



MACHAKOS UNIVERSITY COLLEGE

(A Constituent College of Kenyatta University)
University Examinations for 2015/2016

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FIRST SEMESTER EXAMINATIONS FOR DEGREE IN

BACHELOR OF ECONOMICS AND STATISTICS

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS

EAE 201: ECONOMICS OF PUBLIC EXPENDITURE

Date: 1/8/2016

Time: 8:30 – 10:30 AM

INSTRUCTIONS:

Answer question one (compulsory) and any other two questions.

Do not write on the question paper.

QUESTION ONE (COMPULSORY)

- (a) An investor is faced with three projects. This investor wants to make a choice on which project to proceed with. The opportunity cost of capital is given as 15 percent. Additional information on the three projects is given below

YEAR	PROJECT A		PROJECT B		PROJECT C	
	Benefit	Cost	Benefit	Cost	Benefit	Cost
0	(500)	400	400	100	1000	650
1	600	300	1000	650	350	400
2	300	0	(300)	400	400	200

Required

- (i) Use the method of Net present value (NPV) to rank the projects (4 marks)
- (ii) If you used the NBCR approach, what would be your conclusion (4 marks)
- (iii) Account for the results in (i) and (ii) (1 marks)
- (b) Markets are institutions where exchange occurs. In perfect markets, market participants are assumed to be equally well informed about the nature of the good being traded and the circumstances under which the good is traded. Market failure may arise due to incomplete information because markets will then fail to allocate resources efficiently. Analyze two types of incomplete information problems. Highlight relevant examples and corrective mechanisms. (4 marks)
- (c) Analyze the applicability of Peacock and Wiseman political constraint model of public expenditure in developing countries like Kenya. Kindly pay attention to *inspection* and *displacement effect*. (4 marks)
- (d) A tax is a compulsory transfer of private resources into the public economy. Therefore a tax distorts private sector activity leading to inefficient outcomes. Based on this statement, use a well labelled diagram to demonstrate the welfare loss(es) associated with government imposition of a tax (4 marks)
- (e) Briefly highlight two issues that have been raised over the annual budget in Kenya (2 marks)
- (f) One of the criteria of social welfare is Pareto-optimal allocation of resources. That is, it is practically impossible to make one person better off without making another person worse off. With the aid of the contract curve, evaluate the theory of the first best among two consumers (5 marks)
- (g) In brief explain the term single peaked preferences as used in the Median voter theorem. (2 marks)

QUESTION TWO

- (a) Fisher separation theorem states that an individual makes a decision on that income level that maximizes wealth before rearranging consumption to maximize satisfaction.
- (i) With the aid of a well labelled diagram demonstrate the Fisher separation theorem (4 marks)
 - (ii) State the relevance of the theorem in developing countries while in general paying attention to the state of capital markets (2 marks)
- (b) One primary role of the government is redistribution of income in the economy. The objective of redistribution could be to bridge the gap between those few rich and the majority poor. In line with the statement, illustrate two ways the government in Kenya achieves this goal. (3 marks)
- (c) An Impure (club) good is one which is excludable but non-rival. Cite two examples of these goods. Explain if necessary (2 marks)
- (d) In the presence of a positive externality, prices do not equal to the marginal social benefit (MSB). Demonstrate using a well labelled graph how competitive markets may fail to create a solution for a positive externality (5 marks)
- (e) Political equilibrium refers to an agreement on the level of production of one or more public goods, given the specified rule for making the collective choice and the distribution of tax shares among individuals. State three determinants of political equilibrium that in your opinion are relevant in Kenya (3 marks)
- (f) Explain the term social rate of return as used in cost benefit analysis (1 mark)

QUESTION THREE

- (a) Unanimity and majority voting rules are some procedures used in democratic societies in making decisions on public expenditures.
- (i) Distinguish between the two procedures (4 marks)
 - (ii) State two problems regarding unanimity voting as a practical way of providing public goods (2 marks)

- (b) Illustrate three principles proposed to govern public expenditure decisions envisioned in the new constitution of Kenya (3 marks)
- (c) Briefly evaluate the practicability of the theory of the second best in public expenditure regarding attainment of pareto optimal conditions (4 marks)
- (d) Demonstrate the computation of the degree of government participation in provision of goods and services in the economy. Hint: use the share of government contribution to personal income (3 marks)
- (e) Using a diagram, illustrate how regulation can be used as a response to an externality. (4 marks)

QUESTION FOUR

- (a) Growth in public expenditure can be traced to the first and second world war when spending as a proportion of GDP rose to over 45% and over 60% in the first and second world wars respectively in Britain and across Nations. Account in two reasons for the size of the modern public sector (4 marks)
- (b) Briefly demonstrate the ideal budget cycle prior to implementation (5 marks)
- (c) With the aid of a well labelled diagram illustrate the optimal allocation of inputs among producers and optimal allocation of commodities among consumers. (4 marks)
- (d) The following excerpt is obtained from McConnell, Brue and Flynn (2009).

“Suppose the owner of a large parcel of forestland is considering a plan to clear-cut (totally level) thousands of acres of mature fir trees. The complication is that the forest surrounds a lake with a popular resort on its shore. The resort is on land owned by the resort. The unspoiled beauty of the general area attracts vacationers from all over the nation to the resort, and the resort owner is against the clear-cutting. Assume the owner of the timberland holds the property rights to the land to be logged and thus has the right to clear-cut it.”

Required

- (i) Demonstrate how this problem can be solved by individual bargaining (Coase Theorem) in the spirit of Ronald Coase (1960) (3 marks)
- (ii) State the main assumptions you made in (i) (2 marks)
- (iii) State the main limitations of this approach (2 marks)

QUESTION FIVE

(a) What do economists mean when they say government purchases are “exhaustive” expenditures whereas government transfer payments are “nonexhaustive” expenditures? Cite an example of a government purchase and a government transfer payment. (4 marks)

(b) Through reference to the accompanying table, which shows ranking of three public goods by voters Jay, Dave, Conan:

Public Good	<u>Rankings</u>		
	Jay	Dave	Conan
Courthouse	2nd choice	1st choice	3rd choice
School	3rd choice	2nd choice	1st choice
Park	1st choice	3rd choice	2nd choice

- (i) Explain the paradox of voting (3 marks)
- (ii) What is the possible ultimate public outcome? What does the outcome depend on (2 marks)
- (c) The non-rival nature of social good consumption makes it virtually impossible to optimally price such goods even if provided by government.
- (i) Derive with the aid of well labelled diagrams the conditions for efficient provision of a public good (4 marks)
- (ii) Compare them with those of private goods (3 marks)
- (d) Differentiate between
- (i) Merit and demerit goods (2 marks)
- (ii) Explain why these goods might be sources of externalities (2 marks)