



AFRICAN ECONOMIC RESEARCH CONSORTIUM

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

JOINT FACILITY FOR ELECTIVES (JFE)

JUNE – SEPTEMBER 2007

PUBLIC SECTOR ECONOMICS II

Second Semester: Final Examination

Duration: 3 Hours

Date: Tuesday, September 25, 2007

INSTRUCTIONS:

Answer **THREE** Questions; **TWO** Questions from **SECTION A** and **ONE** Question from **SECTION B**.

Each Question Carries 20 Marks.

SECTION A: Theory of Taxation

Answer TWO QUESTIONS from this Section

Question 1

- (a) Discuss the economic effects of VAT by referring to economic efficiency, equity, administrative efficiency and flexibility (10 marks)
- (b) Given a utility function $U = U(Y, H - H_0)$ and budget constraint $Y = wH_0 + N$; where Y is net income, H_0 is hours spent working, H is total number of available hours so that $(H - H_0)$ is the number of hours spent on leisure, w is wage rate and N is non-wage income. Show algebraically and graphically how the introduction of a proportional income tax affects labour supply. (10 marks)



Question 2

- (a) "Tax incentives are not effective instruments for attracting investment" Do you agree? Discuss (8 marks)
- (b) Suppose the Government knows its level of output and wants to collect the maximum possible tax revenue in order to improve its services to the public. As an advisor to your Minister for Finance, what would be your recommendation on the choice between *ad valorem* tax and specific taxes? Verify your answer both algebraically and diagrammatically. (12 marks)

Question 3

- (a) Optimal taxation is the term used to describe a new approach to an old concern: "the design of tax system to minimize excess burdens while achieving a socially desirable redistribution of income". With the help of simple illustration show that the optimal linear income taxation in a pure labour supply model depends on three things: the shapes of individuals' preference maps for net income and leisure; the society's view about redistribution and the distribution of wage rates (12 marks)
- (b) It is frequently asserted that taxes on beer and cigarettes are regressive, because poor individuals spend a large fraction of their income on such items. Both algebraically and graphically show how would your estimate of the degree of regressivity be affected if you thought these commodities were produced by a monopoly facing a constant elasticity demand schedule, $Q = P^{-\eta}$

Where Q is output, P is price and η is elasticity of demand and $\eta > 0$ (8 marks)



SECTION B: Tax Policy and Other Issues

Answer ONE QUESTION from this Section

Question 4

- (a) "A fiscally decentralized system is always more efficient and more equitable than a fiscally centralized system" Discuss **(12 marks)**
- (b) Explain the contradictions (if any) between Ricardian equivalence, fiscal activism, and crowding-out as theories of public debt. **(8 marks)**

Question 5

- (a) "Tax financing is always superior to debt finance on both efficiency and equity grounds". Discuss this statement. **(10 marks)**
- (b) Equity, efficiency and administrative feasibility are major principles of tax design. Using a target-and-instruments assignment-type framework Atkinson (1977) shows how the problems of optimal design of direct and indirect taxation can be resolved to attain the first two principles. Outline Atkinson's arguments and assess their practical importance. **(10 marks)**