

COMPETENCE BASED CURRICULUM

S.3 BIOLOGY PAPER 2

SAMPLE ITEM

Christine a s.3 student went to the hospital for medical check up when she experienced the following signs and symptoms;

- General body weakness
- Dry, loose skin
- Hair loss
- Weight loss
- Wasting of muscles and
- Stomach shrinkage.

In the hospital, nutritionist and from the conversation they had with christine, she testified that she was not including enough carbohydrates in her diet. Without sending her to the laboratory for any medical tests the nutritionist simply advised her to start prioritising carbohydrates in her diet because the symptoms she had were indicating a deficiency of carbohydrates in her body. To start the nutritionist, gave her food substances A and B and told her that only one of them contains food substances that her body needs to do away with the symptoms she had.

She was also given iodine solution, Benedict's solution, sodium hydroxide solution, test tubes, test tube holder and a heat source.

The nutritionist requested Christine to use the reagents and apparatus above to identify the food solution that contains the food substances needed at that time. Christine is totally confused and does not know where to begin from.

Task

(a) Using the food substances A and B provided help Christine to design a clear test procedures to identify the food solution containing the food required nutrients.

(b) For each test procedure carry out the test procedure practically and write corresponding observations and conclusions, ensure that all the reagents above are used with each food solution.

(c) From your tests, which food solution would you recommend for Christine and why?

(d) Using the knowledge, you have acquired from Biology, name the disease Christine was suffering from.

(e) Name the building blocks of the food substances you have confirmed in solution B.

END♥CHARLES DE EXCELLENTO♥.....

