



*“Investing in Africa’s future”*

**COLLEGE OF HEALTH, AGRICULTURE & NATURAL SCIENCES**

**NAEC 408: PROJECT APPRAISAL AND EVALUATION**

**NOVEMBER/ DECEMBER 2022**

**LECTURER: MRS. R. MUCHANYUKA**

**DURATION: 3 HOURS**

---

### **INSTRUCTIONS**

- 1 Answer FOUR questions
2. Answer in Essay form
3. DO NOT Repeat Material

FOR CALCULATIONS, SHOW ALL WORKING

### QUESTION 1 [25 Marks]

Assume that after graduation you decided that you wanted to start a pig project, and that the following information applies:

- You need a loan of \$70 000 from the bank at the going interest rate of 12% per annum
- You are going to put up structures in the base year (Year 0) at the cost of \$20 000
- In the first year of the project's life (Year 1) you are going to buy equipment and weaners with the rest of the loan
- Sales of live animals to Colcom start in year 1 and the project lasts for 6 years before it winds up or expires
- Price of the live weight is \$1.50/kg throughout the years
- Production and operation costs and the level of production are as follows:

	Years					
Costs	Year1	Year2	Year3	Year4	Year5	Year6
Production costs	2 000	3 000	3 200	2 800	2 600	1 800
Operation costs	1 000	1 500	2 400	2 800	2 000	1 500
Production output (kgs of live weight)	2 400	28 400	22 000	2 000	1 400	1 000

- Using the Benefit Cost Analysis (BCA) find out if you should undertake the project. Give reasons for your answer and show all calculations (12)
- Discuss critically what the production and operation costs would consist of in this project (5)
- If due to scarcity of inputs like feeds and piglets you put the loan in your account at the bank instead of establishing the project, at interest rate 10% per annum for 6 years. Could this be a better option? Explain why. (8)

### QUESTION 2 [25 Marks]

- Identify a problem in the economy of your country that needs to be resolved as a priority (5)
- Identify two projects that could solve the problem and explain how and why they can solve the problem (20)

### Question 3 [25 Marks]

From the pictures below, chose a project you would like to do and carry out a detailed economic and social analysis in a location of your choice.



### Question 4 [25 Marks]

1. Blend Blast is an agricultural company which is thinking of investing \$100 000 to start dairy production. The following are the expected cash inflows from the dairy project. In the 1<sup>st</sup> year they expect cash inflow of \$10 000, in the 2<sup>nd</sup> year \$15 500, in the 3<sup>rd</sup> year 20 000, in the 4<sup>th</sup> year \$ 35 000, in the 5<sup>th</sup> year \$39 000 and in the 6<sup>th</sup> year \$40 000. Alternatively, the company can invest the \$100 000 in beef production with expected cash inflows of \$ 12 000 per year until the initial investment is paid off.

Calculate: (show working)

- a) The Payback period for milk and for beef production (9)
- b) Net Present Values (NPV) **for both projects**; Where their interest rates will be at 8% per annum (12)

Comment on both calculations whether the project is viable or not. (4)

**Question 5 [25 Marks]**

- a) With an aid of an agricultural example, show how you can analyze a project of your choice (15)
- b) Differentiate economic growth from economic development (5)
- c) Illustrate with an example the Time value of money (5)

**Question 6 [25Marks]**

Emmanuel owns a factory which produces sports shoes. His initial investment was \$55 000 which he got from Masala investments. In the 1<sup>st</sup> year, he had a total net of production at \$ 35100. Payback period was 2 years;

- a) Explain what Average Annual Proceeds Per unit of Investment method of financial analysis of a project is. (5)
- b) Calculate the Average Annual Proceeds per unit of Investment (AAPPUI). (5)
- c) Carry out a market appraisal and a technical appraisal for a PIGGERY farming project  
[15]

**END OF EXAMINATION PAPER**