

YORK UNIVERSITY
Faculty of Graduate Studies
Annual Examination
December 16, 1991
Economics 5300.03A : Public Economics – Taxation
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time=2 hours

Do both part A and part B. Part A counts for **40%** of the mark, part B for **60%**. Note that there is some choice in each part.

Part A. For any **five** of the following seven terms, **briefly** state their significance in the economics of taxation.

1. lump-sum taxes
2. golden rule of economic growth
3. differential tax incidence
4. excess burden of an excise tax
5. Ramsey rule for optimal commodity taxation
6. accelerated depreciation
7. imputed income

Part B. Answer any **five** of the following seven questions.

1. A person has a fixed amount W of wealth which can be invested in two assets. One asset is a bond paying a return r_0 , which is *certain* and *positive*. The other asset has a stochastic return r (with an expected return which exceeds r_0). How would a proportional tax on interest income, with full loss offset, affect the person's demand for the risky asset?

2. Suppose that a region can produce two crops, wheat and apples, using land and labour as inputs. The aggregate supplies of land and of labour are fixed in the region, but both inputs are perfectly mobile between the two types of farming. Discuss the incidence of a tax on the use of land in wheat farming.

3. Derive an expression for the marginal excess burden of a tax on a single commodity (when there are many commodity taxes already in place). Must this marginal excess burden be positive? Explain briefly.

4. A person's utility, as a function of her consumption of leisure (L), of food (F), and of clothing (C) is

$$U(L, F, C) = L + \log F + \sqrt{C}$$

If commodity taxes on food and clothing are set optimally, what is the relation between the tax

rates on the two goods?

5. Would a “Rawlsian” [maximize the well-being of the worst-off person] decision maker ever choose a marginal tax rate less than 100 percent when choosing the optimal linear income tax? Explain.

6. Suppose that dividend income is not taxed at all in the personal income tax. If the corporate income tax rate were 40 percent, and the personal income tax were 30 percent on interest income, how should the firm finance its investment?

7. How does the Canadian personal income tax differ from a comprehensive (Haig-Simons) income tax in its treatment of capital gains?

the end