

### MAASAI MARA UNIVERSITY

# REGULAR UNIVERSITY EXAMINATIONS 2021/2022 ACADEMIC YEAR THIRD YEAR FIRST SEMESTER

## SCHOOL OF BUSINESS & ECONOMICS BACHELOR OF SCIENCE IN ECONOMICS

**COURSE CODE: ECO 3108** 

**COURSE TITLE: PROJECT APPRAISAL AND** 

**ANALYSIS** 

DATE: TIME:

#### **INSTRUCTIONS TO CANDIDATES**

1. Answer Question **ONE** and any other **THREE** questions

This paper consists of **three** printed pages. Please turn over.

#### **QUESTION ONE**

a) The county government of Narok intends to undertake the following two mutually exclusive projects ( $P_A$  and  $P_B$ ). The table below gives their cash flows and initial costs. Use the Net Present Value (NPV) and the Internal Rate of Return (IRR) techniques to decide which project should be undertaken. (Use a required rate of return of 12 per cent).

Project	Yearly Cash Flows (USD Millions)							
	0	1	2	3	4	5		
P <sub>A</sub>	(1,685)	550	680	620	350	310		
$P_{B}$	(1,850)	600	1350	750	530	295		

(10 Marks)

- b) Discuss the non-numeric models used in project selection and state the advantages they have over the numeric models. (6 Marks)
- c) Differentiate between strategic attractiveness and financial attractiveness in project selection. (9 Marks)

#### **QUESTION TWO**

- a) Differentiate between economic and financial analysis of environmental projects. (10 Marks)
- b) Discuss the rationale for Social Cost Benefit Analysis (SCBA). (5 Marks)

#### **QUESTION THREE**

- a) Explain the conditions which makes cost benefit analysis desirable in developing countries.(9 Marks)
- b) Describe three non-time adjusted investment criteria of project appraisal. (6 Marks)

#### **QUESTION FOUR**

- a) Discuss the features that distinguish one project from another. (9 Marks)
- b) Explain the circumstances when shadow pricing should be used in measurement of costs and benefits in projects. (6 Marks)

#### **QUESTION FIVE**

a) Use the following pay off matrix to explain the decision making criteria appropriate to uncertainty as listed below the matrix

N	1	2	3	4
S				
1	0	3	7	16
2	4	4	4	5
3	0	0	3	3
4	6	10	5	3

i) The Maximin (Wald criterion)	(3 Marks)
ii) The Minimax (minimum regret) criterion	(3 Marks)
iii) The index of pessimism criterion (index of pessimism is 0.9)	(3 Marks)
iv) Laplace Criterion	(3 Marks)

b) Differentiate between a risk situation and an uncertainty situation for a project. (3 Marks)