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University Examinations 2015/2016

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

AFN 3477: NUTRACEUTICAL AND EMERGING ISSUES IN NUTRITION

DATE: NOVEMBER 2015

TIME: 2 HOURS

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

QUESTION ONE (30 MARKS)

- a) Using an example in each case, define the following terms:
- (i) Functional foods.
 - (ii) Prebiotics.
 - (iii) Probiotics.
 - (iv) Dietary supplements. (8 Marks)
- b) Consumer awareness and interest in nutraceuticals and functional foods has increased substantially. Outline five reasons for this. (5 Marks)
- c) Briefly explain five health benefits of dietary fiber. (5 Marks)
- d) Briefly explain the sources of butyric acid and outline its beneficial metabolic effects in human body. (5 Marks)
- e) List five examples of approved food label health claims. (5 Marks)
- f) List two examples of bioactive lipids. (2 Marks)

QUESTION TWO (20 MARKS)

- a) Briefly explain the appropriate use of dietary supplements. (10 Marks)
- b) Briefly explain what you understand by bioactive peptides and explain the three main strategies or approaches that can be used to produce bioactive peptides. (10 Marks)

QUESTION THREE (20 MARKS)

Explain the role of functional foods in the prevention of following health conditions.

- a) Gastrointestinal infections. (7 Marks)
- b) Obesity. (7 Marks)
- c) Osteoporosis. (6 Marks)

QUESTION FOUR (20 MARKS)

Discuss the role of the following functional foods in maintenance of human health.

- a) Soy beans. (10 Marks)
- b) Milk. (10 Marks)