



Uva Wellassa University
Faculty of Animal Science and Export Agriculture
BSc in Palm & Latex Technology and Value Addition
End Semester Examination - September/October 2015
Year II Semester I



Principles of Food Science (TEA 233 - 0)

Instructions

Answer Four (04) questions only

No. of questions : Five (05)

No. of pages : Two (02)

Total marks allocated : 100 %

Time : Two hours (02 hrs)

Essay

Question 01

a. Write a short note on food additives.

(12.5 marks)

b. "Safe use of food additives has received extensive attention in recent years". Briefly discuss the statement.

(12.5 marks)

Question 02

A food processing company produces dehydrated bitter guard for export market by following the given process line.

Raw materials → Cleaning → Size reduction → Dehydration → Packing

However, the final quality of the product was poor due to discolouration. In addition, the product repeatedly showed lower shelf-life than expected.

a. Explain the possible reasons for the poor quality and the reduced shelf life of the dehydrated bitter guard.

(15 marks)

b. Suggest an improved process line in order to obtain better quality final product.

(10 marks)

Question 03

a. Define the term "water activity (a_w)".

(05 marks)

b. "Water activity plays an important role in food preservation". Explain the statement.

(20 marks)

Question 04

"Hurdle technology is a crucial concept for the preservation of foods". Critically discuss the statement.

(25 marks)

Question 05

a. Write a short note on functional foods.

(10 marks)

b. Design a protocol for a novel functional food of your own choice.

(15 marks)