



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF AGRICULTURAL AND FOOD SCIENCES**  
**THIRD YEAR FIRST SEMESTER UNIVERSITY EXAMINATION FOR DEGREE OF**  
**BACHELOR OF SCIENCE IN AGRIBUSINESS MANAGEMENT**  
**2017/2018 ACADEMIC YEAR**  
**REGULAR**

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**COURSE CODE: AAE 3312**

**COURSE TITLE: ANALYSIS AND PLANNING OF AGRICULTURAL PROJECTS**

**EXAM VENUE: LAB 3**

**STREAM: (BSc. Agribusiness Management)**

**DATE: 12/12/17**

**EXAM SESSION: 2.00 – 4.00PM**

**TIME: 2 .00 HOURS**

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**Instructions**

- 1. Answer ALL questions in Section A (compulsory) and ANY TWO 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**
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**SECTION A** **[30 MARKS]**

**Answer ALL questions in this Section.**

1. Project managers must engage in risk and uncertainty management to understand and control them in their projects.
  - (a) Outline any four risks that might interfere with agricultural project implementation. [4marks]
  - (b) Explain any four aspects considered in environmental analysis of agricultural projects. [4marks]
  - (c) Differentiate between:
    - i. A project and A plan [1 mark]
    - ii. Ex-ante analysis and Ex-post analysis [1 mark]
  
2. A project moves through stages. An idea germinates then it passes through various steps which will clarify the concept.
  - (a) Briefly explain the project life cycle. [5marks].
  - (b) What are the main characteristics of agricultural projects [5marks]
  
3.
  - (a) What are the limitations of Gantt chart as a planning technique in agricultural projects. [2marks]
  - (b) Outline any three objectives of monitoring and evaluation in agricultural projects [3marks]
  - (c) Explain any five technical aspects you would consider in a project; targeting implementation of cage fish farming in the Lake Victoria region. [5marks]

**SECTION B** **[40 MARKS]**

Answer any TWO QUESTIONS in this Section.

4. Use the table below to answer the questions below.

Activity	Predecessor	Duration (Days)
A	-	20
B	A	10
C	B	8
D	A	11
E	C, D	7
F	E	6
G	D	12
H	E	13
I	G, H	5

Required;

- (a) Draw a network diagram. [8 marks]
- (b) Determine;
  - i. Critical activities [2 marks]
  - ii. Critical path [2 marks]
  - iii. Project duration [2 marks]
- (c) Advise an agricultural project manager on how to treat labour abundance  
In the face of capital intensive technology advocacy. [ 6 marks]

5. Financial analysis refers to cash-flows from which present and future expenditure and income are calculated to determine the financial feasibility of a project.
- (a) Briefly discuss the importance of this analysis with reference to agricultural projects. [12 marks]
  - (c) A prospective investor is contemplating investing in two projects presented in the table below. Use the information below to advise him accordingly.

Year	Investments	Returns from Project A	Returns from Project B
1	20,000	-	12,000
2	8,000	8,000	9,000
3	6,500	12,000	5,500
4	2,500	20,000	6,000
5	1,000	10,500	25,000
6	-	8,000	20,000
7	-	9,500	17,500

Required:

- (a) Calculate the payback period of each project. [6marks]
- (b) Advise the investor on the best project to invest in. Justify your answer. [2marks]
6. With the government ban on plastic packaging materials, a local NGO has come up with a proposal of making packaging materials from the abundant papyrus reeds from the Yala swamp. The swamp supports different organisms and rare birds in danger of extinction. The NGO intends to target the small-scale traders with their products.
- (a) As an agricultural project manager, advise them on the commercial and environmental aspects of the project. [4marks]
- (b) Is this project suitable for public or private funding? Justify your answer. [2marks]
- (c) Explain any two externalities that may be experienced in this project. [4marks]
- (d) How would you classify this type of agricultural project? [2marks]
- (e) Briefly explain how this agricultural project may help the agricultural sector contribute to the achievement of Vision 2030 under the economic pillar. [2marks]
- (f) Shadow prices are used when there are distortions in the market to determine the scarcity value of goods and services used in the project. Outline some of the general problems with the determination of shadow prices. [6marks]