Gregory Clark Econ 110B, Winter 2001

SECOND MIDTERM – VERSION #2

A total of 100 points are possible.

Last Name: ______________________________ First Name: _________________________

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

Part A: Multiple Choice Questions

(25 questions, each of which is worth 3 points)

Instructions: Answer these multiple choice questions on your Scantron. Write on the Scantron your name (last name first), student ID number, and exam version number in the "name," "subject," "test no." boxes respectively. For example,

NAME	McComb, Madeline		
SUBJECT	**530-66-6271**	**TEST NO.**	**1 or 2**
DATE		**HOUR**	

**** Warning ****

If you first fill in an answer and then erase it to fill in a different one, and the first answer is not fully erased, the Scantron reader may detect two answers and not accept either one. Do not fill in an answer till you are sure this is the one you want to give, or you may not receive credit for the question.

1. Suppose that the birth rate in India was 40 per thousand in 1700, and India was a Malthusian economy. Life expectancy at birth would be

A. 20
B. 35
C. 30
D. 25
E. 40

2. Suppose India and Britain had the same birth rate the years before 1800. This would imply:

A. They had the same wage level
B. They had the same death rate
C. They had the same life expectancy
D. A and B and C
E. B and C

3. Suppose that the growth rate of the capital stock in the US **increased** by 1% per year. If the growth rate of the labor supply is 3%, and the share of capital in national income is 0.2, while the share of labor is 0.7, what is the **increase** in the growth rate in income per person?

A. -0.4%
B. 0.2%
C. 0.4%
D. 0.7%
E. 1%

4. The labor supply in an economy is actually the number of workers times the hours worked per worker. Suppose that the number of workers in the US economy is increasing by 1% per year, but the hours worked per worker is decreasing by 2% per year. Then the growth rate of the labor supply is

A. -1%
B. 1%
C. 2%
D. 3%
E. Not enough information to tell.

5. Growth accounting suggests that productivity advance, as opposed to capital accumulation, explains most income growth since the Industrial Revolution. This is puzzling to economists because

A. The rate of return on capital is the same now as in 1760.
B. Technology develops through natural selection mechanisms.
C. Huge amounts of capital have been invested since the Industrial Revolution
D. We believe technology was improved mainly through investment in finding new techniques
E. There is little sign of crowding out in the Industrial Revolution period.

6. We know there cannot have been an Agricultural Revolution alongside the Industrial Revolution because:

A. The number of workers in the agricultural sector did not decline between 1760 and 1860.
B. There were very few mechanical innovations.
C. Input prices in agriculture rose little relative to output prices.
D. Yields of crops rose little over these years.
E. The people such as Jethro Tull who were famous innovators in agriculture had crazy ideas.

7. Which of the following sectors of the economy is believed to have contributed **no** productivity growth to the economy in the years 1760-1860.
A. Cotton textiles
B. Steam power
C. Iron and Steel
D. Railways
E. Coal mining

8. What is the odd name in the following list?

A. Thomas Malthus
B. Nassua Senior
C. Jethro Tull
D. Adam Smith
E. David Ricardo

9. The profit rates of cotton textile firms in the Industrial Revolution period were about 10%, the same as the average commercial or industrial enterprise at that time. This shows that:

A. The workers got all the benefits from technical innovation.
B. There was really little technical change in cotton textiles.
C. The management of firms did not keep pace with technological advances.
D. Technical gains by individual firms were copied quickly by their competitors without any compensation to the innovators.
E. The raw cotton producers got all the benefits.

10. Suppose that prices of cotton yarn fell at 4% per year between 1770 and 1820, while the cost of capital rose by 4% per year and the cost of labor by 2%. The rate of productivity growth in the industry if capital was 25% of costs and wages 75% of costs was

A. 6.5%
B. 6%
C. 5.5%
D. 5%
E. 4.5%

11. Why did people traditionally expect that an **agricultural revolution** had accompanied the Industrial Revolution?

A. Because of the mechanization of threshing and grain harvesting

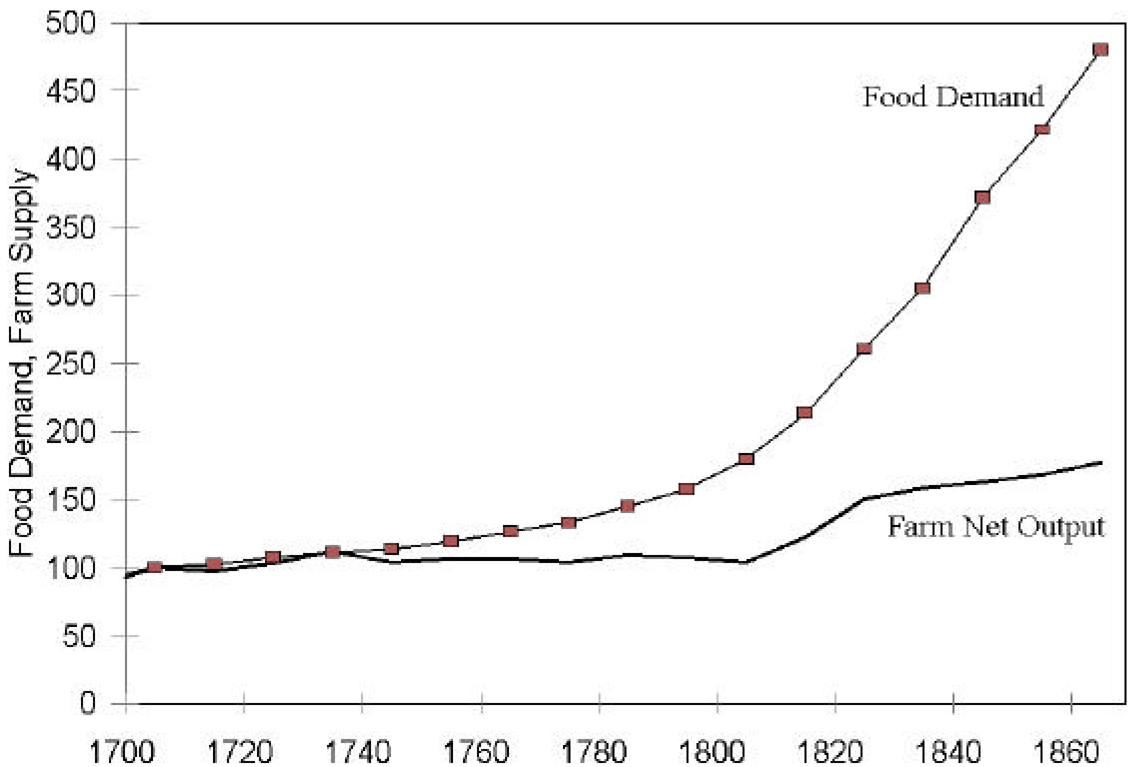
B. Because of the Enclosure Movement.

C. Because incomes per person had increased and the income elasticity for food demand was 0.65.

D. Because the sizes of animals brought to sale in the London markets increased from 400 lbs in 1760 to 1000 lbs in 1860

E. Because of the discovery of the importance of nitrogen in crop growth by Baron Leibig in the 1840s

12 The figure below shows estimated demand for **food** in England in the Industrial Revolution period and estimated supply of output from English agriculture.



The gap between food demand and farm output was bridged by:

A. People in England eating less.

B. Imports of food.

C. Imports of raw materials

D. Increased production of coal

E. B and C and D

13. Manufactured exports from Britain rose greatly in the Industrial Revolution period mainly because of

A. Technological advances in cotton textiles
B. Rapid population growth
C. The decline of the Dutch economy
D. British success in the wars against the French
E. Technological advances in agriculture

14. The innovations in textile production explain how much (roughly) of the productivity growth of the English economy between 1760 and 1860?

A. 30%
B. 50%
C. 70%
D. 90%
E. 100%

15. The invention of mechanical printing circa 1450 did not cause rapid productivity growth in Europe because

A. The price elasticity of book demand was less than 1.
B. The productivity gains from hand copying manuscripts were very modest
C. There was little written material worth printing.
D. The income elasticity of book demand was very low
E. Paper costs kept book prices high

16. Population nearly quadrupled in England between 1700 and 1860. In the past increases in population as in 1500-1600 had resulted in sharp declines in real wages. Yet real wages rose in England from 1700 to 1860. This was mostly explained by:

A. The rapid technological advances of the Industrial Revolution
B. Improvements in trade so that England could export manufactures and import food
C. The slower population growth in the rest of Europe
D. The addition to the effective land area of Europe of new lands in the Midwest of the USA
E. C and D

17. Peter Temin argues that recent studies suggesting productivity advance in Industrial Revolution in England was confined to a small number of industries are wrong because.

A. Real wages could not have improved given the population growth without widespread productivity advance
B. Britain imported a lot of food by the 1850s
C. Britain was a net exporter of almost all manufactured goods even in the 1850s.
D. People were making money in lots of different industries.
E. Urban areas grew greatly in the Industrial Revolution era.

18. The most plausible reason a **transport revolution** through improved roads and canals accompanied the Industrial Revolution is

A. Improved incentives in the economy after the Glorious Revolution of 1688 encouraged improvements in all activities.
B. The urban population increased greatly
C. The Turnpike Trusts
D. The new industrial technology had applications in transport also
E. Crowding Out from government debt did not occur.

19. The hypothesis of "Ricardian Equivalence" advanced by Barro about the effects of government debt in the years 1790-1830 argues that

A. Debt would induce more saving so for every $1 of debt there would be $1 more of saving and so $1 more of real capital.
B. Debt would crowd out real capital, but by less than $1 for every $1 issued.
C. Debt would crowd out real capital in the economy $1 for every $1 issued
D. Because government debt was sold world wide there was an inflow of foreign capital so that there was no decline in real capital in Britain.
E. Debt would induce more saving so for every $1 of debt there would be $1 more of saving and no reduction in real capital.

20. The most plausible reason the British government was able to increase debt to equal at least double the level of GNP by the 1820s and yet not drive up private rates of return on capital such as housing sharply is:

A. Ricardian Equivalence operated.
B. Capital markets were not integrated by the 1820s
C. Falling rental income from land as a share of total income in the years 1750-1850 meant that people were looking for other assets to invest in.
D. The usury laws limited private interest rates to 5%
E. Dutch investors bought up much of the government debt.

21. Which of the following countries saw a decline in industrial output per capita between 1860 and 1913?

A. India
B. Russia
C. Spain
D. Italy
E. Belgium

22. Steam boats were not used much for carrying regular cargo before the 1850s because

A. The inefficiency of engines before then meant that most of the cargo space had to be used to carry coal.
B. The Suez canal was not completed until 1869.
C. Coal was too costly before the 1850s to make them economical compared to sailing ships.
D. They were only introduced after Georg Frege's invention of the rotator bearing in 1849.
E. People would not travel on steam ships because of the danger of boiler explosions.

23. The key idea in the Becker explanation of why fertility declines with income is
A. Children should be regarded as yielding the same kinds of utility to parents as do potatoes
B. Dogs substitute for children in high income societies because dogs are more loyal and do not involve college tuition costs
C. Children are a time intensive form of consumption
D. Higher income is associated with improvements in the opportunities for women.
E. Everyone always had a target family size of two children.

24. The **demographic transition** in Europe was the period of rapid population growth in the years 1800-1910 created by the faster decline of death rates than birth rates. Suppose death rates declined from 40 per thousand to 20 per thousand by 1870, but birth rates remained at 40 per thousand. What would be the rate of population growth in 1870?

A. 2.5%
B. 2%
C. 1.5%
D. 1%
E. 0.5%

25. One European country had an unusually early fall in birth rates. That was
A. Ireland
B. Britain
C. France
D. Germany
E. Sweden

Part B: LONG ANSWER

1. A popular explanation of why income per capita differs so much across countries now is the failure of poor countries to develop appropriate institutions. Is this view plausible for the years 1860-1914? Explain. (25 points)