



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY
SCHOOL OF HEALTH SCIENCES**

SCHOOL OF AGRICULTURAL AND FOOD SCIENCES

**UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN
AGRICULTURAL EXTENSION EDUCATION**

FOURTH YEAR FIRST SEMESTER 2016/2017 ACADEMIC YEAR

REGULAR

COURSE CODE: AAE 3416

COURSE TITLE: COMMUNITY HEALTH & FOOD SECURITY

EXAM VENUE: LR 6

STREAM: Bsc. (Agric. Ext. Educ.)

DATE: 16/12/16

EXAM SESSION: 2.00 – 4.00PM

TIME: 2 HOURS

Instructions:

- 1. Answer all questions in Section A and any other 2 questions in Section B**
- 2. Candidates are advised not to write on the question paper**
- 3. Candidates must hand in their answer booklets to the invigilator while in the examination room**

SECTION A

[30mark]

Answer all questions in this section

- 1) Define food security stating clearly the food security dimensions **(2 marks)**
- 2) Define health and briefly explain the factors that affect the health of a community **(5 marks)**
- 3) Explain the term epidemiology and state the underlying premise in epidemiology **(3 marks)**
- 4) Illustrate the epidemiological triad explaining the various components **(5 marks)**
- 5) Clearly distinguish between the following terms **(10 marks)**
 - (a) Essential nutrient versus non-essential nutrient
 - (b) Community health versus population health
 - (c) Bias versus confounding
 - (d) Qualitative research versus quantitative research
 - (e) Problem-based learning versus subject-based learning
- 6) State clearly the disadvantages of problem-based learning **(5 marks)**

SECTION B (40 marks)

Answer ANY TWO questions in this section

- 6) Answer the following questions;
 - (a) Briefly describe the steps involved in writing a scientific research report **(10 marks)**
 - (b) Briefly describe the epidemiologic study designs **(10 marks)**
- 7) Discuss the historical developments that led to community food security as a public health issue in Kenya **(20 marks)**
- 8) Answer the following questions;
 - (a) Kevin, a male shopkeeper weighs 82.3 kg and is 172.1 cm tall. Considering that he consumes on average 2800 kcal per day and that he has a moderate physical activity, compute his total energy expenditure and comment on his nutritional status **(10 marks)**
 - (b) Discuss the community health strategies for food security in a community **(10 marks)**