



Uva Wellassa University
Faculty of Animal Science and Export Agriculture

BSc in Export Agriculture

End Semester Examination - August/September 2014
Year III Semester II



Advanced Food Science & Food Analysis EAG 361 -2

Instructions

Answer **Four (04)** questions **including question No. 01**

No. of questions : Five (05)

No. of pages : Two (03)

Time : Two hours (02 hrs)

Total marks allocated : 100 %

Essay

Question 01

Write short notes on following topics.

- Aseptic packaging
- Membrane filtration technique in food microbiological analysis
- Organoleptic properties of foods
- Proximate analysis of foods
- Cut-out examination of canned foods

(05 × 05 = 25 marks)

Question 02

- Write down the essential steps of the determination of percentage total ash content of a given food sample using an incineration method (Dry ashing).

(12 marks)

- Write two advantages and two disadvantages of the above method.

(08 marks)

- Results obtained from determination of total ash content of potato are given bellow.

Weight of the crucible with the sample before incinerate = 15.41 g

Weight of the crucible with the sample after incinerate = 10.09 g

Weight of the empty crucible = 10.01 g

Calculate the percentage total ash content of the sample.

(05 marks)

Question 03

A student has done a research work on development of mango incorporated drinking yoghurt. In preliminary studies three different mango percentages were used. The three samples were prepared in three different days prior to the sensory evaluation. Then in order to select the best sample out of the three samples, sensory evaluation was done using 9 point hedonic scale.

- a. What was the critical mistake done by the student?
(05 marks)
- b. Explain the importance of avoiding that critical mistake?
(12 marks)
- c. What is 'Descriptive Test' in sensory analysis?
(08 marks)

Question 04

A small-scale processing factory produces consumer packets of spices for local market. However, the organoleptic properties of the products deteriorate rapidly due to poor packaging and the products repeatedly show a tendency of expiring very quickly.

- a. Explain the reasons for above incident.
(12 marks)
- b. What kind of packaging should be selected in order to maintain the inherent quality of the above products?
(08 marks)
- c. List five essential components of a food product label.
(05 marks)

Question 05

a. Briefly explain the functions of food additives.

(12 marks)

b. Briefly explain the term 'Food Adulteration'.

(10 marks)

c. Following food additives are mentioned in the label of a commercially available food product. Write the basic function of each additive.

E-102, E-223, E-621

(03 marks)

