MURANG'A UNIVERSITY COLLEGE (MRUC)

(A constituent college of Jomo Kenyatta University of Agriculture and Technology)

SCHOOL : HOSPITALITY AND TOURISM MANAGEMENT

DEPARTMENT: FOOD SCIENCE AND TECHNOLOGY

CLASS: DFT SEPT 2015
UNIT CODE: DFT 1125
UNIT TITLE: FOOD ANALYSIS
END OF SEMESTER EXAMINATION

DIPLOMA IN FOOD SCIENCE AND TECHNOLOGY
DATE: 21ST APRIL 2016 **TIME: 2HRS.**

ANSWER 3 QUESTIONS IN TOTAL.
QUESTION ONE IS COMPULSORY

QUESTION ONE

a. Explain four reasons for analyzing foods. (6mks)
b. Explain four characteristics of foods that are analyzed. (8mks)
c. Explain the criteria used in selecting an appropriate Technique for food analysis. (5mks)
d. Explain the three common sources of error in any analytical technique. (6mks)
e. Describe the different types of water found in foods. (5mks)

QUESTION TWO

a. Explain the meaning of a sampling plan. (2mks)
b. Describe a laboratory sample. (4mks)
c. Discuss four changes that may occur in a sample before actual analysis. (4mks)
d. Describe protein determination by Kjeldahl (8mks)
e. State two Disadvantages of protein determination by Kjeldahl (2mks)

QUESTION THREE

a. Explain reasons for determination of moisture content of foods (6mks)
b. Explain the principles of moisture determination by each of the following methods.
   i. evaporation method
   ii. distillations methods
   iii. Karl-Fishermethodmethods (9mks)
c) Describe fat determination by solvent extraction. (5mks)

QUESTION FOUR

Define “ash content” and “mineral” content of a food sample. (5mks)
Differentiate between “dry” and “wet” ashing. (5mks)
Describe protein determination by Kjeldahl (8mks)
Discuss the Advantages and Disadvantages of protein determination by Kjeldahl (2mks)