BACCALAUREAT « C-D »

SESSION 2003

Section 1: Vocabulary 10 marks

***A. Complete the following passage. (5* marks)**

Malthus believed that the size of a country's population was limited to its food supply. He…….. that overpopulation would lead to war, famine and disease. Happily, his…….. did not come ……..

Boserup, on the other hand, said an increase in population would stimulate a change in farming technology and lead to an increase in food. He said necessity is the mother of…….. He studied …….. cultivation, which is the practice in Africa, where farmers cultivate from place to place each year. He also studied…….. cropping, which is the practice of growing many crops in one…….. Although nobody knows the real …….. of people in the world because many census…….. are inaccurate, it is important to be interested in the relationship between food supply and the population of the world.

B. Write the opposites of the words underlined in the following sentences. Write in the spaces provided. (5 marks)

1. A microscope can enable you to see the world of <u>tiny</u> animals……

2. A Microscope……can be the source of <u>much</u> excitement and adventure.

3. A microscope can be <u>purchased</u> in most hobby stores in Europe ……

4. Microscopy is an adventure that <u>allows</u> people to see, study and learn about the world too small for the naked eye to see ……

5. My parents were <u>disappointed</u> when I did not study science at University……

6. The meal at the Chinese restaurant was quite <u>tasteless</u> ……

7. He's quite a handsome young man ……

8. The light from the satellite was quite bright in the dark sky ……

9. We spent some pleasant times in the laboratory ……

10. There were many guests at the last science day occasion in our school ……

Section II: Grammar 10 marks

A. Complete the following sentences by filling in the gaps. You are advised (o read the whole passage more than once before you start doing the exercise. (5 marks) Sources of Energy.

We are blessed with many sources of energy which with a little effort and with the help of science, mankind can use very effectively.

Ah transport use……. oil transformed in refineries to produce……. for our lamps, petrol and diesel oil for motor……. and aviation……., for planes. It is therefore an important source of …….

Another source of energy is It is found in large quantities underground. So miners have to…… it.

A product of oil fields is……. gas. This is transported in overland through forests and deserts as the case may be. However many ships carry …….natural gas round the world to assure, distribution. Oil, natural gas and coal are known as……. fuels because they are formed from the decomposition or transformation of vegetation. Man has been careless in the use of these sources of energy and has polluted the environment by burning them.

B. Join the following sentences without using a conjunction. Write in the spaces provided (5 marks)

1- I am very angry with. I may forgive him if he apologises ……...

2- He was crossing the street. A car hit him ……...

3. He comes here quite often. Each time he buys me a present ……

4. He was very happy. He could not say a word ……...

5. It rained in the morning. It was still raining at might yesterday ……

Section III. Comprehension 10 marks.

Read the following passage carefully and answer the questions below. You are advised to read the entire text several times before you start answering the questions.

Solar solutions

Rural farmers in Africa lose millions of tonnes of fresh produce each year due to ignorance about food preservation techniques. Now efforts are underway to improve the situation, reports News1inkAfla's Sam Gonza and Kimi Mamtora.

Fruit production in Africa as in the rest of the world is seasonal. There is a very good market for exotic fruits in the western world. But before the produce reaches the dining tables of Europe, an African farmer has to put a lot of effort to ensure the fruit is consumable.

During periods of abundance, a large amount of fresh farm produce in Africa is lost because of its perishable nature. There are a number of reasons for this. First, farmers are ignorant about cheap food preservation techniques. Second, often road access is missing or inadequate, so produce cannot reach the market in good time. Moreover, during periods of surplus, prices are significantly low so farmers see no real incentives to transport their produce to the market.

These are the perennial problems that face the African farmer. The struggle is that the farmer obtains the best results from all that they produce. In the semi and area of Kenya, women's groups are keenly learning how to preserve surplus fruit produce using solar dryers. During the recently concluded Africa Wide Food Processing Technology show in Nairobi, one of the women participants, Beatrice Kingori said; "What is lacking is our awareness. Our people need to stimulate the nutritional benefits of solar dried food items'. She said that the food value of solar dried fruit items was minimally affected by solar drying.

On show were appetising dried mango slices produced by the Matinyani Women's Group of Kitui. The production process essentially involves cleaning, peeling and slicing the mangoes, which are then dipped into lemon juice made from locally grown lemons. The slices

are then spread on clean trays and inserted into locally made solar dryer kiln or ovens for about seven hours.

The dryer has a glass top surface and rotates to follow the sun in the course of the day. After the long drying process, the mango slices are sorted and packed in approved airtight plastic bags. The whole process is carried out in a hygienic environment.

According to Ms Kingori, each solar dryer has a top glass surface of 1.5 square metres and rotates in the course of the day. There are three tiers of rack inside the dryer and they assure uniform drying.

The dried fruit slices can be eaten in that form or constituted with water to make fruit juices. There is good nutritional preservation.

The glass topped dryer kiln is designed for long life and costs 300 US dollars. It is possible to make a cheaper dryer but it will be less durable.

***(African Farming* November/ December 1996)**

Questions

1- What have scientists tried to do for farmers in Kenya? (2marks)

2- What is the most serious handicap formers in Africa? Justify your answer.

3- What can Beatrice Kengori and her women's group do to ensure their success?

4. (Tick ⁄ the correct answer) (1 mark)

Science has contributed to the success of farmers in Kenya by:

a) inventing the solar kiln dryer

b) teaching the women to keep their fruits clean

c) providing solar solutions

Justify your choice

5. Why should the solar dryer kiln rotate?

Sections IV: Essay

Write an essay of between 225 and 250 words on one of the following topics:

a) Imagine that you have been invited by the science club of your school to talk to younger students on some of the benefits that society has got from science. Write a talk for the occasion and try to influence your listeners indirectly to study science.

b) Write a letter to: The Editor, Young People and Science, and present a plea on why young girls should be encouraged to study science. This is because you have noticed that there are very few girls studying science in your school. For this article your name is Marcel Nang.

c) Imagine that you are a girl called Njapdounke Abiba in a school that does not encourage girls to study science. Write an article for the journal, Girls and Science, stating why it is important for a young future mother to study science. For the article, your name is Njapdounke Abiba.