



## AFRICAN ECONOMIC RESEARCH CONSORTIUM

Collaborative MA Programme in Economics for Anglophone Africa  
(Except Nigeria)

JOINT FACILITY FOR ELECTIVES  
JULY – OCTOBER 2006

PUBLIC SECTOR ECONOMICS II

Second Semester: Final Examination

Duration: 3 Hours

Date: Friday, September 29, 2006

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### INSTRUCTIONS:

Answer **THREE** Questions; **TWO** Questions from Section A and **ONE** Question from Section B. Each Question Carries 20 Marks.

Allocate your time accordingly. Be brief and to the point.

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### SECTION A: Theory of Taxation

(Answer **TWO** Questions from this Section)

#### Question 1

- (a) Show the effect of an increase in interest rate to a borrower and a lender in a two-period inter-temporal model of consumption decision in a perfectly competitive market. (11 Marks)
- (b) Assess differences in effect of introduction of lump-sum tax, income tax and an indirect tax on present and future consumption of an individual in a two-period inter-temporal model of consumption decisions in a perfect market. (9 Marks)



## Question 2

- (a) "The economy is an interdependent system in which all prices are related to each other. Changes in the price and quantity of one product or factor affect those of others. Households not directly involved in the taxed market may lose or gain, and those which are directly involved may become subject to further indirect effects". Discuss, outlining the limitations of a partial equilibrium analysis compared to a general equilibrium analysis in the analysis of tax incidence. (8 Marks)
- (b) Using a two-sector general equilibrium analysis, Harberger (1962) demonstrates that a tax on return on capital in the corporate sector may be borne by all owners of capital, whether or not their capital is used in the corporate sector. Without stating the assumptions of the model, show that there are basically two effects (substitution and output effects) of the introduction of corporate tax on capital in the corporate sector. (12 Marks)

## Question 3

- (a) What is the conclusion of *the Ramsey rule*? Show that in certain circumstances Ramsey rule result is attained when tax rates are set inversely proportional to the price elasticity of demand. (12 Marks)
- (b) "By suggesting that inelastically demanded goods should be taxed at relatively high rates, the *inverse elasticity rule* contrasts the fairness objective of taxation". Discuss, giving suggestions on how distributional consequences of taxation can be considered. (8 Marks)

## **SECTION B: Tax Policy and Other Issues**

### **Question 4**

There are three major principles of tax design, namely: equity, efficiency, and administrative feasibility.

- (a) Atkinson (1977) shows, using a targets-and-instruments assignment-type framework, how the problems of optimal design of direct and indirect taxation can be resolved to attain the first two major principles of tax design. Outline Atkinson's arguments and assess their practical importance **(12 Marks)**
- (b) How does the level of a country's development affect its tax structure? What evidence is there that countries at similar stages of development have similar tax structures. **(8 Marks)**

### **Question 5**

- (a) What are the advantages of a decentralized system of government? Show that compared to centralization, decentralization of government allocative function may lead to welfare gains. **(10 Marks)**
- (b) 'There is concern that financing of government deficits may reduce or "crowd-out" private investment'. Discuss, in the context of relationship between deficits and savings/investment **(10 Marks)**