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University Examinations 2013/2014

SECOND YEAR, SECOND SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FOOD SCIENCE AND NUTRITION

AFN 2202: NUTRITIONAL EPIDEMIOLOGY 1

DATE: DECEMBER 2013   TIME: 2 HOURS

INSTRUCTIONS: *Answer questions* **one** *and any other* **two** *questions.*

QUESTION ONE (30 MARKS)

a) Define the following terms: (5 Marks)
   i.   Bioavailability
   ii.   Tolerance test
   iii. Factor analysis
   iv.   Cluster analysis
   v.   Epidemiology

b) State any five circumstances in which failure to observe a statistically significant association when such an association truly exist can occur in a study of diet and disease.   (5 Marks)

c) Discuss briefly the importance of multivariate analysis in nutritional epidemiology.   (5 Marks)

d) List any five factors that are considered as criteria for causality if an association is observed in an epidemiologic study.   (5 Marks)

e) Discuss briefly the importance of combining food frequency questionnaire and dietary recalls in nutritional epidemiology studies.   (5 Marks)

f) State the major components of a nutrient calculation system when analyzing diet record or 24-hours recall.   (5 Marks)

QUESTION TWO (20 MARKS)

Discuss any five epidemiological studies: give a brief description of the study and highlight the strengths and weaknesses of the study.

QUESTION THREE (20 MARKS)

a) Describe the advantages and disadvantages of describing diets as specific components or groups of compounds (nutrients) on one hand, and on the other hand, the use of foods to present diet in nutritional epidemiology studies. (15 Marks)

b) Give a summary or conclusive remark on describing diet either as nutrients or foods in nutritional epidemiology studies. (5 Marks)

QUESTION FOUR (20 MARKS)

Discuss the strengths and limitations of the 24-hours recall and food record methods of dietary assessment. (20 Marks)