

**CHUKA**



**UNIVERSITY**

## **UNIVERSITY EXAMINATIONS**

### **EXAMINATION FOR THE AWARD OF DEGREE IN BACHELOR OF AGRICULTURAL ECONOMICS, AGRIBUSINESS MANAGEMENT AND BACHELOR OF SCIENCE IN ANIMAL HEALTH**

**AGEC 422: AGRICULTURAL PROJECT ANALYSIS**

**STREAMS: AGECE Y4S2,AGBM ,ANSI**

**TIME: 2 HOURS**

**DAY/DATE: MONDAY 4/12/2017**

**8.30 A.M – 10.30 A.M**

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#### **INSTRUCTIONS:**

- **Answer question one and any other three**

1. Explain intangible costs and benefits in a project. [4marks]  
  - (ii) Financial prices of tangible items can be adjusted to reflect economic values in three successful steps. Explain the four stages of project cycle. [6marks]
  - (iii) A project has a clear starting and finishing date in which specific objectives may be achieved. Explain how the achievements can be measured. [10marks]
  - (iv) Explain the reason why project may fail. [5marks]
2.
  - (i) Mr. Mutwiri borrowed some money from a bank to start a dairy project . However due to technicalities involved in financing he was to receive ksh 1,000,000 at the end of each year for a period of 8 (eight) years. The money was delayed for initial period of six month which did not affect the term as agreed. Calculate the present worth of the project if the present worth factor is 12.5% p.a and therefore draw a conclusion. [5marks]
  - (ii) Discuss the project management process group. [10marks]
3.
  - (i) Consider the following examples in which a farmer applies the DAP fertilizer to his farm.

<b>CROP RESPONSE TO DAP FERTILIZER IN 2015 - 16</b>						
	<b>WHEAT</b>			<b>MAIZE</b>		
<b>DAP IN KGS/ HA</b>	<b>YIELD IN KGS/ HA</b>	<b>VALUE/ KSH</b>	<b>MVP</b>	<b>YIELD IN KGS/HA</b>	<b>VALUE KSH</b>	<b>MVP</b>
0	2070	8000		1800	9000	
6	2120			2000		
12	2200			2200		
18	2228			2400		
24	2300			2500		
30	2345			2700		
36	2400			2750		
42	2510			2800		
48	2580			3000		
54	2610			3100		
60	2712			3150		
66	2800			3200		
72	2100			3220		

- (a) Find the value of wheat and value of maize. [4marks]
- (b) Find the marginal value product. [5marks]
- (c) Suppose the farmer had only 2 hectares one planted with maize and another with wheat and sufficient resources to purchase only 66 kgs of DAP fertilizers. Suppose he shifted 6 kgs to maize leaving the rest for wheat production. Explain this scenario giving the opportunity cost in this case. [6marks]
4. (i) Define Gantt chart. [2marks]
- (ii) As a financial analyst in agricultural project, explain how you would treat family labour. [3marks]
- (iii) You have been appointed as project manager for chaka farm in chuka, explain the difficulties you may encounter when determining economic values for non-traded items. [10marks]
5. (i) Use the ‘discounting incremental net benefit’ to fill the table below. [10marks]

Year	Capital items	Operation & maintenance cost	Production cost	Gross costs	Incremental production ( gross benefit) ksh	Incremental net benefit or cash flow (ksh)	Discount factor 10%	Present worth 10% ( ksh)
1	2000	0	0		0			
2	5000	0	0		0			
3	8000	0	0		0			
4	7100	0	0		0			
5	4000	0	0		0			
6	0	580	560		3000			
7	0	580	1200		4000			
8	0	580	1800		1000			
9	0	580	1880		11000			
10	0	580	2300		13000			

(ii) Explain the role of the project manager and project owner.

[5marks]

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