Examination

Food Tech

Section	Part	Question Number
III		28

Date

10/11/11

Number of booklets used for this question: 1

Instructions

- Write your Centre Number and Student Number at the top of this page.
- In the boxes provided write the name and date of this examination, and the number(s) of the question(s) attempted in this booklet.
- If you have not attempted the question, you must still hand in the Writing Booklet, with the words 'NOT ATTEMPTED' written clearly on the front cover.
- Write using black or blue pen. (Black pen is recommended.)
- You may ask for an extra Writing Booklet if you need more space.
- **You may NOT take any Writing Booklets, used or unused, from the examination room.**

Start here.

a) There are a variety of causes of deterioration and spoilage in fruit. These causes include enzymatic reaction, physical damage and the environment in which it is kept. Such examples include the browning of fruit due to air, causing an enzymatic reaction. Physical damage may be the cause of vertical and horizontal impact. The environment may include hot and harsh conditions when being transported. Therefore, these are some of the possible causes of deterioration and spoiling in fruit.

b) There are many legislative requirements for the labelling of a preserved fruit product. The essential requirements include the additives used to preserve the fruit. This is important for consumers in case they have an allergy to the preservative used. The best before date is also vital to inform consumers of when the preserved fruit is no longer at it's best quality. The net weight of the preserved fruit is also essential on the labelling to not

mislead consumers with the amount of juice or syrup combined with the fruit pieces itself. Therefore, these are legislative requirements for the labelling of a preserved fruit product.

c) There are a variety of preservation processes that could be used to extend the shelf life of the fruit. Two preservation processes that are used are canning and freezing. Aseptic and conventional canning both preserve to extend the shelf life of fruit. When aseptic canning is used, the fruit is first heated to temperatures between 105°C and 145°C and then placed into the can with juice or syrup. Conventional canning heats both the can and fruit to temperatures between 105°C and 145°C ~~the~~ which also extends the shelf-life of the fruit. ~~An~~ example of a fruit that is suitable for canning is sliced peaches. Freezing is also another preservation process that is used to extend the shelf life of fruit. Freezing is a

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straight forward preservation process where the fruit is kept in a freezer of −18°C to preserve and extend the shelf life of the fruit. Fruits that are most suitable for freezing are mixed berries, such as strawberries, blueberries and raspberries. Therefore, canning and freezing are two preservation processes that are suitable to use to extend the shelf life of the fruit.

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