CHAPTER 7
Measuring Domestic Output, National Income, and the Price Level

<table>
<thead>
<tr>
<th>Topic</th>
<th>Question numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. GDP concept</td>
<td>1-15</td>
</tr>
<tr>
<td>2. $C$, $I$, $G$, and $X_n$ components</td>
<td>16-43</td>
</tr>
<tr>
<td>3. Investment and the capital stock</td>
<td>44-57</td>
</tr>
<tr>
<td>4. GDP accounting: expenditure approach</td>
<td>58-75</td>
</tr>
<tr>
<td>5. GDP accounting: value added; income approach</td>
<td>76-85</td>
</tr>
<tr>
<td>6. Other social accounts</td>
<td>86-100</td>
</tr>
<tr>
<td>7. Real versus nominal GDP; price indexes</td>
<td>101-151</td>
</tr>
<tr>
<td>8. GDP and social welfare</td>
<td>152-156</td>
</tr>
<tr>
<td>Last Word</td>
<td>157-159</td>
</tr>
<tr>
<td>True-False</td>
<td>160-175</td>
</tr>
</tbody>
</table>

Multiple Choice Questions

GDP concepts

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 $C + I_n + G + X_n$.

2. A nation's gross domestic product (GDP):
   A) can be found by summing $C + I_n + G + X_n$.
   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 $C + S + G + X_n$.
   D) is always some amount less than its NDP.

3. The GDP is the:
   A) monetary value of all final goods and services produced within a nation in a particular year.
   B) national income minus all nonincome charges against output.
   C) monetary value of all economic resources used in producing a year's output.
   D) monetary value of all goods and services, final and intermediate, produced in a specific year.

4. Suppose Smith pays $100 to Jones.
   A) We can say with certainty that the GDP has increased by $100.
   B) We can say with certainty that the GDP has increased, but we cannot determine the amount.
   C) We can say with certainty that the nominal GDP has increased, but we can't say whether real GDP has increased or decreased.
   D) We need more information to determine whether GDP has changed.

5. Suppose the total market value of all final goods and services produced in a particular country in 2001 is $500 billion and the
total market value of final goods and services sold is $450 billion. We can conclude that:
A) GDP in 2001 is $450 billion.
B) NDP in 2001 is $450 billion.
C) GDP in 2001 is $500 billion.
D) inventories in 2001 fell by $50 billion.

6. National income accountants can avoid multiple counting by:
   A) including transfers in their calculations.
   B) counting both intermediate and final goods.
   C) only counting final goods.
   D) only counting intermediate goods.

7. Gross domestic product (GDP) measures and reports output:
   A) as an index number.
   B) in percentage terms.
   C) in dollar amounts.
   D) in quantities of physical units (for example, pounds, gallons, and bushels).

8. GDP may be defined as:
   A) the monetary value of all goods and services (final, intermediate, and non-market) produced in a given year.
   B) total resource income less taxes, saving, and spending on exports.
   C) the economic value of all economic resources used in the production of a year’s output.
   D) the market value of all final goods and services produced within a nation in a specific year.

9. 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.

10. The term "final goods and services" refers to:
    A) goods and services that are unsold and therefore added to inventories.
    B) goods and services whose value has been adjusted for changes in the price level.
    C) goods and services purchased by ultimate users, as opposed to resale or further processing.
    D) the excess of U.S. exports over U.S. imports.

11. If intermediate goods and services were included in GDP:
    A) the GDP would then have to be deflated for changes in the price level.
    B) nominal GDP would exceed real GDP.
    C) the GDP would be overstated.
    D) the GDP would be understated.

12. Which of the following is a final good or service?
    A) diesel fuel bought for a delivery truck
    B) fertilizer purchased by a farm supplier
    C) a haircut
    D) Chevrolet windows purchased by a General Motors assembly plant
13. Which of the following is an intermediate good?
   A) the purchase of gasoline for a ski trip to Colorado
   B) the purchase of a pizza by a college student.
   C) the purchase of baseball bats by a professional baseball team.
   D) the purchase of jogging shoes by a professor

14. Tom Atoe grows tomatoes for home consumption. This activity is:
   A) excluded from GDP in order to avoid double counting.
   B) excluded from GDP because an intermediate good is involved.
   C) productive but is excluded from GDP because no market transaction occurs.
   D) included in GDP because it reflects production.

15. GDP includes:
   A) neither intermediate nor final goods.
   B) both intermediate and final goods.
   C) intermediate, but not final, goods.
   D) final, but not intermediate, goods.

C, I, G, and Xn components

16. GDP can be calculated by summing:
   A) consumption, investment, government purchases, exports, and imports.
   B) investment, government purchases, consumption, and net exports.
   C) consumption, investment, wages, and rents.
   D) consumption, investment, government purchases, and imports.

17. 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.

18. In national income accounting, consumption expenditures include:
   A) purchases of both new and used consumer goods.
   B) consumer durable goods and consumer nondurable goods, but not services.
   C) consumer durable goods, consumer nondurable goods, and services.
   D) changes in business inventories.

19. Net exports are:
   A) that portion of consumption and investment goods sent to other countries.
   B) exports plus imports.
   C) exports less imports.
   D) imports less exports.

20. Gross investment refers to:
   A) private investment minus public investment.
   B) net investment plus replacement investment.
   C) net investment after it has been "inflated" for changes in the price level.
21. Net exports are negative when:
   A) a nation’s imports exceed its exports.
   B) the economy's stock of capital goods is declining.
   C) depreciation exceeds domestic investment.
   D) a nation’s exports exceed its imports.

22. 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

23. Which of the following do national income accountants consider to be "investment"?
   A) the purchase of an automobile for private, nonbusiness use
   B) the purchase of a new house
   C) the purchase of corporate bonds
   D) the purchase of gold coins

24. GDP is equal to:
   A) \( C + I_g + G + X_n \).
   B) \( C + I_g + G - X_n \).
   C) \( C + I_n + G + X_n \).
   D) \( C + I_n + G - X_n \).

25. Economists 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.

26. As defined in national income accounting, investment includes:
   A) business expenditures on machinery and equipment.
   B) all consumption.
   C) imports, but not exports.
   D) all nonfood items.

27. Suppose that inventories were $40 billion in 2000 and $50 billion in 2001. In 2001, accountants would:
   A) add $10 billion to other elements of investment in calculating total investment.
   B) subtract $10 billion from other elements of investments in calculating total investment.
   C) add $45 billion (= $90/2) to other elements of investment in calculating total investment.
   D) subtract $45 billion (= $90/2) from other elements of investment in calculating total investment.

28. Suppose that inventories were $80 billion in 2000 and $70 billion in 2001. In 2001, accountants would:
   A) add $10 billion to other elements of investment in calculating total investment.
   B) subtract $10 billion from other elements of investments in calculating total investment.
C) add $45 billion (= $90/2) to other elements of investment in calculating total investment.
D) subtract $45 billion (= $90/2) from other elements of investment in calculating total investment.

29. 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.

30. 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 fell by $10 billion.  GDP in year 2 is:
   A) $180 billion.
   B) $190 billion.
   C) $200 billion.
   D) $210 billion.

31. If the economy adds to its inventory of goods during 2001:
   A) gross investment will exceed net investment by the amount of the inventory increase.
   B) this amount should be ignored in calculating 2001's GDP.
   C) this amount should be subtracted in calculating 2001's GDP.
   D) this amount should be included in calculating 2001's GDP.

32. The smallest component of aggregate spending in the United States is:
   A) net exports.
   B) government purchases.
   C) investment.
   D) consumption.

33. In calculating GDP, governmental transfer payments, such as social security or unemployment compensation, are:
   A) not counted.
   B) counted as investment spending.
   C) counted as government spending.
   D) counted as consumption spending.

34. The largest component of total expenditures in the United States is:
   A) net exports.
   B) government purchases.
   C) consumption.
   D) gross investment.

35. Government purchases include government spending on:
   A) government consumption goods and public capital goods.
   B) government consumption goods only.
   C) public capital goods only.
   D) government consumption goods, public capital goods, and transfer payments.

36. In national income accounting, government purchases include:
A) purchases by Federal, state, and local governments.
B) purchases by the Federal government only.
C) government transfer payments.
D) purchases of goods for consumption, but not public capital goods.

37. Transfer payments are:
A) excluded when calculating GDP because they only reflect inflation.
B) excluded when calculating GDP because they do not reflect current production.
C) included when calculating GDP because they are a category of investment spending.
D) included when calculating GDP because they increase the spending of recipients.

38. The value of U.S. imports is:
A) added to exports when calculating GDP because imports reflect spending by Americans.
B) subtracted from exports when calculating GDP because imports do not constitute spending by Americans.
C) subtracted from exports when calculating GDP because imports do not constitute production in the United States.
D) added when calculating GDP because imports do not constitute production in the United States.

39. In the treatment of U.S. exports and imports, national income accountants:
A) subtract exports, but add imports, in calculating GDP.
B) subtract both exports and imports in calculating GDP.
C) add both exports and imports in calculating GDP.
D) add exports, but subtract imports, in calculating GDP.

40. In calculating the GDP national income accountants:
A) treat inventory changes as an adjustment to personal consumption expenditures.
B) ignore inventories because they do not represent final goods.
C) subtract increases in inventories or add decreases in inventories.
D) add increases in inventories or subtract decreases in inventories.

41. The ZZZ Corporation issued $25 million in new common stock in 2001. It used $18 million of the proceeds to replace obsolete equipment in its factory and $7 million to repay bank loans. As a result, investment:
A) of $7 million has occurred.
B) of $25 million has occurred.
C) of $18 million has occurred.
D) has not occurred.

42. In 2001 Trailblazer Bicycle Company produced a mountain bike which was delivered to a retail outlet in November of 2001. The bicycle was sold to E.Z. Ryder in March of 2002. This bicycle is counted as:
A) consumption in 2001 and as disinvestment in 2002.
B) disinvestment in 2001 and as consumption in 2002.
C) disinvestment in 2001 and as investment in 2002.
D) investment in 2001 and as disinvestment in 2002.

43. In national income accounting, \( G \) stands for:
A) government purchases.
B) gross investment.
C) government transfer payments.
D) gross saving.
Investment and the capital stock

44. GDP differs from NDP in that:
   A) GDP is based on gross exports, while NDP is based on net exports.
   B) GDP includes, but NDP excludes, indirect business taxes.
   C) net investment is used in calculating GDP and gross investment is used in calculating NDP.
   D) gross investment is used in calculating GDP and net investment is used in calculating NDP.

45. If depreciation exceeds gross investment:
   A) the economy's stock of capital may be either growing or shrinking.
   B) the economy's stock of capital is shrinking.
   C) the economy's stock of capital is growing.
   D) net investment is zero.

46. The concept of net domestic investment refers to:
   A) the amount of machinery and equipment used up in producing the GDP in a specific year.
   B) the difference between the market value and book value of outstanding capital stock.
   C) gross domestic investment less net exports.
   D) total investment less the amount of investment goods used up in producing the year's output.

47. If depreciation (consumption of fixed capital) exceeds domestic investment, we can conclude that:
   A) nominal GDP is rising but real GDP is declining.
   B) net investment is negative.
   C) the economy is importing more than it exports.
   D) the economy is expanding.

48. 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) DI exceeds PI.
   D) domestic investment exceeds depreciation.

Use the following to answer questions 49-50:

Economy A: gross investment equals depreciation
Economy B: depreciation exceeds gross investment
Economy C: gross investment exceeds depreciation

49. Refer to the above information. Positive net investment is occurring in:
   A) economy A only.
   B) economy B only.
   C) economy C only.
   D) economies A and B only.

50. Other things equal, the above information suggests that the production capacity in economy:
   A) B is growing more rapidly than either A or C.
   B) A is growing more rapidly than either B or C.
C) A is growing less rapidly than economy B.
D) C is growing more rapidly than economy B.

51. In 1933 net private domestic investment was a minus $6.0 billion. This means that:
   A) gross private domestic investment exceeded depreciation by $6.0 billion.
   B) the economy was expanding in that year.
   C) the production of 1933's GDP used up more capital goods than were produced in that year.
   D) the economy produced no capital goods at all in 1933.

52. An economy is enlarging its stock of capital goods:
   A) when net investment exceeds gross investment.
   B) when gross investment exceeds replacement investment.
   C) whenever gross investment is positive.
   D) when replacement investment exceeds gross investment.

53. A nation's stock of capital goods will decline when:
   A) gross investment exceeds net investment.
   B) net investment is positive, but less than gross investment.
   C) depreciation exceeds gross investment.
   D) gross investment exceeds depreciation.

54. In an economy experiencing a declining production capacity:
   A) the nation's stock of capital goods is expanding.
   B) net exports are necessarily zero.
   C) depreciation exceeds gross investment.
   D) NDP exceeds GDP.

55. If in some year gross investment was $120 billion and net investment was $65 billion, then in that year the country's capital stock:
   A) may have either increased or decreased.
   B) increased by $65 billion.
   C) increased by $55 billion.
   D) decreased by $55 billion.

56. Consumption of fixed capital (depreciation) can be determined by:
   A) adding indirect business taxes to NDP.
   B) subtracting NDP from GDP.
   C) subtracting net investment from GDP.
   D) adding net investment to gross investment.

57. 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.

**GDP accounting: expenditure approach**
Use the following to answer questions 58-62:

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal taxes</td>
<td>$40</td>
</tr>
<tr>
<td>Social security contributions</td>
<td>15</td>
</tr>
<tr>
<td>Indirect business taxes</td>
<td>20</td>
</tr>
<tr>
<td>Corporate income taxes</td>
<td>40</td>
</tr>
<tr>
<td>Transfer payments</td>
<td>22</td>
</tr>
<tr>
<td>U.S. exports</td>
<td>24</td>
</tr>
<tr>
<td>Undistributed corporate profits</td>
<td>35</td>
</tr>
<tr>
<td>Government purchases</td>
<td>90</td>
</tr>
<tr>
<td>Gross private domestic investment</td>
<td>75</td>
</tr>
<tr>
<td>U.S. imports</td>
<td>22</td>
</tr>
<tr>
<td>Personal consumption expenditures</td>
<td>250</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td>25</td>
</tr>
<tr>
<td>Net foreign factor income earned in the U.S.</td>
<td>10</td>
</tr>
</tbody>
</table>

58. Refer to the above data. GDP is:
   A) $390.
   B) $417.
   C) $422.
   D) $492.
   E) $512.

59. Refer to the above data. NDP is:
   A) $370.
   B) $402.
   C) $392.
   D) $467.

60. Refer to the above data. NI is:
   A) $364.
   B) $372.
   C) $447.
   D) $362.

61. Refer to the above data. PI is:
   A) $294.
   B) $346.
   C) $408.
   D) $437.

62. Refer to the above data. DI is:
   A) $284.
   B) $329.
   C) $254.
   D) $402.
Use the following to answer questions 63-66:

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross investment</td>
<td>$18</td>
</tr>
<tr>
<td>National income</td>
<td>100</td>
</tr>
<tr>
<td>Net exports</td>
<td>2</td>
</tr>
<tr>
<td>Personal income</td>
<td>85</td>
</tr>
<tr>
<td>Personal consumption expenditures</td>
<td>70</td>
</tr>
<tr>
<td>Saving</td>
<td>5</td>
</tr>
<tr>
<td>Government purchases</td>
<td>20</td>
</tr>
<tr>
<td>Net domestic product</td>
<td>105</td>
</tr>
</tbody>
</table>

63. The gross domestic product for the above economy is:
   A) $100.
   B) $95.
   C) $110.
   D) $107.

64. Refer to the above data. Consumption of fixed capital is:
   A) $5.
   B) $10.
   C) $20.
   D) $30.

65. Refer to the above data. Disposable income is:
   A) $83.
   B) $73.
   C) $75.
   D) $77.

66. 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.

Use the following to answer questions 67-70:

Answer the next question(s) on the basis of the following national income data for the economy. All figures are in billions.
<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal consumption expenditures</td>
<td>$400</td>
</tr>
<tr>
<td>Government purchases</td>
<td>128</td>
</tr>
<tr>
<td>Gross private domestic investment</td>
<td>88</td>
</tr>
<tr>
<td>Net exports</td>
<td>7</td>
</tr>
<tr>
<td>Net foreign factor income earned in the U.S.</td>
<td>0</td>
</tr>
<tr>
<td>Consumption of fixed capital</td>
<td>43</td>
</tr>
<tr>
<td>Indirect business taxes</td>
<td>50</td>
</tr>
<tr>
<td>Compensation of employees</td>
<td>369</td>
</tr>
<tr>
<td>Rents</td>
<td>12</td>
</tr>
<tr>
<td>Interest</td>
<td>15</td>
</tr>
<tr>
<td>Proprietors' income</td>
<td>52</td>
</tr>
<tr>
<td>Corporate income taxes</td>
<td>36</td>
</tr>
<tr>
<td>Dividends</td>
<td>24</td>
</tr>
<tr>
<td>Undistributed corporate profits</td>
<td>22</td>
</tr>
</tbody>
</table>

67. The gross domestic product for the above economy is:
   A) $584.
   B) $592.
   C) $609.
   D) $623.

68. Refer to the above data. Net domestic product is:
   A) $520.
   B) $580.
   C) $623.
   D) $573.

69. Refer to the above data. The national income is:
   A) $561.
   B) $573.
   C) $580.
   D) $548.
   E) $530.

70. Refer to the above data. Disposable income:
   A) cannot be determined from the data given.
   B) is $484.
   C) is $416.
   D) is $502.

Use the following to answer questions 71-75:

Answer the next question(s) on the basis of the following data. All figures are in billions of dollars.
Gross private domestic investment $46
Exports of the U.S. 9
Disposable income 190
Personal saving 10
Government purchases 84
Net foreign factor income earned in the U.S. 10
Consumption of fixed capital 52
Dividends 13
Imports of the U.S. 12
Indirect business taxes 22
Personal taxes 38
Social security contributions 23

71. Refer to the above data. The gross domestic product is:
   A) $326.
   B) $282.
   C) $307.
   D) $300.

72. Refer to the above data. The net domestic product is:
   A) $233.
   B) $255.
   C) $230.
   D) $348.

73. Refer to the above data. The national income is:
   A) $223.
   B) $249.
   C) $208.
   D) $346.

74. Refer to the above data. Personal income is:
   A) $184.
   B) $221.
   C) $149.
   D) $208.

75. The economy characterized by the above data is:
   A) experiencing inflation because disposable income exceeds personal income.
   B) experiencing declining production capacity because net investment is negative.
   C) in a depression because personal income exceeds disposable income.
   D) experiencing expanding production capacity because net private domestic investment is positive.

GDP accounting: value added; income approach

76. "Value added" refers to:
   A) any increase in GDP that has been adjusted for adverse environmental effects.
   B) the excess of gross investment over net investment.
   C) the difference between the value of a firm's output and the value of the inputs it has purchased from others.
77. Assume a manufacturer of stereo speakers purchases $40 worth of components for each speaker. The completed speaker sells for $70. The value added by the manufacturer for each speaker is:
   A) $110.
   B) $30.
   C) $40.
   D) $70.

78. Setup Corporation buys $100,000 of sand, rock, and cement to produce redi-mix concrete. It sells 10,000 cubic yards of concrete at $30 a cubic yard. The value added by Setup Corporation is:
   A) $300,000.
   B) $100,000.
   C) $200,000.
   D) zero dollars.

79. By summing the values added at each stage in the production of some good we obtain:
   A) the price of that good.
   B) the total income generated by that good's production.
   C) the total cost (including profits) of that product.
   D) all of the above.

80. Value added can be determined by:
   A) summing the profits of all enterprises in the economy.
   B) subtracting the purchase of intermediate products from the value of the sales of final products.
   C) calculating the year-to-year changes in real GDP.
   D) deflating nominal GDP.

Use the following to answer questions 81-85:

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal taxes</td>
<td>$23</td>
</tr>
<tr>
<td>Net private domestic investment</td>
<td>33</td>
</tr>
<tr>
<td>Net exports</td>
<td>6</td>
</tr>
<tr>
<td>National income</td>
<td>278</td>
</tr>
<tr>
<td>U.S. exports</td>
<td>20</td>
</tr>
<tr>
<td>Gross private domestic investment</td>
<td>56</td>
</tr>
<tr>
<td>Disposable income</td>
<td>220</td>
</tr>
<tr>
<td>Indirect business taxes</td>
<td>32</td>
</tr>
<tr>
<td>Undistributed corporate profits</td>
<td>15</td>
</tr>
<tr>
<td>Proprietors' income</td>
<td>45</td>
</tr>
<tr>
<td>Net foreign factor income earned in the U.S.</td>
<td>0</td>
</tr>
</tbody>
</table>

81. Refer to the above data. Consumption of fixed capital (private sector) is:
   A) $23.
   B) $14.
   C) $32.
   D) $26.
82. Refer to the above data. U.S. imports are:
   A) $26.
   B) $16.
   C) $24.
   D) $14.

83. Refer to the above data. Personal consumption expenditures:
   A) cannot be calculated.
   B) are $231.
   C) are $225.
   D) are $205.

84. Refer to the above data. The gross domestic product is:
   A) $328.
   B) $402.
   C) $382.
   D) $333.

85. Refer to the above data. Personal income is:
   A) $229.
   B) $253.
   C) $274.
   D) $243.

Other social accounts

86. If net foreign factor income earned in the U.S. is zero, the sum of national income, indirect business taxes, and the consumption of fixed capital equals:
   A) disposable income.
   B) personal income.
   C) net domestic product.
   D) gross domestic product.

87. NDP is:
   A) NI plus net foreign factor income earned in the U.S. plus indirect business taxes.
   B) NI plus corporate income taxes.
   C) GDP deflated for increases in the price level.
   D) GDP minus indirect business taxes.

88. Which of the following best defines national income?
   A) income received by households less personal taxes
   B) the before-tax income received by households
   C) all incomes earned by U.S. resource suppliers for their current contributions to production
   D) the market value of the annual output net of consumption of fixed capital

89. The total amount of income earned by U.S. resource suppliers in a year is measured by:
   A) gross domestic product.
B) national income.
C) personal income.
D) disposable income.

90. The largest component of national income is:
   A) compensation of employees.
   B) rents.
   C) interest.
   D) corporate profits.

91. The total income earned in any year by U.S. resource suppliers is measured by:
   A) DI.
   B) NI.
   C) PI.
   D) GDP.

92. National income measures:
   A) nominal GDP after it has been inflated or deflated for changes in the value of the dollar.
   B) the after-tax income of resource suppliers.
   C) the market value or cost of the resources used in the production of the national output.
   D) the amount of wage, rent, interest, and profits income actually received by households.

93. Personal income is most likely to exceed national income:
   A) when gross and net investment are equal.
   B) during a period of recession or depression.
   C) when gross investment exceeds net investment.
   D) during a period of extended inflation.

94. If personal income exceeds national income in a particular year, we can conclude that:
   A) transfer payments exceeded the sum of social security contributions, corporate income taxes, and indirect business taxes.
   B) the sum of social security contributions, corporate income taxes, and undistributed corporate profits exceeded transfer payments.
   C) consumption of fixed capital and indirect business taxes exceeded personal taxes.
   D) transfer payments exceeded the sum of social security contributions, corporate income taxes, and undistributed corporate profits.

95. Which of the following best defines disposable income?
   A) income received by households less personal taxes
   B) the before-tax income received by households
   C) all income earned by resource suppliers for their current contributions to production
   D) the market value of the annual output net of consumption of fixed capital

96. Which of the following is the largest dollar amount in the United States?
   A) disposable income
   B) personal income
   C) gross domestic product
   D) national income
97. Which of the following is the smallest dollar amount in the United States?
   A) disposable income
   B) personal income
   C) gross domestic product
   D) national income

98. Transfer payments are included in:
   A) NI.
   B) PI.
   C) GDP.
   D) NDP.

99. The amount of after-tax income received by households is measured by:
   A) discretionary income.
   B) national income.
   C) disposable income.
   D) personal income.

Real versus nominal GDP; price indexes

100. In a typical year which of the following measures of aggregate output and income is likely to be the smallest?
   A) gross domestic product
   B) national income
   C) disposable income
   D) personal income

101. Nominal GDP is:
   A) the sum of all monetary transactions that occur in the economy in a year.
   B) the sum of all monetary transactions involving final goods and services that occur in the economy in a year.
   C) the amount of production that occurs when the economy is operating at full employment.
   D) money GDP adjusted for inflation.

102. The term "real GDP" refers to:
   A) the value of the domestic output after adjustments have been made for environmental pollution and changes in the distribution of income.
   B) GDP data that embody changes in the price level, but not changes in physical output.
   C) GDP data that reflect changes in both physical output and the price level.
   D) GDP data that have been adjusted for changes in the price level.

103. Real GDP measures:
   A) current output at current prices.
   B) current output at base year prices.
   C) base year output at current prices.
   D) base year output at current exchange rates.

104. Nominal GDP is adjusted for price changes through the use of:
   A) the Consumer Price Index (CPI).
   B) the Producer Price Index (PPI).
C) the GDP price index.
D) exchange rates.

105. A price index is:
A) a comparison of the price of a market basket from a fixed point of reference.
B) a comparison of real GDP in one period relative to another.
C) the cost of a market basket of goods and services in a base period divided by the cost of the same market basket in another period.
D) a ratio of real GDP to nominal GDP.

106. The GDP price index:
A) includes fewer goods and services than the consumer price index.
B) is identical to the consumer price index.
C) is another term for the producer price index.
D) includes all goods comprising the nation's domestic output.

107. If real GDP falls from one period to another, we can conclude that:
A) deflation occurred.
B) inflation occurred.
C) nominal GDP fell.
D) none of the above necessarily occurred.

Use the following to answer questions 108-111:

Use the following table for a hypothetical single-product economy.

<table>
<thead>
<tr>
<th>Year</th>
<th>Units of Output</th>
<th>Price of bagel per unit</th>
<th>Price index (year 1 = 100)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>$10</td>
<td>100</td>
</tr>
<tr>
<td>2</td>
<td>12</td>
<td>20</td>
<td>200</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>30</td>
<td>300</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>40</td>
<td>400</td>
</tr>
</tbody>
</table>

108. Refer to the above data. Nominal GDP in year 3 is:
A) $100.
B) $450.
C) $225.
D) $150.

109. Refer to the above data. Real GDP in year 3 is:
A) $100.
B) $450.
C) $225.
D) $150.

110. Refer to the above data. Nominal GDP in year 4 is:
A) $320.
B) $450.
C) $225.  
D) $800.

111. Refer to the above data. Real GDP in year 4 is:  
A) $320.  
B) $450.  
C) $200.  
D) $800.

112. If real GDP in a particular year is $80 billion and nominal GDP is $240 billion, the GDP price index for that year is:  
A) 100.  
B) 200.  
C) 240.  
D) 300.

113. Suppose a nation's 2001 nominal GDP was $972 billion and the general price index was 90. In order to make the 2001 GDP comparable with the base year GDP the 2001 GDP must be:  
A) adjusted downward to $678 billion.  
B) deflated to $896 billion.  
C) inflated to $1080 billion.  
D) deflated to $1080 billion.

114. Suppose nominal GDP in 1999 was $100 billion and in 2001 it was $260 billion. The general price index in 1999 was 100 and in 2001 it was 180. Between 1999 and 2001 the real GDP rose by:  
A) 160 percent.  
B) 44 percent.  
C) 37 percent.  
D) 12 percent.

115. Historically, real GDP has increased less rapidly than nominal GDP because:  
A) price indices have not reflected improvements in product quality.  
B) the general price level has increased.  
C) technological progress has resulted in more efficient production.  
D) the general price level has declined.

116. 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.

Use the following to answer questions 117-121:  
Assume an economy that is producing only one product and that year 3 is the base year. Output and price data for a five-year period are as follows. Answer the next question(s) on the basis of these data.
<table>
<thead>
<tr>
<th>Year</th>
<th>Units of output</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3</td>
<td>$3</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

117. Refer to the above data. If year 3 is chosen as the base year, the price index for year 1 is:
   A) 140.
   B) 40.
   C) 167.
   D) 60.

118. Refer to the above data. The nominal GDP for year 4 is:
   A) $49.
   B) $55.
   C) $40.
   D) $35.

119. Refer to the above data. Real GDP for year 5 is:
   A) $160.
   B) $49.
   C) $40.
   D) $64.

120. Refer to the above data. In determining real GDP, the nominal GDP for:
   A) each year must be multiplied by the relevant price index.
   B) years 1 and 2 must be inflated.
   C) years 4 and 5 must be inflated.
   D) years 1 and 2 must be deflated.

121. Refer to the above data. For the years shown the growth of:
   A) real GDP has exceeded the growth of nominal GDP.
   B) nominal GDP accurately reflects changes in real output.
   C) nominal GDP overstates increases in real output.
   D) nominal GDP understates increases in real output.

122. A price index can *rise* from one year to the next even though:
   A) some individual prices in the economy fall.
   B) nominal GDP falls.
   C) real GDP falls.
   D) all of the above occur.

123. Real GDP and nominal GDP differ because the real GDP:
   A) is adjusted for changes in the volume of intermediate transactions.
   B) includes the economic effects of international trade.
   C) has been adjusted for changes in the price level.
   D) excludes depreciation charges.
124. Nominal GDP was $130 and $150 in years 1 and 2 respectively. Real GDP was $100 and $110 in years 1 and 2 respectively. On the basis of this information we can conclude that:
   A) the price level increased between years 1 and 2.
   B) more intermediate goods were produced in year 1 than in year 2.
   C) the increase in nominal GDP between years 1 and 2 understated the increase in production which occurred.
   D) the price level declined between years 1 and 2.

125. 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.

126. Real GDP is:
   A) the nominal value of all goods and services produced in the economy.
   B) the nominal value of all goods and services produced in the domestic economy corrected for inflation or deflation.
   C) that aggregate output that is produced when the economy is operating at full employment.
   D) always greater than nominal GDP.

127. In comparing GDP data over a period of years, a difference between nominal and real GDP may arise because:
   A) of changes in trade deficits and surpluses.
   B) the length of the workweek has declined historically.
   C) the price level may change over time.
   D) depreciation may be greater or smaller than gross investment.

Use the following to answer questions 128-130:

Answer the next question(s) on the basis of the following information: Only three goods are produced in an economy in the following amounts: A = 10, B = 30, C = 5. The current year per unit prices of these three goods are A = $2, B = $3, and C = $1.

128. Refer to the above information. Nominal GDP in the current year is:
   A) $110.
   B) $115.
   C) $45.
   D) $90

129. (Advanced analysis) Refer to the above information. If the per unit prices of the three goods each were $1 in a base year used to construct a GDP price index, then the GDP price index in the current year is:
   A) 205.5.
   B) 255.5.
   C) 39.3.
   D) 100.

130. (Advanced analysis) Refer to the above information. If the per unit prices of the three goods each were $1 in a base year used to construct a GDP price index, then real GDP in the current year is:
   A) $110.
   B) $115.
Use the following to answer questions 131-135:

Assume an economy that is producing only one product. Output and price data for a three-year period are as follows. Answer the next question(s) on the basis of these data.

<table>
<thead>
<tr>
<th>Year</th>
<th>Units of output</th>
<th>Price per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>$ 4</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>30</td>
<td>6</td>
</tr>
</tbody>
</table>

131. Refer to the above data. If year 2 is chosen as the base year, the price index for year one is:
   A) 80.
   B) 100.
   C) 120.
   D) 20.

132. Refer to the above data. The nominal GDP for year 3 is:
   A) 125 percent higher than the nominal GDP for year 1.
   B) 50 percent higher than the nominal GDP for year 1.
   C) $120.
   D) $30.

133. Refer to the above data. If year 2 is chosen as the base year, real GDP for year 1 is:
   A) $25.
   B) $100.
   C) $20.
   D) $80.

134. Refer to the above data. If year 2 is chosen for the base year, in year 3 nominal GDP and real GDP, respectively, are:
   A) $180 and $30
   B) $30 and $5
   C) $180 and $120
   D) $120 and $100

135. Refer to the above data. If year 2 is chosen as the base year, in years 1 and 3 the price index values, respectively, are:
   A) 4 and 6.
   B) 6 and 4.
   C) 120 and 100.
   D) 100 and 150.

Use the following to answer questions 136-138:

Answer the next question(s) on the basis of the following information:
<table>
<thead>
<tr>
<th>Year</th>
<th>Nominal GDP</th>
<th>Price index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$550</td>
<td>140</td>
</tr>
<tr>
<td>2</td>
<td>560</td>
<td>135</td>
</tr>
<tr>
<td>3</td>
<td>576</td>
<td>120</td>
</tr>
<tr>
<td>4</td>
<td>586</td>
<td>117</td>
</tr>
<tr>
<td>5</td>
<td>604</td>
<td>108</td>
</tr>
</tbody>
</table>

136. The economy above has experienced a:
   A) a declining nominal GDP.
   B) a rising price level.
   C) a declining real GDP.
   D) deflation.

137. In the economy above:
   A) the price level is rising faster than nominal GDP.
   B) nominal and real GDP are growing at the same rate.
   C) the growth of nominal GDP understates the growth of real GDP.
   D) the growth of nominal GDP overstates the growth of real GDP.

138. In the economy above, real GDP for year 3 is:
   A) $512.
   B) $428.
   C) $480.
   D) $691.

139. Assume that in 2000 the nominal GDP was $350 billion and in 2001 it was $375 billion. On the basis of this information we:
   A) cannot make a meaningful comparison of the economy's performance in 2001 relative to 2000.
   B) can conclude that the economy was achieving real economic growth.
   C) can conclude that real GDP was higher in 2000 than in 2001.
   D) can conclude that real GDP was lower in 2000 than in 2001.

140. If nominal GDP in some year is $280 and real GDP is $160. The GDP price index for that year is:
   A) 175.
   B) 57.
   C) 160.
   D) 280.

141. If real disposable income fell during a particular year, we can conclude that:
   A) personal taxes increased.
   B) inflation occurred.
   C) transfer payments declined.
   D) none of the above necessarily occurred.

Use the following to answer questions 142-143:
142. Refer to the above diagram. The base year used in determining the price indices for this economy:
A) cannot be determined from the information given.
B) is some year before 1996.
C) is more recent than 1996.
D) is 1996.

143. Refer to the above diagram. Which of the following statements is correct?
A) The price index is greater than 100 for every year shown on the graph.
B) Nominal GDP must be deflated in each year prior to 1996 to determine real GDP.
C) Real GDP has grown in this economy, but nominal GDP has not.
D) Nominal GDP must be deflated in each year since 1996 to determine real GDP.

144. In an economy experiencing persistent deflation:
A) potential GDP will necessarily exceed actual GDP.
B) changes in nominal GDP may either overstate or understate changes in real GDP.
C) changes in nominal GDP understate changes in real GDP.
D) changes in nominal GDP overstate changes in real GDP.

145. If real GDP rises and the GDP price index has increased:
A) the percentage increase in nominal GDP must have been less than the percentage increase in the price level.
B) nominal GDP may have either increased or decreased.
C) nominal GDP must have increased.
D) nominal GDP must have fallen.

146. In determining real GDP economists adjust the nominal GDP by using the:
A) national productivity index.
B) wholesale (producers') price index.
C) GDP price index.
D) consumer price index.

147. The fact that nominal GDP has risen faster than real GDP:
A) suggests that the base year of the GDP price index has been shifted.
B) tells us nothing about what has happened to the price level.
C) suggests that the general price level has fallen.
D) suggests that the general price level has risen.
148. The consumer price index (CPI):
   A) is an average of the prices of all consumer goods purchased each year.
   B) measures changes in the prices of a market basket of some 300 goods and services purchased by urban consumers.
   C) measures prices of goods, but not services.
   D) is also known as the GDP price index.

149. The consumer price index:
   A) uses a fixed market basket for all years in the series.
   B) is also called the GDP price index.
   C) measures changes in the prices of a market basket of some 50,000 goods and services.
   D) is adjusted monthly for changes in consumer spending patterns.

150. If the CPI was 160 in 2001 and 40 in 1980, the cost of living was:
   A) 4 times higher in 2001 than in 1980.
   B) 25 percent higher in 2001 than in 1980.
   C) constant over the period.
   D) 4 times lower in 2001 than in 1980.

151. Suppose rate of inflation for some specific year was 10 percent. If the CPI for that year was 139.7, the previous year's CPI must have been:
   A) 100.0
   B) 129.7
   C) 127.0
   D) 153.7

GDP and social welfare

152. The GDP tends to:
   A) overstate economic welfare because it does not include certain nonmarket activities such as the productive work of housewives.
   B) understate economic welfare because it includes expenditures undertaken to offset or correct pollution.
   C) understate economic welfare because it does not take into account increases in leisure.
   D) overstate economic welfare because it does not reflect improvements in product quality.

153. The growth of GDP may understate changes in the economy's economic well-being over time if the:
   A) distribution of income becomes increasingly unequal.
   B) quality of products and services improves.
   C) environment deteriorates because of pollution.
   D) amount of leisure decreases.

154. 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 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.
155. Environmental pollution is accounted for in:
   A) GDP.
   B) PI.
   C) DI.
   D) none of the above.

156. Assume that the size of the underground economy increases both absolutely and relatively over time. As a result:
   A) real GDP will rise more rapidly than nominal GDP.
   B) GDP will tend to increasingly understate the level of output through time.
   C) GDP will tend to increasingly overstate the level of output through time.
   D) the accuracy of GDP will be unaffected through time.

Last Word Questions

157. (Last Word) The U.S. government agency responsible for compiling the national income accounts is the:
   A) Census Bureau.
   C) Commerce Department's Bureau of Economic Analysis (BEA).
   D) Government Accounting Office (GAO).

158. (Last Word) Which of the following is a source of data for the consumption component of the U.S. GDP?
   A) the Census Bureau's Retail Trade Survey
   B) the Census Bureau's Survey of Government Finance
   C) the Conference Board's Index of Leading Indicators
   D) the Bureau of Labor Statistics Consumer Price Index

159. (Last Word) Which of the following is a source of data for the investment component of U.S. GDP?
   A) the Census Bureau's Retail Trade Survey
   B) the Census Bureau's Housing Starts Survey and Housing Sales Survey.
   C) the Conference Board's Survey of Consumer Sentiment
   D) the Bureau of Labor Statistics Consumer Price Index

True/False Questions

160. Disposable income measures the before-tax income received by resource suppliers.

161. NDP can be determined by adding indirect business taxes to GDP.

162. In determining GDP by the expenditures method it would be appropriate to use net investment rather than gross investment as a measure of investment spending.

163. The expenditures and income approaches to GDP yield identical results because goods that are not sold in one year will be sold in some following year.
164. Welfare payments to low-income families are included in national income.

165. Within the circular flow model, the level of total resource income and total spending on output will be approximately equal:

166. Interest on the public debt is included as a part of government purchases in determining GDP by the expenditures method.

167. The simplest way to calculate GDP is to sum the total sales of all business firms.

168. The purchase of Wal-Mart stock is a part of gross investment, but not of net investment.

169. Personal income usually exceeds disposable income.

170. Gross private domestic investment exceeds depreciation in an economy that experiences expanding production capacity.

171. A price index is 100 times the ratio of real GDP to nominal GDP.

172. If nominal GDP is 150 and the GDP price index is 200, real GDP is 75.

173. All expenditures on new construction are included as investment in calculating GDP.

174. Exports are subtracted from imports in calculating U.S. GDP because exports are not available for domestic consumption.

175. If real GDP is 50 and nominal GDP is 100, the GDP price index is 200.