

ECO 202 Macroeconomics Principles
Test 1 Fall 2008/2009

Please circle the best answer to the following questions (2.5 pts each)

1. A nation's gross domestic product (GDP):
☒ A) is the dollar value of the total output produced within the borders of the nation.
☐ B) is the dollar value of the total output produced by its citizens, regardless of where they are living. ✗
☒ C) can be found by summing $C + I_n + S + X_n$.
☐ D) is always some amount less than its $C + I_g + G + X_n$.
2. Suppose the total market value of all final goods and services *produced* in a particular country in 2004 is \$500 billion and the total market value of final goods and services *sold* is \$450 billion. We can conclude that:
☐ A) GDP in 2004 is \$450 billion.
☐ B) NDP in 2004 is \$450 billion.
☒ C) GDP in 2004 is \$500 billion.
☐ D) inventories in 2004 fell by \$50 billion.
3. Which of the following is *not* economic investment?
☐ A) the purchase of a drill press by the Ajax Manufacturing Company
☐ B) the purchase of 100 shares of AT&T by a retired business executive
☐ C) construction of a suburban housing project
☒ D) the piling up of inventories on a grocer's shelf
4. If the economy adds to its inventory of goods during some year:
☐ A) gross investment will exceed net investment by the amount of the inventory increase.
☒ B) this amount should be ignored in calculating that year's GDP.
☐ C) this amount should be subtracted in calculating that year's GDP. ✗
☐ D) this amount should be included in calculating that year's GDP. ✗
5. When an economy's production capacity is expanding:
☒ A) nominal GDP, but not necessarily real GDP, is rising.
☐ B) net exports is always a positive amount.
☐ C) Disposable income exceeds personal income.
☐ D) domestic investment exceeds depreciation.

Use the following to answer questions 6-9:

Answer the next question(s) on the basis of the following data. All figures are in billions of dollars.

Gross investment	\$ 18
National income	100
Net exports	2
Personal income	85
✓ Personal consumption expenditures	70
Saving	5
Government purchases	20
Net domestic product	105

6. The gross domestic product for the above economy is:

- A) \$100.
- B) \$95.
- ☒ C) \$110.
- D) \$107.

7. Refer to the above data. Consumption of fixed capital (or depreciation) is:

- ☒ A) \$5.
- B) \$10.
- C) \$20.
- D) \$30.

8. Refer to the above data. Disposable income is:

- ☒ A) \$83.
- B) \$73.
- C) \$75.
- D) \$77.

9. Refer to the above data. From this information we can conclude that the sum of indirect business taxes and net foreign factor income is.

- ☒ A) \$5 billion.
- B) zero.
- C) \$1 billion.
- D) \$15 billion.

10. Which of the following best measures improvements in the standard of living of a nation?

- A) growth of nominal GDP
- ☒ B) growth of real GDP
- C) growth of real GDP per capita
- D) growth of national income

11. Official unemployment statistics:
- A) understate unemployment because individuals receiving unemployment compensation are counted as employed.
 - ☒ B) understate unemployment because discouraged workers are not counted as unemployed.
 - C) include cyclical and structural unemployment, but not frictional unemployment.
 - D) overstate unemployment because workers who are involuntarily working part time are counted as being employed.
12. Part-time workers are counted as:
- A) unemployed and therefore the official unemployment rate may overstate the level of unemployment. X
 - B) unemployed and therefore the official unemployment rate may understate the level of unemployment. X
 - ☒ C) fully employed and therefore the official unemployment rate may overstate the level of unemployment.
 - D) fully employed and therefore the official unemployment rate may understate the level of unemployment.
13. Suppose there are 5 million unemployed workers seeking jobs. After a period of time, 1 million of them become discouraged over their job prospects and cease to look for work. As a result of this, the official unemployment rate would:
- A) increase in the short run but eventually decline.
 - B) increase.
 - ☒ C) decline.
 - D) be unchanged.
14. Suppose there are 10 million part-time workers and 90 million full-time workers in an economy. Five million of the part-time workers switch to full-time work. As a result:
- A) the official unemployment rate will fall.
 - B) the official unemployment rate will rise.
 - ☒ C) the official unemployment rate will remain unchanged.
 - D) the size of the labor force will increase.

Use the following to answer questions 15-16:

Answer the next question(s) on the basis of the following information about a hypothetical economy:

Full-time employed = 80

Part-time employed = 25

Unemployed = 15

Discouraged workers = 5

Members of underground economy = 6

Consumer Price Index = 110

15. Refer to the above information. The unemployment rate is:
- A) 18.8 percent.
 - ☒ B) 12.5 percent.
 - C) 16.7 percent.
 - D) 25 percent.
16. Refer to the above information. If the members of the underground economy are presently counted as part of the unemployed when in fact they are employed, the official unemployment rate is overstated by:
- A) 0 percentage points.
 - B) 2 percentage points.
 - ☒ C) 5 percentage points.
 - D) 6 percentage points.
17. Suppose that a person's nominal income rises from \$10,000 to \$12,000 and the consumer price index rises from 100 to 105. The person's real income will:
- A) fall by about 20 percent.
 - B) fall by about 2 percent.
 - ☒ C) rise by about 15 percent.
 - D) rise by about 25 percent.
18. Suppose that a person's nominal income rises by 5 percent and the price level rises from 125 to 130. The person's real income will:
- A) fall by about 1 percent.
 - ☒ B) remain constant.
 - C) rise by about 4 percent.
 - D) rise by about 1 percent.
19. Which of the following statements is *correct*? Unanticipated inflation:
- ☒ A) arbitrarily "taxes" fixed-income groups.
 - B) increases the real value of savings.
 - C) increases the purchasing power of the dollar.
 - D) benefits creditors at the expense of debtors.
20. If the nominal interest rate is 5 percent and the real interest rate is 2 percent, then the inflation premium is:
- A) 8 percent.
 - B) 5 percent.
 - ☒ C) 3 percent.
 - D) 2 percent.

21. Suppose the *nominal* annual interest rate on a two year loan is 8 percent and lenders expect inflation to be 5 percent in each of the two years. The annual *real* rate of interest is:
- A) 6 percent.
 - B) 8 percent.
 - C) 2 percent.
 - ☒ D) 3 percent.
22. In national income accounting, consumption expenditures include purchases of:
- A) both new and used consumer goods.
 - ☒ B) automobiles for personal use, but not houses.
 - C) consumer durable and nondurable goods, but not services.
 - D) consumer nondurable goods and services, but not consumer durable goods.
23. National income accountants define investment to include:
- A) any increase in business inventories.
 - B) the addition of cash to a savings account.
 - C) the purchase of common or preferred stock.
 - ☒ D) the purchase of any durable good, for example, an automobile or a refrigerator.
24. Suppose that GDP was \$200 billion in year 1 and that all other components of expenditures remained the same in year 2 except that business inventories increased by \$10 billion. GDP in year 2 is:
- A) \$180 billion.
 - ☒ B) \$190 billion.
 - C) \$200 billion.
 - D) \$210 billion.
25. In national income accounting, *G* stands for:
- A) government purchases.
 - ☒ B) gross investment.
 - C) government transfer payments.
 - D) gross saving.
26. GDP excludes:
- ☒ A) the market value of unpaid work in the home.
 - B) the production of services.
 - C) the production of nondurable goods.
 - D) positive changes in inventories.

27. Suppose nominal GDP was \$360 billion in 1990 and \$450 billion in 2000. The appropriate price index (1985 = 100) was 120 in 1990 and 125 in 2000. Between 1990 and 2000 real GDP:
- ☒ A) increased by \$60 billion.
 - B) decreased by \$32 billion.
 - C) increased by \$100 billion.
 - D) increased by \$117 billion.
28. If nominal GDP rises:
- ☒ A) real GDP may either rise or fall.
 - B) we can be certain that the price level has risen.
 - C) real GDP must fall.
 - D) real GDP must also rise.
29. By summing the dollar value of all market transactions in the economy we would:
- A) be determining the market value of all resources used in the production process.
 - B) obtain a sum substantially larger than the GDP.
 - ☒ C) be determining value added for the economy.
 - D) be measuring GDP.
30. GDP data are criticized as being inaccurate measures of economic welfare because:
- A) they do not take into account changes in the amount of leisure.
 - B) they do not take into account all changes in product quality.
 - C) they do not take into account the adverse effects of economic activity on the environment.
 - ☒ D) of all of the above considerations.
31. Real income is found by:
- A) dividing nominal income by 70.
 - B) multiplying nominal income by 1.03.
 - C) dividing the price index (in hundredths) by nominal income.
 - ☒ D) dividing nominal income by the price index (in hundredths).
32. Recently a labor union argued that the standard of living of its members was falling. A critic of the union argued that this could not possibly be true because the union had been acquiring increases in the nominal incomes of its members through collective bargaining. Is the critic correct?
- A) Yes, because when you have a large nominal income your standard of living automatically increases.
 - ☒ B) No, because real income may fall if price increases are more proportionately than the increase in nominal income.
 - C) No, because real income may fall if price increases are less proportionately than the increases in nominal income.
 - D) Yes, because real income may fall if price increases are less proportionately than the increases in nominal income.

Use the following to answer questions 33-35:

- ✓ Consumption expenditures \$1200
- ✓ Exports \$150
- ✓ Government purchases of goods and services \$400
- ✓ Construction of new homes and apartments \$200
- ~~Sales of existing homes and apartments \$400.~~
- ✓ Imports \$100
- Beginning of year inventory stocks \$250
- End of year inventory stocks \$200
- ✓ Business purchases of equipment \$200
- ✓ Government payments to retirees \$200
- ✓ Household purchases of services \$320

33. Refer to the data above. The GDP of this economy is

- ~~A) \$2000~~
- ~~B) \$2100~~
- ☒ C) \$2420
- D) \$2320

$$GDP = C + I + G + X - M$$

1200 700 400 150 100

$\Delta S = -50$

34. Refer to the data above. Sales of existing homes and apartments

- A) are included in the current GDP because they generate income to the sellers.
- B) are excluded from the current GDP because they are not part of consumption expenditures
- C) are included in the current GDP because they are part of investment expenditures
- ☒ D) are excluded from the current GDP because they have been counted when they were built

$$GDP = \text{Sales} + \Delta \text{inventory}$$

(-)

35. Refer to the data above. Investment is

- ~~A) \$850~~
- ~~B) \$350~~
- ☒ C) \$450
- D) \$650

Use the following to answer questions 36-38:

The Bureau of Labor Statistics has found that typical family expenditures each month in the base year are as follows:

30 burgers at 3\$ each

Rent of apartment, \$500 per month

5 movie tickets at \$5 each

10 chickens at \$3 each

In the year following the base year the cost of a burger has increased to \$4, the apartment rent to \$520, the movie tickets remained at \$5 each and the chicken is now at \$4.

36. Refer to the information above. The CPI in the subsequent year is
- A) 100
 - ☒ B) 109.30
 - C) 9.3
 - D) 119.3
37. Refer to the information above. The family's nominal income rose by 11% between the base year and the subsequent year
- ☒ A) They are better off in terms of what their income is able to buy
 - B) They are worse off in terms of what their income is able to buy
 - C) They will buy less goods to survive the inflation ✗
 - D) They will buy less goods to save ✗
38. Refer to the information above. If the family buys in the subsequent year 40 burgers and no chicken
- A) their cost of living will increase
 - B) their cost of living will drop
 - ☒ C) Their cost of living could have dropped if originally the burger costs less than the chicken
 - D) The CPI of the subsequent year will decrease
39. Which of the transactions below is counted in the GDP?
- ☒ A) The government purchases military equipment from a foreign country for \$1 billion.
 - B) The government pays \$1 billion in transfers ✗
 - C) The government pays \$1 billion in interest on maturing treasury bonds ✗
 - ☒ D) The government purchases newly produced trucks from a local firm for \$1 billion
- No

40. A labor contract provides for a first-year wage \$10 per hour and specifies that the real wage will rise by 4% the second year and another 4% in the third year. Knowing that the CPI in year 1 is 100, the CPI in year 2 is 102 and the CPI in year 3 is 105, the indexed dollar wage that must be paid at the end of year 3 is

- No ☒ A) \$11.3568
☐ B) \$11.5839
yes ☐ C) \$10.8539
☐ D) \$11.5389