AlloSchool

English: 2Bac (Science and technology)

National Exam 2022 Resit Session

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I- Text

[1] Professor Rachid Yazami's passion for science started when he was a child in his native city, Fez, with a fascination for geology. His academic ambitions soon progressed from analysing rocks to acquiring a doctorate in graphite compounds for lithium batteries in France. In 1980, aged 26, he made a key discovery that led to the development of the lithium-graphite anode, which is used in rechargeable batteries in mobile phones and laptops.

[2] "I still remember the day I opened my battery and saw that graphite had become a gold colour. I converted graphite into gold," he told Rebecca from Inspire Middle East. His professors were very supportive when they realized the importance of his discovery: lithium can be stored into graphite. This was a turning point in battery history.

[3] Despite this scientific achievement, it took more than a decade to commercialize the lithium battery. For some reason, the French government didn't consider the invention of graphite as a major invention. So, Yazami did not get a copyright, which means that it could be used for free by other companies. Today, around 95% of batteries produced globally use Yazami's technology. Worldwide, analysts think that the commercial lithium battery market is worth about $80 billion.

[4] In his battery research, Yazami is exploring the capabilities of artificial intelligence for ameliorating the quality of people's lives. He is working on a technique that will allow an electric car battery to last for up to ten years instead of five years now. Moreover, the battery can be charged in 10 minutes, the same time we spend in the gas station when we fill our car tank.

[5] Yazami has won many awards, including the Draper Prize, the equivalent of a Nobel Prize for engineers. Even at the age of 67, he remains dynamic and wholly dedicated to his work. He is currently the Principal Scientist at Nanyang Technological University in Singapore, and is frequently consulted by the business community there.





Adapted from: www.euronews.com

II- Comprehension (15 pts)

Base all your answers on the text

A. ARE THESE STATEMENTS TRUE OR FALSE? JUSTIFY. (3 pts)

1. Professor Yazami's first interest was lithium batteries : _____

2. The majority of batteries worldwide use Yazami's technology : _____

3. Yazami has an important position at Nanyang Technological University in Singapore : _____

B. ANSWER THESE QUESTIONS. (3 pts)

1. How has Professor Yazami's invention changed the history of batteries?

2. How long did it take the lithium batteries to be on the market?

3. Why could companies use Yazami's invention for free?

C. COMPLETE THE FOLLOWING SENTENCES WITH INFORMATION FROM THE TEXT.(2pts)

1. Thanks to Yazami's technique, electric car batteries will _____

2. Yazami is still active although _____

II- Comprehension (15 pts)

D. PICK OUT FROM THE TEXT PHRASES OR SENTENCES WHICH SHOW THAT (2 pts)

1. Yazami was encouraged by his professors.

2. the Draper Prize is a very important prize.

E. FIND IN THE TEXT WORDS THAT MEAN ALMOST THE SAME AS (3 pts)

1. very important (paragraph 1) : _____
2. improving (paragraph 4) : _____
3. committed (paragraph 5) : _____

F. WHAT DO THE UNDERLINED WORDS IN THE TEXT REFER TO? (2 pts)

1. it: (paragraph 3) : _____
2. there: (paragraph 5) : _____

III- Language (15 pts)

A. PUT THE WORDS IN BRACKETS IN THE CORRECT FORM. (2 pts)

1. John needed a special medical (treat) _____ after the accident.
2. Although the story is simple, it teaches important (morality) _____ lessons.

B. FILL IN THE GAPS WITH THE RIGHT WORDS FROM THE LIST. (2 pts)

launch - cultural - strange - foreign - achieve

1. Our university will _____ a new training program for its staff.
2. The new economic reform will attract _____ investment in agriculture.

C. REWRITE THE SENTENCES AS INDICATED. (4 pts)

1. The book was cheap. Yet it did not sell well.

The book _____ in spite of

_____ .

2. They will clean the room after the party.

The room _____

3. “Did Amina call the doctor?” The neighbor asked.

The neighbor wanted to know

_____

4. The journal rejected Amal’s article because she used impolite language.

The journal _____ if she hadn’t used impolite language.

III- Language (15 pts)

D. PUT THE VERBS IN BRACKETS IN THE CORRECT FORM. (3 pts)

1. My car (break) _____ down three times last week.
2. We started painting the house yesterday. We (paint) _____ the living room and the kitchen by tomorrow afternoon.
3. Many students are interested in (join) _____ our yoga club.

E. MATCH EACH EXPRESSION WITH ITS APPROPRIATE FUNCTION. (2 pts)

Expressions	Functions
1- “How do you find the idea of working on Saturdays?” 2- “Would you mind helping me fix my washing machine?” 3- “I’ll understand better if you give me an example.” 4- “You should get your parents’ permission before you travel alone.”	a. Making a complaint b. Asking for clarification c. Giving advice d. Making a request e. Asking for opinion

(1, ___) ; (2, ___) ; (3, ___) ; (4, ___)

F. COMPLETE THE FOLLOWING EXCHANGES APPROPRIATELY. (2 pts)

1. Rachid:

_____

Lisa: Great news! Let’s celebrate it!

2. Karim:

_____

Hind: Good idea! The weather is warm in Essaouira these days.

IV- Writing (10 pts)

DO TASKS 1 AND 2

4-1/ TASK 1 (4 pts)

Complete the following paragraph :

There are many things I would like my school administration to change. First,

IV- Writing (10 pts)

4-2/ TASK 2 (6 pts)

Do you prefer to travel with your friends or with your family?

Write a short article to be published in a travel blog about your choice. Give your reasons.

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