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UNIVERSITÉ CHEIKH ANTA DIOP DE DAKAR

2023GS33NA0139 Durée: 2 heures Séries : S1-S2-S1A-S2A-S4-S5-coef 2

Epreuve du 1<sup>er</sup> groupe

## ANGLAIS

1/3

A genetically modified organism, GMO, is an animal, plant, or micro-organism 1 whose DNA has been altered using genetic engineering techniques. Before the advent of GMOs, 2 humans had used traditional methods to improve or transfer desired characteristics in animals 3 and plants for thousands of years. **This** was done through either selective breeding, which is the 4 selection of animals or plants with specific characteristics to reproduce others; or crossbreeding, 5 the mixing of different species during reproduction in order to obtain a hybrid variety. For example, 6 7 corn, cattle, and, even dogs, have been selectively reproduced or crossbred over generations to make them carry desired characteristics. 8

9 Within the last few decades, however, modern biotechnology has allowed scientists to modify directly the DNA of microorganisms, crops, and animals through genetic engineering, 10 which brought about modern era GMO processes that allow the direct incorporation of genes 11 12 from a given species into a completely unrelated species. Although in its beginnings GMO was essentially used for research and limited to laboratories, today, its applications cover animals and 13 plants produced for human consumption. For instance, salmon has been altered through GMO 14 processes to grow faster and taste better. Similarly, agricultural crops such as corn are genetically 15 engineered to grow and develop even in the middle of weeds, and resist insects, pests and 16 diseases, while producing higher yields. 17

Many see overall benefits in the advent of GMO and its applications to food production. **They** argue these benefits range from lighter work for farmers and less expensive farming. This can, in turn mean better food availability and less hunger and famine threats in the world. However, GMO foods do raise controversy. It is feared that genetically modified foods carry inherent risks for humans and the environment, because the process typically changes animals and plants in ways that do not occur naturally; it is even common for scientists to insert genes into a totally unrelated organism. This raises the risk of cancer and unexpected allergic reactions.

In the future, GMOs are likely to continue playing an important role in our lives. GMO foods may provide better nutrition and perhaps even be engineered to contain medicinal elements to enhance human health. Before **that**, they will have to show they are unequivocally both safe and without harm to humans and the environment.

> <u>Genetically Modified Organisms | National Geographic Society</u> <u>https://www.google.com/search?q=genetically+modified+organisms&rlz=1C1JZAP</u>

### I. <u>READING COMPREHENSION</u> (8 marks)

A. Find in the text the equivalents or synonyms of the following words. (2 marks)

Example: Arrival (paragr. 1): advent (of GMOs, line 2, paragr.1) is a synonym of arrival.

1. Tra	(paragr.1):
2. Illne	ses (paragr.2):
	e (paragr.3):
mprove (p	ragr.4):
•	/

# B. Say if the statement is TRUE or FALSE by circling, and justify with reference to the text. (2 marks) 4. Modern era GMO processes have been used for thousands of years. TRUE / FALSE

- 5. GMO processes are only used in labs for research. **TRUE / FALSE**
- C. Match the following paragraphs with their corresponding titles. There is an odd title and an example is provided. (2 marks)

PARAGRAPHS	TITLES
Example: Paragraph 1 (d.)	a. Advantages and disadvantages of GMO products
6. Paragraph 2.	b. Unanimous rejection of GMO
7. Paragraph 3.	c. The future prospects of GMO
8. Paragraph 4.	d. Ways of improving organisms
9. Paragraph not in text.	e. GMOs extend out of their initial purpose

#### D. Who or what do the underlined words refer to in the text?

- 10. This (line 4): .....
- 11. Which (line11): .....
- 12. They (line 19):
- 13. That (line 27): .....

(08 marks)

#### II. LINGUISTIC COMPETENCE

F. Match the following notions with the sentences they correspond to in the table: *Purpose – Contrast – Possibility – Necessity – Insistence - Illustration* (2 marks)

Sentences	Notions
For example, corn, cattlecarry desired characteristics	Illustration
<b>21</b> the mixing of different species during reproduction <b>in order to</b> obtain a hybrid variety.	
22. However, GMO foods do cause controversy.	
<b>23.</b> they will <b>have to</b> show they are unequivocally both safe and without harm to humans and the environment.	
24GMO foods do cause controversy.	

(2 marks)

- G. Circle to indicate the option that would make the sentence correct and meaningful. (1.5 marks)
  - 25. (Despite - Although - No matter how) the risks related to their production and consumption, GMO are a good solution against hunger.
  - 26. (But – Because of - Due) the outbreak of war in Europe, trade and the cost of goods have been impacted significantly.
  - 27. There isn't (no any some) guarantee that he can pay back the money.

#### H. Choose the right option to fill in the gaps.

- (1.5 marks) **28.** With the right agricultural approach, farmers can produce enough without relying so much ..... (at / on / in) chemical fertilizers.
- ..... (Ago / For / Since) our independence, the country has had difficulties in 29. meeting the needs of the youth.
- **30.** Our teacher told us to study...... (much / hardly / hard) in preparation for this exam.

#### III- WRITING (4 marks)

#### Choose ONE topic only and write a text of about 150 to 200 words.

- **TOPIC1**. In 2022, the authorities adopted a law allowing the introduction of GMO in Senegalese agriculture. Write a paper in which you express and justify your opinion on the matter.
- **TOPIC 2**. Two friends are discussing the pros and cons of GMO in relation to food safety and health. Write down their conversation.
- **TOPIC 3.** You want to get into agribusiness after graduation. Write down a letter to the local representative of DER / FJ (Délégation à l'Entreprenariat Rapide pour les Femmes et les Jeunes) in your area to say what your project is about and ask for support.