



**JARAMOGI OGINGA ODINGA UNIVERSITY OF SCIENCE AND
TECHNOLOGY
SCHOOL OF AGRICULTURE AND FOOD SCIENCE
UNIVERSITY EXAMINATION FOR THE DEGREE OF BACHELOR OF
SCIENCE IN AGRIBUSINESS MANAGEMENT
3RD YEAR 1ST SEMESTER 2013/2014 ACADEMIC YEAR
MAIN**

COURSE CODE: AAE 3312

COURSE TITLE: ANALYSIS AND PLANNING OF AGRICULTURAL PROJECTS

EXAM VENUE:LR9

STREAM: (BSc. Agribusiness Mgt.)

DATE: 13/8/14

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 [30 MARKS]

Answer ALL questions in this Section.

1. Project managers have a list of actions in a project and also specific results from the actions. Give these actions and results required in a table form with examples in the agricultural environment. [10 marks]

2. The project concept has increasingly been used as an instrument to promote development and change. In fact, a good and well designed project can be the ‘cutting edge’ in a development strategy.
 - a) Outline and explain five virtues of the development project approach that makes it useful as a tool for rural socioeconomic development. [5marks]
 - b) Describe the project management process and different project phases in project selection. [5marks]

3. Project managers must engage in risk management to understand and control the risks in their projects.
 - a) Explain the risk management process in a project. Illustrate where necessary. [5marks]
 - b) Differentiate between;
 - i. Financial analysis and Economic analysis [1 mark]
 - ii. Ex-ante and Ex-post impact assessment [1 mark]
 - iii. Monitoring and Evaluation [1 mark]
 - c) Justify the use of shadow prices in economic analysis [2marks]

SECTION B **[40 MARKS]**

Answer any **TWO QUESTIONS** in this Section.

4. The table below shows a hypothetical cost-benefit analysis (CBA) of a beef project. Use it to answer the following questions.

Year	Total benefits (\$m)	Total Cost (\$m)	Net Benefits (\$m)	NPV at 5% (\$m)
0	0.00	450.00		
1	0.00	450.00		
2	0.00	450.00		
3	357.01	225.00		
4	360.86	225.00		
5	364.46	225.00		
6	367.82	225.00		
7	370.96	225.00		
8	373.89	225.00		
9	376.61	225.00		
10	379.15	225.00		
11	381.52	225.00		
12	383.72	225.00		
13	385.76	225.00		
14	387.66	225.00		
15	608.09	225.00		
Total	5,097.53	4,275.00		

- a) Complete the undiscounted net benefits column, clearly highlighting the total undiscounted net benefits. [5marks]
- b) How do the total undiscounted net benefits compare to the discounted net benefits, when net benefits are discounted at 5%? [5marks]
- c) Suppose you were required to appraise this project, would you use the discounted total net benefits or the undiscounted total net benefits? Provide economic justification for your answer. [5marks]
- d) Explain how you would use the cost-benefit ratio to appraise this project. (*please do not calculate*) [5marks]
5. A local sugar company has been experiencing problems with transportation of sugar cane from the production site to the processing site. There has been high frequency of truck accidents due to careless driving, poor conditions of vehicles and impassable feeder roads. The trucks have not been serviced for some time now due to negative cash flows. All these have translated into high absenteeism, high insurance premiums and delay in cane delivery. Prepare a simple logical framework proposal for this scenario: develop
- a) A problem tree, [4marks]
- b) An objective tree, [4marks]
- c) A strategy tree and [4marks]
- d) Log frame matrix. [8marks]
6. Use the table below to answer the questions.

Activity	Predecessor	Duration (Days)
A	-	6
B	A	8
C	A	8
D	B	20
E	B	18
F	C	10
G	E	8
H	D,F	2
I	G,H	7

Required;

- a) Draw a network diagram [8marks]
- b) Determine;
- i. Critical activities [2marks]
- ii. Critical path [2marks]
- iii. Project duration [2marks]
- iv. What is the probability of finishing the project in 55 days [2marks]
- c) Explain some of the main features of agricultural development projects. [4marks]