



**MERU UNIVERSITY OF SCIENCE & TECHNOLOGY**

*Foundation of innovations*

**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

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**University Examination 2016/2017**

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

**AFT 3256: FOOD MICROBIOLOGY AND PARASITOLOGY**

**DATE: APRIL 2016**

**TIME: 2 HOURS**

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

**QUESTION ONE (30 MARKS)**

- a) Define the following terms as used in food microbiology and parasitology. (10 marks)
  - i) Food microbiology
  - ii) Food spoilage
  - iii) Parasite
  - iv) Cryptosporidiosis
  - v) Indicator micro-organism
- b) Giving two examples in each case, explain what is meant by;
  - i) Intrinsic factors (5 marks)
  - ii) Extrinsic factors (5 marks)
- c) Outline the five main hurdles a food borne pathogen must overcome in order to cause a food borne illness. (10 marks)

**QUESTION TWO (20 MARKS)**

Discuss any five characteristics of microbial food borne infection. (20 marks)

**QUESTION THREE (20 MARKS)**

Discuss giardiasis under the following headings

- i) Disease symptoms (5 marks)
- ii) Persons at risk (5 marks)
- iii) Prevention (10 marks)

**QUESTION FOUR (20 MARKS)**

Discuss spoilage characteristics of the following

- i) Ropines in bread (10 marks)
- ii) Flat sour spoilage in canned foods. (10 marks)