**MERU UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**P.O. Box 972-60200 – Meru-Kenya.**

**Tel: 020-2069349, 061-2309217. 064-30320 Cell phone: +254 712524293, +254 789151411**

**Fax: 064-30321**

**Website:** [**www.must.ac.ke**](http://www.must.ac.ke) **Email:** **info@mucst.ac.ke**

**University Examinations 2015/2016**

THIRD YEAR FIRST SEMESTER EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FOOD SCIENCE AND TECHNOLOGY AND BACHELOR OF SCIENCE IN FOOD SCIENCE AND NUTRITION

**AFT 3329: BEVERAGE TECHNOLOGY**

 **DATE: NOVEMBER 2015 TIME: 2 HOURS**

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

**QUESTION ONE (30 MARKS)**

1. (i) Define the following terms:
2. Potable water. (1 Mark)
3. Dutching. (1 Mark)
4. Abstraction. (1 Mark)
5. Cupping. (1 Mark)
6. Espresso. (1 Mark)

(ii) Explain the mechanism of CTC (Crush Tear Curl) and explain why it is important.

 (5 Marks)

1. (i) Explain two broad classification of beverages and give two examples in each category. (3 Marks)

(ii) State four main types of tea consumed in the world. (2 Marks)

(iii) Explain four characteristics of beverages. Justify each characteristics with an example (4 Marks)

1. (i) Giving two examples in each case differentiate beer, wine and spirits of ethanol concentration and raw materials used. (6 Marks)

(ii) Explain the roles of fermentation in tea and coffee processing. (4 Marks)

**QUESTION TWO (20 MARKS)**

Describe in detail cocoa powder, production stating the reasons for each stage. (20 Marks)

**QUESTION THREE (20 MARKS)**

1. Using flow diagram outline the process of manufacturing black tea in tea factory. (10 Marks)
2. Discuss primary, secondary and tertiary processing of coffee to be consumed in Kenya. (10 Marks)

**QUESTION FOUR (20 MARKS)**

Discuss the following:

1. Beer production. (5 Marks)
2. Wine production. (5 Marks)
3. Spirit production. (5 Marks)
4. Coke production. (5 Marks)