Federal University of Technology Owerri. Rain Semester Examination, 2017/2018 Academic Session.

Course Title: Agric. Project planning and Appraisal. Code AEC 504; 2Units. Time 3hrs. Attempt 5 Questions in all, with at least one question from each section

SECTION A.

1. Attempt an in-depth distinction with examples, between economic and financial analysis of agricultural projects.
2. What do you understand by the term discounting

2b) consider a hypothetical irrigation project with the following investment outlay as below;

Compute, (i) the BC* ratio and (ii) NPW. Assume a discount factor of 12%

year	Production cost	capital	Operation and maintenance	Gross benefit
1	0	170,000	0	0
2	0	85,000	0	0
3	20,000	0	26,000	114000
4	20,000	0	26,000	114,000
5	20,000	0	26,000	114,000
6	20,000	0	26,000	114,000

2c) following from your computations in 2b above, advise a prospective investor as appropriate.

2d) Explain the reasons for the values for years 1-2.

3. Traditionally, projects have been valued by discounting the future expected cash flows, subtracting the investment costs and obtaining the net present value. But there is an added value above the discounted cash flows. What is this value? Also show the mathematical representation.

3b. Describe the four options available to a project manager and the circumstances that may necessitate each option.

SECTION B.

4. Identify the costs and benefits involved in agric projects and succinctly explain any four of them

5. Explain each of the following concepts and their importance where applicable agricultural project analysis.

I) Inflation; II) Shadow prices; iii) capital investment analysis; iv) Techniques of agricultural investment analysis.

SECTION C.

6a) A school of thought described project as "cutting edge of development". Briefly comment on this assertion.

b) Differentiate between project and the following (i) scheme; (ii) programme; (iii) development plan.

c. briefly explain the stages involved in project appraisal.

7a) what is payback period (PBP)?

(b) Consider the following four irrigation schemes, with project costs and values (N'000) as below:

project	year	Total costs	Total value	Net value
I	1	25,000	15,000	10,000
	2	5000	15,000	10,000
	3	-	-	-
	Total	30,000	30,000	20,000
II	1	25,000	15,000	10,000
	2	5000	15000	10,000
	3	5000	5,972	.972
	Total	35,000	35,972	20,972
III	1	25,00	10,000	5,000
	2	5,000	11,500	6,500
	3	5,000	17,000	12,000
	Total	35.000	38,500	23,500
IV	1	25,000	10,000	5,000
	2	5,000	17,000	12,000
	3	5,000	11,500	6,500
	Total	35,000	38,500	23,500

i) Calculate the pay-back period for each project (I-IV)

ii) Using Payback period rank the projects

iii) Inspecting project I and II, what is the weakness observed using PBP as a ranking criterion?

iv) Similarly, assuming the total cost of project III and IV increased by N3, 500, what weaknesses would you observe in the use of PBP as a ranking criterion?