

**UNIVERSITY OF KABIANGA**

**UNIVERSITY EXAMINATIONS**

**2016/2017 ACADEMIC YEAR**

**SECOND YEAR SECOND SEMESTER EXAMINATIONS**

**FOR THE DEGREE OF BACHELOR OF SCIENCE IN AGRICULTURE**

**COURSE CODE: CRS 334**

**COURSE TITLE: ANNUAL CROP PRODUCTION AND MANAGEMENT**

**DATE: 20TH JUNE, 2017**

**TIME: 3 HOURS**

**INSTRUCTIONS TO CANDIDATES:**

Answer any **ALL** Questions in **section A** and any other THREE Questions in **section B**

**SECTION A (40 MARKS)**

**Question One**

1. Briefly explain the significance of the cotton strainers and their possible control measures. (4 marks)
2. Briefly discuss the Finger millet farming under the following sub-headings:
3. Land preparation. (4 marks)
4. Planting. (4 marks)
5. Explain the rationale behind the following agronomic practices:
6. Furrow sowing of maize. (4 marks)
7. Planting of sorghum and a cow pea in crop rotation. (4 marks)
8. Briefly explain the usefulness of the following elements in maize (*Zea mays*) farming:
9. Nitrogen. (2 marks)
10. Phosphorus. (2 marks)
11. Briefly describe physiological losses in Irish potato (*Solanum tuberosum* L.). (4 marks)
12. Briefly explain any two most important mycotoxins in maze (*Zea mays*). (4 marks)
13. Explain the economic importance of the stem borer (*Busseola fusca*) in sorghum (*Sorghum bicolor*). (4 marks)
14. Outline the problems facing Wheat (*Triticum aestivum*) farming in Kenya. (4 marks)

**SECTION B (60 MARKS)**

**Question Two**

1. Describe the agronomy of cassava (*Manihot esculenta*) under the following sub-headings:
2. Harvest maturity. (4 marks)
3. Harvesting methods. (4 marks)
4. Rasping and pulping. (4 marks)
5. Explain starch extraction process in cassava. (8 marks)

**Question Three**

1. Name two major pests of cowpea and indicate their scientific names. (4 marks)
2. Briefly explain the rice farming systems. (6 marks)
3. Using grain colour, differentiate the various commercial cowpea varieties. (10 marks)

**Question Four**

1. Give a brief description of the temperature and rainfall requirements of common bean (*Phaselus vulgaris* L.*).* (4 marks)
2. Briefly describe the fertilizer requirements of sweet potato (*Ipomoea batatas*). (4 marks)
3. Describe the origin and distribution Sweet potato (*Ipomoea batatas*). (12 marks)

**Question Five**

1. Briefly discuss nutritional importance of finger millet in human diet. (8 marks)
2. Briefly discuss the impact and control of maize lethal necrosis disease. (12 marks)