer Key	Mark	
	Competencies: - Utilize reading strategies - Develop literal and interpretive comprehension of written discourse - Produce transactional writing		
A-1	It is a warning call for men because the increase of women graduates in science causes a decrease of men graduates in the same field. This idea is shown through the percentages Padias uses, for they show how women are taking the place of men.	01	
A-2	One reason is Spriggs' early interest in science, mainly linear algebra. Another reason is the presence of a family role model; her mother is a mechanical engineer. Other reasons are her school that focused on math and science and the support her generation got.	01	
A-3	The first kind is gender discrimination which is shown in the following example: "You see a lot of men, but not many women." The second kind is racial discrimination in the following example: "If you only have white, middle-age guys solving problems, you only get their solutions. We have to have people of color and women at the table."	01	
A-4	Both Goldberg and Westbrook are aware of the main obstacle/problem that prevents women from choosing careers related to science. They give priority to the support and encouragement women need at the undergraduate level in order to choose these careers.	01	
B-1	The introduction is that of interesting facts or statistics. Its first purpose is to introduce the topic of the essay which is more women nowadays are having degrees in the field of science. Also it attracts the readers' attention through facts and numbers related to this progress, and it supports the writer's credibility from the very beginning of the essay	1.5	
B-2	The relation is cause/ effect. In paragraph 4 the writer mentions the cultural and educational changes which resulted in "less bias against women"; an effect which is explained in Paragraph 5.	1.5	
B-3-a	comparison-contrast ; exemplification	0.5	
B-3-b	cause-effect	0.5	
C	<b>Encouraging Factors</b>	<b>Discouraging Factors</b>	02
	1. Institutional allowance of women to enter science fields (Institutional changes)	1. Low number of female role models	
	2. Cultural acceptance of working women in any career (Less bias against women)	2. Educational focus on male students	
	N.B. 0.5 for each factor		
D-1	executive (Par. 4)	0.25	
D-2	ban (Par.4)	0.25	
D-3	preconceived (Par. 8)	0.25	
D-4	conference (Par.8)	0.25	