MACHAKOS UNIVERSITY

University Examinations for 2016/2017 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

SECOND YEAR FIRST SEMESTER EXAMINATION FOR DEGREE IN

BACHELOR OF ECONOMICS AND FINANCE

EAE 201: ECONOMICS OF PUBLIC EXPENDITURE

DATE: 5/6/2017 **TIME: 2:00 – 4:00 PM**

INSTRUCTIONS:

Answer Question One and Any Other Two Questions

QUESTION ONE (COMPULSORY)

a) Briefly explain the following concepts as used in economics of public expenditure (12 marks)

i. Unanimity rule and Majority voting rule
ii. Consumer surplus and producer surplus
iii. Pareto efficiency and pareto improvement
iv. Direct crowding out and indirect crowding out

b) Using a relevant diagram and equations, explain the concept of optimal allocation of commodities among consumers (7 marks)

c) A community has n members. The Marginal Benefit (MB) for street lighting is MBx=10-0.4x and the Marginal Cost (MC) is MCx=10+2x. The members share the cost of street lighting equally.

Compute:

i. The social optimal level of street lighting if n=5 (3 marks)
ii. The net social welfare for each individual (4 marks)

d) Explain any four determinants of political equilibrium (4 marks)

QUESTION TWO (20 MARKS)

a) Using relevant examples, discuss any four public policy objectives (8 marks)

b) Kenyatta University is planning to invest in two projects (Project A and Project B) to improve the welfare of the students. The initial cash outlay is KShs 1Million and KShs. 2Million for project A and B, respectively. The cash inflows associated with the two projects for a period of four years are as follows:

	CASH INFLOWS	
YEAR	PROJECT A	PROJECT B
1	400,000	700,000
2	350,000	200,000
3	325,000	150,000
4	100,000	200,000

Given a discount rate of 10% rank the two projects using the Net Present Value Criterion and select the best alternative. Clearly show all your workings.

(8 marks)

c) Briefly discuss any four ways of measuring the size of the public sector (4 marks)

QUESTION THREE (20 MARKS)

a) Discuss any five types of budgets (10 marks)

b) Consider two individuals (A and B) who both demand good X. The inverse demand functions are given as $P_A = 100 - 2Q_A$ and $P_B = 100 - 2Q_B$. The marginal cost of good X is 40.

Required (10 marks)

i. Suppose that either consumer can be prevented from using good X and can also be charged additional cost for each extra unit consumed, what is the efficient number of units for good x consumed by both A and B?

ii. Assuming that it is impossible to prevent either consumer from using good X and also it is impossible to charge them additional cost for each extra unit consumed, compute the efficient number of units for good x consumed by both A and B?

iii. Estimate the efficient price in i) and ii) above

iv. Is there free riding in either case? Explain.

QUESTION FOUR (20 MARKS)

a) Differentiate between the benefit cost ratio and the net benefit cost ratio project evaluation methods (5 marks)

b) Discuss, using relevant diagrams and illustrations, any five responses to externalities (15 marks)

QUESTION FIVE (20 MARKS)

a) The three top leaders of Nairobi County are planning to implement different county projects. The information is represented on the table below. A negative sign means a net loss estimated by each of the leaders in each project

LEADER	Project A	Project B	Project C	Total Net Benefits
Senator	200	-50	-55	95
Governor	-40	150	-30	80
Woman Rep	-120	-60	400	220

i. If the three leaders vote for each of the projects, what will be the outcome? (3 marks)

ii. Suppose now the leaders engage in logrolling, how will the outcome in i) above change (4 marks)

iii. If the total net benefits were negative, how will the strategy adopted in ii) above lower the country's welfare (3 marks)

b) With the aid of relevant examples explain five strategies that the government can use to ensure it achieves the objective of income redistribution in the country (10 marks)