## Political Economics Qualifying Exam May 28<sup>th</sup> 2002

# Part A:

# Professor Hunt

**Instructions**:

Do not write your name anywhere on your blue book.

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and write ONE SIDE of the page only.

Write PolEcon/Part A on your Blue Book.

#### PART A:

### Political Economy/Critique I, Econ 7003, Qualifier, May 28, 2002

The following question has three prefatory statements A, B, and C. When you answer the question, answer it in terms of the statements in Part A, Part B, and Part C, even though it is just one question.

#### Part A statement:

In India, cows are considered, by some, to be sacred. In much of the rest of the world, cows are considered to be food. The attributes of cows by virtue of which they are seen as sacred are obviously not such that they can be shown objectively to be true. The qualities of cows that are thought to provide nutrition to humans can be shown objectively to be true.

Obviously, some aspects of the cow exist only in certain societies at certain times, while others exist at all times in all societies.

#### Part B statement:

Some Neoclassical economists argue that positive economics and normative economics are totally separable; and that their value theory is scientific only because it relies exclusively on positive economics.

Some Marxist economists agree on the distinction of the positive and normative aspects of theory, but they argue that it is the labor theory of value that is scientifically true.

Many economists deny that positive economics and normative economics can ever be totally separated.

#### Part C statement:

Some economists argue that scientific laws are arrived at only after extensive observation of "facts." such that these "facts" are sufficient to derive general truths or laws.

Other economists argue that observable "facts" sometime obscure the basic truths or laws that underlie these "facts."

### THIS IS THE QUESTION:

Analyze the relation of Marxist writing on value theory in Volume I of <u>Capital</u> and Volume III (i.e., the transformation problem). Analyze them within the context of statements of A, B, and C above, (i.e., analyze them within in terms of A, then do the same for B, then do the same for C).

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## Part B:

## Professors Glick & Campbell

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### Political Economy/Critque II, Econ 7004, Qualifier, May 28, 2002

Answer all questions. The two essay questions, 1 and 2, will each be weighted 30% of the qualifier, and the Sraffian/ Marxian computational problem 3 will be weighted 40%.

- 1. Why are underconsumption theories and disproportionality theories of crisis logically inadequate and must ultimately collapse into some form of theory of profits? Work through each of these two theories individually to demonstrate this inadequacy theory.
- 2. Why was the Okishio Theorem so devastating to Marxist theories of the falling rate of profit? Explain the logical structure of the Okishio argument and examine two possible avenues of reply that were taken historically.
- 3.Let  $\lambda_i$ ,  $c_i$ ,  $v_i$ , and  $s_i$  be the total value, constant capital, variable capital and surplus value of a unit of some good i. Let there be 2 goods. Let  $l_i$  be the direct labor needed to produce a unit of good i, and let the transpose of the productive matrix  $A^T$ , with everything defined as in the book by Woods, be

$$A^{T} = \begin{pmatrix} a_{11} & a_{21} \\ a_{12} & a_{22} \end{pmatrix}$$

Let the variable capital be determined by the wage:  $v_i$ =Awl<sub>i</sub> for the money wage w and some constant A.

- a) Suppose that  $(\lambda/c)_1 = (\lambda/c)_2$  and that the value  $\lambda$ -vector is proportional to (parallel to) the direct labor vector so  $(\lambda$ -vector)=B(1-vector)-for some constant B. Also using the assumption on the variable capital, show that  $(v/c)_i$  (the inverse of the organic composition of capital) has the same value for each good.
- b) Let

$$A^{T} = \begin{pmatrix} .3 & .2 \\ .3 & .4 \end{pmatrix} \qquad \qquad \vec{l} = \begin{pmatrix} 2 \\ 3 \end{pmatrix}$$

Find the  $\lambda$ -vector.

- c) Consider the general condition  $(l_1a_{11}+l_2a_{21})/l_1=(l_1a_{12}+l_2a_{22})/l_2=\alpha$ . The numbers given in part b satisfy this, and it turns out this is enough to guarantee that the value  $\lambda$ -vector is proportional to the direct labor l-vector (second assumption needed for part a), although b) of course is only an example, not a proof. Using this new relation and anything previously established that you need to also establish the first assumption in part a), that  $(\lambda/c)_1=(\lambda/c)_2$ , which says that the value  $\lambda$ -vector is proportional to the constant capital c-vector.
- d) Demonstrate (or you can argue this in words if you use the correct words!) that the surplus value s-vector is proportional to (parallel to) the direct labor expended in this case. (Hint it likely would help to first show that the surplus value vector has to be parallel to the value vector).

We have shown above that the direct labor and value vectors are proportional, as are the c-vector, v-vector and s-vector). In the remaining parts, I will ask you to show, in a certain way, that the price vector is parallel to the direct labor vector (and hence to them all, of course). The beginning is easy and simple math, so do it - so of he later stuff will take some creativity.

- e) Manipulate the condition given in part c) to get an expression for  $l_2a_{11}$ - $l_1a_{12}$ .
- f) The test gives (p 45) the equation for the ration of the prices,

$$\frac{p_2}{p_1} = \frac{l_2(1 - (1+r)a_{11}) + (1+r)l_1a_{12}}{l_1(1 - (1+r)a_{22}) + (1+r)l_2a_{21}}$$

Use the result from part e) and just a little creativity to show that the p-vector must be proportional to the direct labor l-vector.