



*(University of Choice)*

**MASINDE MULIRO UNIVERSITY OF  
SCIENCE AND TECHNOLOGY  
(MMUST)**

**MAIN EXAMINATION**

**UNIVERSITY EXAMINATIONS  
2023/2024 ACADEMIC YEAR**

**FIRST YEAR FIRST SEMESTER EXAMINATIONS**

**FOR THE DEGREE  
OF  
MASTER OF SCIENCE IN ECONOMICS**

**COURSE CODE: ECO 812**

**COURSE TITLE: PLANNING AND PROJECT APPRAISAL**

**DATE: THURSDAY, 21-12-2023**

**TIME: 9:00 -12:00**

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**INSTRUCTIONS TO CANDIDATES**

**ATTEMPT QUESTION ONE AND ANY OTHER THREE**

**TIME: 3 Hours**

**MMUST observes ZERO tolerance to examination cheating**

**This Paper Consists of 4 Printed Pages. Please Turn Over.**

**QUESTION ONE.**

- a) Describe the essence and constraints of economic planning in a Sub-Saharan context (17 marks)
  
- b) Mention the various techniques that can be applied in the monitoring and evaluation of development projects (5 marks)
  
- c) Highlight the principal control measures that should be taken to ensure that planning objectives are achieved in a timely and effective manner. (8 marks)
  
- d) Describe the key components of an environmental assessment of development projects (10 marks)

**QUESTION TWO**

The Department of Energy is planning a rural micro-energy project.

- a. Highlight the essence of public participation in development planning. (8 marks)
  
- b. Describe the process of preparing a stakeholder analysis and describe how the different groups can participate effectively in the planning and implementation process. (12 marks)

**QUESTION THREE**

The County Government is considering alternate community health care projects as scheduled below:

	PROJECT A (sh'000)	PROJECT B (sh '000)
initial investment	4000	5000
Annual fixed costs	200	300
Annual variable costs (% of investment cost)	20%	20%
Annual expected revenue	1500	2000
Project life	5 years	5 years
Discount rate	10%	10%

- a) Identify the most viable project by assessing the following economic indicators:
  - i. Project payback period (6 marks)

- ii. Net present value (6 marks)
- b) Highlight the non-economic variables that also require careful consideration when making a project appraisal. (8 marks)

**QUESTION FOUR**

Critically evaluate the application of the following economic models in the national planning process.

- a. Shadow pricing
- b. Social accounting matrix (SAM)
- c. Keynesian aggregate growth model (20 marks)

**QUESTION FIVE**

- a. Explain the key steps to be taken when planning for a mobile district health facility and highlight the various sources of revenue that can be used to finance the project. (12 marks)
- b. Describe the methodology that would be applied for an effective risk and sensitivity analysis of this project. (8 marks)

**QUESTION SIX**

As a Project Officer for a district development committee, describe, using clear diagrams, the various tools that you would adopt to ensure that your team achieves optimal project results. (20 marks)

