



OLABISI ONABANJO UNIVERSITY, AGO-IWOYE

DEPARTMENT OF ECONOMICS

FACULTY OF SOCIAL SCIENCES

2018/2019 HARMATTAN SEMESTER EXAMINATION

Course Code/Title: ECO 403/PROJECT ANALYSIS I

**Instructions:** Answer ALL questions in SECTION A and ONE EACH from SECTION B and C respectively.

**TIME ALLOWED: 2HRS**

**SECTION A:**

Show that the following statements are true, false or ambiguous. (Explanations carry 70% of marks allotted).

- i. Apart from Financial and Economic Analysis, there are four other facets of Project Analysis.
- ii. In determining industrial location, availability of basic infrastructure is the main consideration
- iii. The Weighted Average Cost of Capital is preferred to the Government rate of rediscount in determining the discount rate in project analysis
- iv. Cases of capital rationing and mutually exclusive projects are treated differently in Project Analysis
- v. We can demonstrate the use of Discounting and Compounding factors in the determination of NPV and IRR, using hypothetical examples
- vi. 6 The NPV and IRR give identical decision criteria in all circumstances except where there is inadequate funds
- vii. 7 There is essentially no difference between Economic and Commercial Analysis of a Project
- viii. 8 We obtain Incremental IRR from Incremental Cashflow when treating mutually exclusive projects
- ix. 9 The traditional average profit method is superior to the Net Present Value method in Investment appraisal
- x. 10 Projects are forms of an investment containing a set of activities which must go through all stages of the project cycle

$$\frac{1 - [1 + r]^{-5}}{r}$$



## SECTION B (Answer ONLY one question)

### Question 2

If we consider two projects X and Y with the following Net Cashflows, which of these two projects will you choose if the cost of capital is 15%. Will your decision change if the cost of capital increases to 25%?

Year	Net cashflow (#) X	Net cashflow (#) Y
1	(6,500,000)	(20,000,000)
2	(4,500,000) 1	5,500,000 1
3	2,200,000 2	5,500,000 2
4	2,000,000 3	5,600,000 3
5	2,000,000 4	5,600,000 4
6-16	2,700,000 5	5,600,000 5
17	2,800,000 6	5,600,000 6
18	2,850,000	5,700,000 7
19	2,900,000	5,700,000 8
20	2,950,000	5,700,000 9

### Question 3

OOU venture is set to operate a palm oil production at the Ayetoro Campus. The initial investment cost is #20,000,000 with the economic life span of 20 years. It is estimated to generate a net cash flow of #4,000,000 at the end of the first two years. However, the net cash flow is projected to grow at 5 percent for the rest of the years.

- Calculate the internal rate of return if the cost of capital is 20%
- If the cost of capital rises by 5 percent, will the project still be worth being undertaken?

## SECTION C (Answer ONLY one question)

### Question 4

Illustrate with relevant examples how, the following concepts are treated in project analysis:

- NPV Index and Incremental IRR
- Relevant of the stages of the project cycle
- Risk and Uncertainty
- Discounting factor and compounding factor

### QUESTION 5

Distinguish between the following concepts, using relevant examples:

- Ex-post evaluation and ex-ante evaluation
- Economic, Financial and Technical evaluation
- Unbalanced and Balanced growth theories of Profs Hirschman and Rodan
- Opportunity Cost of Capital and Borrowing Rate