



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY  
SCHOOL OF SPATIAL PLANNING AND NATURAL RESOURCE MANAGEMENT  
UNIVERSITY EXAMINATION FOR DEGREE OF BACHELOR OF ARTS IN  
SPATIAL PLANNING**

**2<sup>ND</sup> YEAR 1<sup>ST</sup> SEMESTER 2013/2014 ACADEMIC YEAR**

**REGULAR**

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**COURSE CODE: PSP 3217**

**COURSE TITLE: PLANNING AND AGRICULTURE**

**EXAM VENUE: LR 6**

**STREAM: Spatial Planning)**

**DATE: 16/04/14**

**EXAM SESSION: 9.00 – 11.00 AM**

**TIME: 2.00 HOURS**

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**Instructions:**

- 1. Answer question 1(Compulsory) and ANY other 2 questions**
- 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.**

### Question One

- a) Agriculture evolved through many distinct stages. Briefly describe agricultural developments during:
- i. Prehistoric period. [5 marks]
  - ii. Neolithic revolution period. [5 marks]
- b) Briefly explain how green revolution led to increased agricultural production around the world between 1940s and 1970s. [10 marks]
- c) Agricultural land use should be integrated into spatial plans in modern days urban planning. Discuss? [10 marks]

### Question Two

- a) Briefly describe global challenges facing agricultural sector currently. [10 marks]
- b) What sustainability is as applied in modern agriculture? [4 marks]
- c) List six common sustainable agricultural techniques. [6 marks]

### Question Three

- a) Describe any five theories about origin of agriculture. [10 marks]
- b) Using a sketch, explain land use zones in Von Thunen's Model of Agricultural Land Use.  
· [7 marks]
- c) In your opinion, why is Von Thunen's Model hardly applicable in modern times?  
· [3 marks]

### Question Four

- a) Briefly highlight crop cultivation systems practiced in Kenya. [10 marks]
- b) Why is transportation important in agricultural production, marketing and distribution?  
· [10 marks]

### Question Five

- a) Outline environmental factors that informed the delineation of agricultural regions/zones in Kenya [10 marks]
- b) Farm layout is arguably a spatial plan of agricultural land use at farm-level. List
- i. Stages in developing farm layout. [5 marks]
  - ii. Factors to consider in developing farm layout. [5 marks]