



**JARAMOGI ODINGA OGINGA UNIVERSITY OF SCIENCE AND TECHNOLOGY**  
**SCHOOL OF EDUCATION**  
**UNIVERSITY EXAMINATION FOR THE DEGREE OF MASTER OF EDUCATION IN**  
**PLANNING AND ECONOMICS OF EDUCATION**  
**1<sup>ST</sup> YEAR, 2<sup>ND</sup> SEMESTER, 2017/2018 ACADEMIC YEAR**  
**KISII CAMPUS, REGULAR: DEC-2017**

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**COURSE CODE: EMA 853**

**COURSE TITLE: COST-BENEFIT ANALYSIS**

**DATE .....**

**STREAM: M.ED**

**TIME: 2HOURS**

**EXAM SESSION: December, 2017**

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**Instructions:**

- 1 Answer question ANY THREE questions.**
- 2 Candidates are advised not to write on the question paper.**
- 3 Candidate must hand in their answer booklets to the invigilator while in the examination room.**

## QUESTION ONE

a) In appraising a project, the commonly used tool is Cost Benefit Analysis. Discuss six aspects that are appraised (3mks)

b) Calculate the NET Present value of the project given below (1mks)

Period I years	0	1	2	3	4	5
Cost (millions)	10m	8	9	15	16	18
Benefit(millions)	0	10	15	16	17	20
Net value( net present value)						

c) Mlachake Business is considering investing ksh.500,000 in starting an academy.

The expected future cash in-flows( benefits) in the next six years are as follows:

year	Cash inflows/benefits
1	80,000
2	100,000
3	140,000
4	150,000
5	190,000
6	240,000

If the discounting factor is 10%, determine:

i)NPV ( 10mks)

ii)IRR assuming 16% and 17% are discounting factors (4mks)

iii)On the basis of the NPV, calculate in i) above whether the project is viable and the rate at which the future value of expected benefits equals to present value costs. (2mks)

## **QUESTION TWO**

With respect to question one, Suppose Mlachake wishes to inject more funds into the academy as follows:

Year 2 sh. 150,000

Year 3 sh. 90,000

Advice Mlachake whether the undertaking is worthwhile to venture into with the projected future cash inflows(Benefits) (20mks)

## **QUESTION THREE**

Maintenance expenditure for a certain University in Kenya over the next 25years is expected to be released from Treasury as period outlays of ksh 20,000 at the end of 5 years, ksh 60,000 at the end of the 10<sup>th</sup> year, ksh100,000 at the end of 15<sup>th</sup> year and ksh 125,000 at the end of the 20<sup>th</sup> year with interest at 10%. What is the equivalent annual cost for a 25 year period? (20mks)

## **QUESTION FOUR**

Examine reasons why stakeholders find it necessary to finance education ( 20mks)

## **QUESTION FIVE**

- a) Examine the various costs and benefits of investments in education (10mks)
- b) Discuss the pros and cons of Cost-Benefit Analysis tool (10mks)

END!