

Answer Key

**Economics 1012B
Introduction to Macroeconomics
Spring 2006
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Second Midterm Examination
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Answer all of the following questions by selecting the most appropriate answer on your bubble sheet. Be sure to read each question carefully. Each question is worth 2 points (100 points total) and will count as 20 per cent of your final course grade.

NOTE: The use of calculators and electronic translators is prohibited.

1. National income accounting:
- A) defines relationships among firms.
 - B) measures microeconomic concepts.
 - C) was developed by Keynesian economists.
 - D) has dominated economic discourse since Adam Smith and *The Wealth of Nations*.

Ans: C

Feedback: National income accounting was developed from the work of Keynesian macroeconomists, including Stone and Kuznets.

2. GDP is:
- A) the market value of an economy's production of final goods and services in a one year period.
 - B) the sum of coins, bills, and demand deposits circulating in an economy one year period
 - C) the total expenditures of the federal government over the period of one year.
 - D) the market value of an economy's production of all goods and services in a one year period.

Ans: A

Feedback: See the definition of GDP in the text.

3. The total market value of all final goods and services produced in a country in a year is:
- A) NNP.
 - B) GNI.
 - C) NDP.
 - D) GDP.

Ans: D

Feedback: See the definition of GDP in the text.

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4. The difference between gross domestic product (GDP) and gross national income (GNI) is that:

- A) GDP measures the economic activity that occurs *within* a country while GNI measures the economic activity of all the people and businesses *of* a country.
- B) GDP measures the economic activity of all the people and businesses *of* a country, while GNI measures the economic activity that occurs *within* a country
- C) GDP excludes exports and imports while GNI does not.
- D) GDP includes exports and imports while GNI does not.

Ans: A

Feedback: See the definitions of GDP and GNI in the text.

5. If Saudi Arabia has invested substantially more money in foreign countries than foreigners have invested in Saudi Arabia, then we might expect:

- A) Saudi net foreign factor income to be negative.
- B) Saudi net foreign factor income to be zero.
- C) Saudi GDP to exceed Saudi GNI.
- D) Saudi GNI to exceed Saudi GDP.

Ans: D

Feedback: Net foreign factor income is the difference between the foreign income of citizens and the income of residents who are not citizens. If Saudi Arabia has invested more money in foreign countries than foreigners have invested in Saudi Arabia, it is likely that the foreign income of Saudi citizens will exceed income of Saudi residents who are not citizens. This implies that net foreign factor income will be positive, so GNI will exceed GDP in Saudi Arabia.

6. Canada produces and sells millions of type of products. To add them up to a single aggregate, each good is weighted by:

- A) its cost of production.
- B) its market price.
- C) its utility to consumers.
- D) its contribution to corporate profits.

Ans: B

Feedback: Each good is weighted by its market price.

7. The reason economists include only the value of final goods and services when they calculate GDP is that intermediate goods:

- A) do not create value added.
- B) do not add to economic welfare.
- C) have no social value.
- D) would be double counted otherwise.

Ans: D

Feedback: Including the value of intermediate goods (i.e. goods used to produce other

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goods) in GDP leads to double counting since the value of these goods is also reflected in the value of the final goods and services they are used to produce.

8. If a dealer purchases a 16th century vase for \$4000 and sells it to a collector for \$5000, how much has been added to GDP?

- A) nothing, because the vase was produced centuries ago.
- B) \$1000.
- C) \$4000.
- D) \$5000.

Ans: B

Feedback: Subtract the cost of production (\$4000) from final sales (\$5000) to find the contribution of the services by the dealer to GDP (\$1000).

9. Transfers of assets, such as stock sales:

- A) are included in GDP because they raise domestic production.
- B) are included in GDP because they increase domestic wealth.
- C) are not included in GDP because they do not increase domestic production.
- D) are not included in GDP because they do not increase domestic wealth.

Ans: C

Feedback: GDP includes only those transactions that increases the production of final goods and services. Since asset transfers do not affect domestic production of final goods or services, they are excluded from GDP.

10. Which of the following is *not* a part of Canadian GDP?

- A) The value of an insurance policy on a new BMW sold by a Canadian company.
- B) The value of a BMW imported from Germany.
- C) The value of a BMW produced in Canada.
- D) The commissions earned by a BMW dealership in Canada.

Ans: B

Feedback: Imported cars are not produced in Canada and thus are not part of Canadian GDP.

11. Which of the following equations is the correct equation for GDP?

- A) $GDP = C + I + G$.
- B) $GDP = C + I + G + X + IM$.
- C) $GDP = C + I + G - X - IM$.
- D) $GDP = C + I + G + X - IM$.

Ans: D

Feedback: The sum of consumption (C), investment (I), government expenditure(G), and net exports (X-IM) equals total expenditure or GDP.

In billions of dollars

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Consumption	3600
Investment	800
Transfer payments	750
Government expenditures	1000
Exports	650
Imports	450
Net foreign factor income	-30

12. Calculate GDP using the table above.

- A) 5570
- B) 5600
- C) 6050
- D) 6320

Ans: B

Feedback: GDP equals $C + I + G + (X - IM) = 3600 + 800 + 1000 + 650 - 450$.

13. Personal consumption expenditures consist of:

- A) household and individual purchases of services and durable and nondurable goods.
- B) foreign investments in Canada.
- C) foreign plus domestic investments.
- D) domestic investments.

Ans: A

Feedback: As defined in the text.

14. Payments to the owners of firms are included in the national income and product accounts as:

- A) profits.
- B) rents.
- C) employee compensation.
- D) interest.

Ans: A

Feedback: See the definition of profits in the text.

15. In comparing the per capita GDPs of two countries, purchasing power parity adjusts for differences in:

- A) exchange rates.
- B) non-market activities.
- C) populations.
- D) relative prices.

Ans: D

Feedback: See the definition of purchasing power parity in the text.

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16. Given nominal GDP of \$4.2 trillion and a GDP deflator which is 40 percent greater than the base year, we can conclude that real GDP is equal to:

- A) \$3.0 trillion.
- B) \$3.5 trillion.
- C) \$4.2 trillion.
- D) \$5.9 trillion.

Ans: A

Feedback: Real GDP is the ratio of nominal GDP to the price index (i.e. \$4.2 trillion/1.40 or \$3 trillion.)

17. If a woman divorces her house spouse (who has been cleaning the house) and hires him to continue cleaning her house for \$20,000 per year, GDP will:

- A) remain constant.
- B) increase by \$20,000 per year.
- C) decrease by \$20,000 per year.
- D) remain unchanged.

Ans: B

Feedback: GDP measures market transactions.

18. Growth occurs when:

- A) output rises.
- B) potential output rises.
- C) employment rises.
- D) resources are employed more efficiently.

Ans: B

Feedback: Growth shifts the production possibility frontier outward, increasing potential output. Increases in output, employment, and efficiency can be achieved by moving outward towards a given production possibility frontier.

19. Markets help to promote growth by:

- A) increasing specialization and the division of labour.
- B) reducing specialization and the division of labour.
- C) encouraging self-sufficiency.
- D) undermining a nation's comparative advantage.

Ans: A

Feedback: By increasing specialization and the division of labour, markets make it possible for a country to focus its production more heavily on its comparative advantage. This increases efficiency and productivity.

20. Economic growth has made the poor:

- A) better off in relative terms.
- B) worse off in absolute terms.

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- C) better off in absolute terms but possibly worse off in relative terms.
- D) worse off in relative terms but possibly better off in absolute terms.

Ans: C

Feedback: Growth has increased the living standards of the poor in the sense that they are better off than the poor in previous generations. Relative to the improvements in the living standards of the rich, however, the poor may have failed to keep pace.

21. In 1997, Hungary's population was 10 million and its GDP was \$45 billion so its per capita output was:

- A) \$450.
- B) \$4,500.
- C) \$222.
- D) \$2,222.

Ans: B

Feedback: Per capita output is obtained by dividing GDP by the population.

22. If output increases by 2 percent and population growth is 3 percent, per capita output:

- A) falls by 5 percent.
- B) falls by 1 percent.
- C) grows by 1 percent.
- D) grows by 5 percent.

Ans: B

Feedback: Growth in per capita output equals the difference between the growth rate of output and the growth rate of population.

23. If only those in the bottom third of the income distribution receive higher incomes:

- A) median income will not change but average income will rise.
- B) both median income and average income will rise.
- C) median income will rise but average income will not.
- D) median income will fall but average income will rise.

Ans: A

Feedback: Average income will rise because one segment of the population will have higher incomes. Median income will not change, however, because median income will still be in the middle third of the income distribution. This assumes that the income given to the bottom third is not so much that they end up no longer being the bottom third.

24. Which of the following would tend to inhibit growth?

- A) Private property.
- B) Limited liability for corporate owners.
- C) Government approval of all economic activity.
- D) Freedom from regulation.

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Ans: C

Feedback: Government approval of all economic activity slows growth through bureaucracy and corruption.

25. Greater labour force participation by women increases measured growth most directly by:

- A) stimulating new technologies.
- B) increasing capital accumulation.
- C) increasing the availability of resources.
- D) altering the nature of growth enhancing institutions.

Ans: C

Feedback: As more women have participated in the labour force, more labour has been made available to the economy, increasing the quantity of this resource.

26. Suppose the quantities of labour, land, and capital each increase by 12 percent while output increases by 9 percent. In that case, returns to scale are:

- A) decreasing.
- B) constant.
- C) increasing.
- D) not defined since more than one input is changing.

Ans: A

Feedback: If output rises by less than the proportion of all inputs, then decreasing returns to scale exist.

27. Use the following table to answer the question. According to the table, production is characterized by:

Units of Capital	Units of Labour	Output
0	0	0
1	1	1
2	2	2
3	3	3

- A) diminishing marginal productivity.
- B) decreasing returns to scale.
- C) constant returns to scale.
- D) increasing returns to scale.

Ans: C

Feedback: When constant returns to scale exist, an identical proportional increase in all inputs produces the same proportional increase in output.

28. According to Malthus, a fixed quantity of land and a growing population combined to produce:

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- A) continuous but variable economic growth.
- B) accelerating economic growth.
- C) a stationary state in which growth ceased.
- D) a stationary state in which the economy grew, but at a fixed and unchangeable rate.

Ans: C

Feedback: Malthus argued that the law of diminishing marginal productivity would eventually set in, causing growth to slow and eventually stop.

29. New growth theories emphasize the importance of increases in _____ in explaining growth.

- A) capital
- B) labour
- C) technology
- D) land

Ans: C

Feedback: See the definition of new growth theories in the text.

30. A positive externality is the positive effect that:

- A) an action has on the decision maker.
- B) an action has on others that is not taken into account by the decision maker.
- C) external forces have on society as a whole.
- D) external forces have on a decision maker.

Ans: B

Feedback: See the definition of a positive externality in the text.

31. All of the following policies encourage per capita growth *except*:

- A) policies that encourage consumption.
- B) policies that promote basic research.
- C) policies that reduce investor risk.
- D) policies that protect private property.

Ans: A

Feedback: Policies that promote consumption undermine saving and investment and in this way reduce capital accumulation, one of the keys to per capita growth.

32. Which organization lends money to developing countries?

- A) EU.
- B) NAFTA.
- C) IMF.
- D) WTO.

Ans: C

Feedback: The IMF is the International Monetary Fund. This organization extends credit

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to countries in need of financial assistance.

33. Basic research is funded primarily by:

- A) small corporations.
- B) large corporations.
- C) the federal government.
- D) provincial governments.

Ans: C

Feedback: See the data in the text.

34. Supply side policies regarding economic growth are strongest when

- A) labour supply is inelastic.
- B) the income effect of a tax cut (or increase) is very strong.
- C) the labour supply curve is very steep.
- D) the substitution effect of a tax cut (or increase) is very strong.

Ans: D

Feedback: See discussion in textbook.

35. The change in expenditures produced by the multiplier effect is really a change in:

- A) induced expenditures.
- B) autonomous expenditures.
- C) exogenous expenditures.
- D) the marginal propensity to consume.

Ans: A

Feedback: The changes in expenditures that result from the multiplier effect are produced by changes in production and income and hence are induced, not autonomous.

36. Keynesian economists believe:

- A) government policies do not affect economic activity.
- B) government can implement policy proposals that can positively impact the economy.
- C) most government policies would probably make things worse.
- D) the economy ought to be left to market forces.

Ans: B

Feedback: Keynesian economists advocate activist macroeconomic policies.

37. The total level of expenditures in an economy equals:

- A) $C + I + G + IM$.
- B) $C + I + G - IM$.
- C) $C + I + G + X$.
- D) $C + I + G + X - IM$.

Ans: D

Answer Key

Feedback: Total expenditures equal expenditures on consumption, investment, government expenditure and net exports.

Income	Expenditures
\$ 0	\$1000
1000	1800
2000	2600
3000	3400
4000	4200
5000	5000

38. Given the accompanying table, what is the level of autonomous expenditures?

- A) \$800
- B) \$1000
- C) \$2600
- D) \$5000

Ans: B

Feedback: Autonomous expenditures are expenditures that occur when income is zero.

39. An increase in income will:

- A) decrease autonomous expenditures.
- B) increase autonomous expenditures.
- C) decrease induced expenditures.
- D) increase induced expenditures.

Ans: D

Feedback: Autonomous expenditures do not change with income. Induced expenditures change with income by some fraction of the change in income.

40. Induced expenditures are defined as expenditures that:

- A) occur in equilibrium.
- B) do not depend on income.
- C) occur even when income is zero.
- D) change as income changes.

Ans: D

Feedback: See the definition of induced expenditures in the text.

41. According to the expenditures function, what happens to expenditures as income rises?

- A) They stay the same.
- B) They decrease.
- C) They increase by the same amount as income.
- D) They increase by less than the increase in income.

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Ans: D

Feedback: In the expenditures function, a \$1 increase in income leads to an increase in expenditures equal to the mpc times the \$1 increase in income, so expenditures rise but by less than the increase in income.

42. If autonomous expenditures are \$1,000, income is \$5,000 and the marginal propensity to consume is 0.6, then total expenditures according to the expenditure function would be:

- A) \$3,000.
- B) \$4,000.
- C) \$5,000.
- D) \$13,500.

Ans: B

Feedback: According to the expenditures function, $AE = AE_0 + mpc Y = \$1,000 + 0.6 \times \$5,000 = \$4,000$.

Income	Expenditures
\$ 0	\$1,000
1,000	1,800
2,000	2,600
3,000	3,400
4,000	4,200
5,000	5,000

43. The expenditures function that reflects the table above is:

- A) $AE = 1000 + 0.8Y$.
- B) $AE = 0.8Y$.
- C) $Y = 100 + 0.8AE$.
- D) $Y = 0.8AE$.

Ans: A

Feedback: The expenditures function is $AE = AE_0 + mpcY$ where AE_0 is autonomous expenditures and the mpc is the change in expenditures divided by the change in income.

Income	Expenditures
\$ 0	\$1,000
1,000	1,800
2,000	2,600
3,000	3,400
4,000	4,200
5,000	5,000

44. In the table above, if income rises from \$1,000 to \$2,000, autonomous expenditures:

- A) remain equal to \$1,000.
- B) remain equal to 0.

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- C) rise by \$800.
- D) rise to \$1,000.

Ans: A

Feedback: Autonomous expenditures do not vary with income so they must equal \$500 since this is the level of expenditures when income is zero.

45. Given $AE = \$1000 + 0.8Y$, when income equals \$6000, autonomous expenditures will be:
- A) \$ 500.
 - B) \$1000.
 - C) \$4800.
 - D) \$5800.

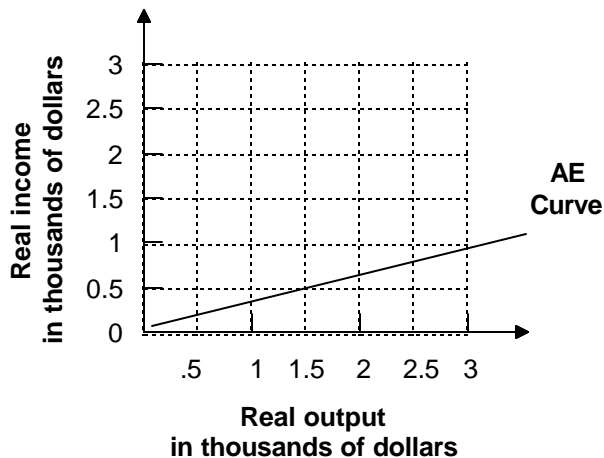
Ans: B

Feedback: Autonomous expenditures are constant in the expenditures function.

46. The slope of the expenditures function is:
- A) found by dividing expenditures by income.
 - B) the marginal propensity to consume.
 - C) one minus the marginal propensity to consume.
 - D) one.

Ans: B

Feedback: Since the expenditures function shows the change in expenditures for a given change in income, the mpc must be the slope of the AE curve.



47. Refer to the graph above. The *mpc* equals:
- A) 0
 - B) 1/3
 - C) 2/3
 - D) 3

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Ans: B

Feedback: The slope (rise over run) of the AE curve is the mpc . Here that is $500/1500 = 1/3$.

48. For levels of income to the left of the point where the expenditure function intersects the aggregate production line:

- A) planned expenditures exceed production.
- B) production exceeds planned expenditures.
- C) a surplus of goods exists.
- D) expenditures equal income.

Ans: A

Feedback: At levels below the intersection of the AP and AE curves, the AE curve is above the AP curve. This implies that planned expenditures exceed production for these income levels.

49. If $AE = 300 + .75Y$, what is the equilibrium level of real income?

- A) \$ 800.
- B) \$1000.
- C) \$1200.
- D) \$1400.

Ans: C

Feedback: Using the multiplier equation, equilibrium real income may be solved for by multiplying autonomous expenditures (300) by the multiplier (4).

50. Suppose autonomous expenditures equal 1000 and the mpc is 0.6. Now suppose the mpc rises to 0.8. Using the multiplier equation, we know that equilibrium income will:

- A) increase by 200.
- B) decrease by 200.
- C) increase by 800.
- D) increase by 2,500.

Ans: D

Feedback: Using the multiplier equation, we know that equilibrium income is 2,500 when the $mpc = 0.6$ and 5000 when the $mpc = 0.8$.

Answer Key