



KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2011/2012

SECOND SEMESTER EXAMINATION FOR THE DIPLOMA IN FOODS NUTRITION AND DIETETICS

FND 016N: FUNDAMENTALS OF FOOD PROCESSING PRESERVATION AND STORAGE

DATE: Monday 26th March 2012

TIME: 2.00p.m -4.00p.m

INSTRUCTIONS

Read the following instruments carefully.

Answer all questions

1. Discuss the following concepts as used in food processing.
 - a) Discuss any five objectives of food processing. [10marks]
 - b) Explain the following concepts as used in food processing.
 - i) Water activity [2marks]
 - ii) Isopeptide bonds [2marks]
 - iii) Food quality [1mark]
 - iv) Enzymatic browning [2marks]
 - c) Blanching [3marks]
2.
 - a) Explain radiation processing of food. [5marks]
 - b) Which foods are processed by irradiation in Kenya. [5marks]
 - c) How can malting be used to improve food quality? [5marks]
 - d) Explain any two dangers associated with malting of food. [5marks]

3. a) What are food additives? [5marks]
b) **Processed foods are dangerous.** Explain why you agree or disagree with this statement. [5marks]
4. a) Explain the significance of gram positive bacterial in thermal preservation of food. [3marks]
b) What do you understand by D and Z values? [7marks]
5. a) What do you understand by the phrase “Humectants?” [3marks]
b) Explain food extrusion [2marks]
c) What are Maillard reactions? [2marks]
d) Which foods are processed by fermentation and how. [3marks]