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University Examinations 2013/2014

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

AFN 2303: NUTRITION RESEARCH

DATE: DECEMBER 2013

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Define the following terms: (5 Marks)
- Confounding
 - Epidemiology
 - Risk difference
 - Recall bias
 - Relative risk
- b) Briefly discuss ethical approval for nutrition research studies and indicate how it is done. (5 Marks)
- c) Describe the three Rs of research design. (5 Marks)
- d) State the advantages and disadvantages of experiments using animals in nutrition research. (5 Marks)
- e) Explain ecologic fallacy and how it affects nutrition research. State the research design mainly affected by ecologic fallacy. (5 Marks)

QUESTION TWO (20 MARKS)

- a) Differentiate between case-control studies and cohort investigations as applied to nutrition research. (4 Marks)
- b) Discuss the outcome analysis in cohort studies. (8 Marks)
- c) Giving an example, discuss the strength of cohort study design. (2 Marks)
- d) Describe the main sources of error in cohort. (6 Marks)

QUESTION THREE (20 MARKS)

- a) Explain what is a cross-sectional study design and discuss its use and application in nutrition research (10 Marks)
- b) Describe and compare cross-sectional study design with case-control studies. Highlight the key differences. (5 Marks)
- c) Discuss the sources of error in cross-sectional study design. (5 Marks)

QUESTION FOUR (20 MARKS)

Discuss how evaluations of the evidence of a causal inference is done in nutritional research. (20 Marks)