Gregory Clark Econ 110A, Spring 2008

MIDTERM 2

No calculators permitted. A total of 100 points are possible.

Last Name: _____ First Name: _____

Your Student ID Number: __ __ __ - __ __ - __ __ __ __

Part A: Multiple Choice Questions (40 points)

(10 questions, each of which is worth 4 points)

1. What was the average number of children reported in the wills of rich men in England in the years 1580-1640?

A. 2
B. 3
C. 4
D. 5
E. 6

2. The sons of rich men also tended to die rich. We know that this was not just because of the wealth they inherited because

A. On average they only had 70% as much wealth as their fathers.
B. There were heavy death duties on wealth in England in these years.
C. Daughters got most of the wealth in dowries.
D. The wealth of sons relative to their fathers was largely independent of how many brothers and sisters they had.
E. Wealthy fathers tended to educate their sons more.

3. If the rate of population growth in a pre-industrial society over the long run was 0.1% per year, then the rate of technological advance would be

A. 0.01%
B. 0.02%
C. 0.1%
D. 0.2%
E. 0.5%

4. The Japanese word for “button” derives (allegedly) from the language of which group that brought this important new technology to Japan?

A. Chinese
B. Korean
C. Inuit
D. Portuguese
E. German

5. The method of the “double sale” was used in some Islamic societies to get around prohibitions on usury in Islam. This involved along with the loan transaction what sale?

A. Sale of a religious indulgence forgiving the loan interest.
B. Sale of a small piece of cloth at an inflated price.
C. Sale of a peppercorn at an inflated price.
D. Sale of two offsetting foreign currency transactions.
E. Sale of a silver penny at an inflated price.

6. Low inflation rates are economically efficient. Modern democracies have annual inflation rates typically in the range of 2-10%. The inflation rate in medieval England was (approximately)?

A. 0%
B. 5%
C. 10%
D. 20%
E. 50%

7. A census of a pre-industrial population records 60% of people as having ages ending in a “0” or a “5”. What percent of this population was likely innumerate, and thus also illiterate?

A. 20%
B. 30%
C. 40%
D. 50%
E. 60%

8. Suppose that in an economy output is growing at 3%, the capital stock is growing at 3%, the labor supply is growing at 3%, the land supply by 0%. The share of capital, labor and land in national income are respectively 1/3, 1/3, and 1/3. What is the growth rate of efficiency?

A. -1%
B. 0%
C. 1%
D. 2%
E. 3%

9. A **rough approximation** for the rate of growth of efficiency in modern economies which depends on the constancy of the real rate of return on capital and the small share of land rents would be

A. $g_A = -bg_w$

B. $g_A = ag_{r/p} + bg_{w/p} + cg_{s/p}$

C. $g_A = bg_w$

D. $g_A = bg_{w/p}$

E. $g_A = ag_r + bg_w + cg_s - g_p$

10. In modern economies how fast is the growth rate of output compared to the growth rate of real wages?

A. $g_y = 1.33g_{w/p}$

B. $g_y = g_{w/p}$

C. $g_y = 0.75g_{w/p}$

D. $g_y = 0.25g_{w/p}$

E. $g_y = 0.05g_{w/p}$

Part B: Proofs (30pts)

(20 points) Show, stating all required assumptions, that the growth rate of efficiency in any economy can be calculated as (where z = Z/L)

$$g_A = g_y - ag_k - cg_z$$

(10 points) Show that the result in part (a) above implies that the growth rate of efficiency in Malthusian economies over the long run is given by

$$g_A = cg_N$$

where c is the share of land rents in all incomes, and g_N is the population growth rate.

Part C: Long Answer (30pts)

Most economists assume that poor institutions explain very slow economic growth before 1800. Using the example of medieval England explain why pre-industrial economic institutions were often quite efficient.