KENYATTA UNIVERSITY

UNIVERSITY EXAMINATIONS 2017/2018

FIRST SEMESTER EXAMINATION FOR THE DEGREE OF MASTER OF ECONOMICS

EAE 802: PLANNING TECHNIQUES

DATE: THURSDAY 1ST FEBRUARY 2018 **TIME: 9.00 A.M. - 12.00 P.M.**

INSTRUCTIONS:

Answer **ALL** questions

QUESTION ONE

(a) Write brief notes on the following

(i) Financial planning and physical planning

(ii) The distributive function and allocation function of the government in an economic system

(iii)The budgetary policy and tax policy (6 marks)

(b) Discuss at least three steps in economic planning (6 marks)

(c) Which discount rates are used in government projects? (3 marks)

QUESTION TWO

(a) State the assumptions of the input-output model (4 marks)

(b) An economy has three sectors, industry, services and agriculture. The matrix of coefficients and the final demand vector are given as A = $A = \begin{bmatrix} 0.4 & 0.6 & 0 \\ 0.4 & 0.3 & 0.2 \\ 0.1 & 0 & 0.4 \end{bmatrix}$ $and\ d = \begin{bmatrix} 72 \\ 150 \\ 58 \end{bmatrix}$ respectively.

Using the Leontief input-output model, determine the production levels required to satisfy the final demand. (8 marks)

(c) Briefly discuss the limitations of the input-output model. (3 marks)

*INVOLVEMENT IN ANY **EXAMINATION IRREGULARITY** SHALL LEAD TO **DISCONTINUATION***

QUESTION THREE

(a) The County government of Busia is planning to acquire a sugar company that will be operating two mills. Mill 1 will cost KES 70000 per day to operate and can produce 400 tonnes of cane tops, 500 tonnes of bagasse and 450 molasses. Mill 2 will cost KES 60000 to operate per day, and can produce 350 tonnes of cane tops, 600 tonnes of bagasse and 400 tonnes of molasses per day. A market research has revealed that there is an immediate demand of 100000 tonnes of cane tops, 150000 tonnes of bagasse and 124500 tonnes of molasses. Using the simplex method advice the County government on how many days the company should run each mill to minimize the costs and still meet the expected demand? (8 marks)

(b) Suppose the incremental capital output ratio (ICOR) an economy is given as 0.75 and the economy targets an increase in output of KES750 billion, what will be the acquired investment to facilitate this output? (2 marks)

(c) What are the shortcomings of the planning tool in (b) above? (5 marks)

QUESTION FOUR

Discuss at least three characteristics of the general equilibrium model of planning (6 marks)

The Central government is considering implementing two projects with the following net returns in KES '000.

	Year 0	Year 1	Year 2	Year 2
Project A	1000	500	600	0
Project B	2361.6	1000	1000	1000

With discount factor of 10%,

(i) Are the projects admissible? (4 marks)

(ii) Suppose government has funds to implement one project. Which will your advice to implement? (1 mark)

(iii) Briefly discuss three shortcomings of he cost-benefit analysis as a planning tool (4 marks)