****

**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**

**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**

**SECOND YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF SCIENCE IN FOOD SECURITY**

**2016/2017 ACADEMIC YEAR**

**REGULAR**

**COURSE CODE: AFB 3212**

**COURSE TITLE: Food Security and World Development**

**EXAM VENUE: STREAM: BSc. Food Security**

**DATE: EXAM SESSION:**

**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 question paper.**
3. **Candidates must hand in their answer booklets to the invigilator while in the examination room.**

**SECTION A [30 MARKS]**

**Answer ALL questions from this Section.**

1. a) Explain the term fortificant as used in food security (2 pts)

b) Define the role of government in national food fortification. How does the government get to identify the need for fortification? (2 pts)

c) Suggest the three major preconditions national government normally consider for fortification to be sanctioned in mass in a community. (3 pts)

d) Identify and explain at least three (3) types of food fortifications done in mass in Kenya. (3 pts)

1. Differentiate the following terms commonly used in food security measurements at community levels:
   1. High food security and marginal food security (2 pts)
   2. Low food security and very low food security (2 pts)
   3. Safety nets and food safety (2 pts)
   4. Hunger and malnutrition (2 pts)
   5. Household hunger scales and coping strategies index (2 pts)
2. What measures are used in international comparison of food security performance? Name and clearly describe what each indicator measures. (10 pts)

**SECTION B: (40 MARKS)**

**Answer ANY TWO questions from this Section.**

4 Discuss at least 5 major points why urbanization and achieving food security in developing nations is not following the same pattern as that of the developed nations

5 The FAO “Twin Track” policy approach to fighting hunger combines sustainable agricultural and rural development with targeted programs to enhance access to food for the needy. Outline and clearly discuss at least ten (5 rural development and 5 agricultural policies) of such programs in third world that enhances food access and availability,

6 In our class discussions, we noted that industrialization, techno-foods and export industries can save the heavy loss agricultural sector experience in developing countries. Outline ten (10) major points such collaborations can bring to Kenya.