Questions and Answers

Chapter 2

Q1: MCQ

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 + S + Xn.
   D) is always some amount less than its C + I + G + Xn.
   Answer: A

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

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 non income 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.
   Answer: A

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

5. 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. C) GDP in 2004 is $500 billion.
B) NDP in 2004 is $450 billion. D) inventories in 2004 fell by $50 billion.
Answer: C

6. **National income accountants can avoid multiple counting by:**

   A) including transfers in their calculations. C) only counting final goods.
   B) counting both intermediate and final goods. D) only counting intermediate goods.
   Answer: C

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).
   Answer: C

8. **GDP is:**

   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.
   Answer: D

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.
   Answer: B

10. **Final goods and services refer 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, rather than for resale or further processing.
    D) the excess of U.S. exports over U.S. imports.
    Answer: C

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
Answer: C

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 uniforms by a professional baseball team.
D) the purchase of jogging shoes by a professor
Answer: C

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.
Answer: C

15. 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.
Answer: C

16. 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.
D) net investment plus net exports.
Answer: B

17. 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.
Answer: B
18. 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.
Answer: D

19. 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.
Answer: B

20. 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.
Answer: B

21. 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.
Answer: C

22. In an economy experiencing a declining production capacity:

A) the nation's stock of capital goods is expanding. C) depreciation exceeds gross

Use the following to answer questions 23-26

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

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

24. Refer to the above data. Consumption of fixed capital is:
   Answer: A

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

26. 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.
   Answer: A

27. 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.
   D) the portion of any increase in GDP that is caused by inflation as opposed to an increase in real output.
   Answer: C

28. 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.
   Answer: C

29. 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.
   Answer: D

30. 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.
Answer: B

31. 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.
Answer: A

32. 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
Answer: C

33. The largest component of national income is:
Answer: A

34. The total income earned in any year by national resource suppliers is measured by:
A) DI. B) NI. C) PI. D) GDP.
Answer: B

35. 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.
Answer: C

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

37. 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.
Answer: D

38. 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
Answer: A

39. 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
Answer: A

40. Transfer payments are included in:

A) NI. B) PI. C) GDP. D) NDP.
Answer: B

41. The amount of after-tax income received by households is measured by:

A) discretionary income. B) national income. C) disposable income. D) personal income.
Answer: C

42. 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
Answer: C

43. Which of the following activities is excluded from GDP, causing GDP to understate a nation's well-being?

A) the services of used-car dealers
B) the child-care services provided by stay-at-home parents
C) the construction of new houses
D) government expenditures on military equipment
Answer: B

44. Which of the following activities is excluded from GDP, causing GDP to understate a nation's well-being?
A) the services of health care workers  
B) the services of military personnel  
C) the construction of new buildings  
D) goods and services produced in the underground economy.  
Answer: D

45. A large underground economy results in an:

A) understated GDP.  
B) overstated GDP.  
C) understated GDP price index.  
D) overstated GDP price index.  
Answer: A

46. 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.  
Answer: C

47. 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.  
Answer: D

48. 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.  
Answer: B

Q2: State why each of the following statements is true or false:

1. If the value of output by citizens outside the country is greater than the value of output by foreigners inside the country, GNP will be less than GDP.  

False because:  
\[ GNP = GDP + \text{National product outside the country} - \text{Foreign product inside the country} \]  
Then GNP< GDP if foreign product inside the country is greater than national output.
2. GNP may equal GDP.
   
   **True**, If net transfer to foreigners is zero.

3. GDP is the best measure of economic welfare.

4. GNP is the perfect measure of economic activities.
   
   **False**, because GNP is the best measure of economic welfare, as it reflects what national citizens can produce of all goods and services, and how much income is available to citizens or residents of the country.

   While, GDP is better than GNP as a measure of economic activity because it reflects the level of employment and how much is being produced inside the country.

5. GDP calculated by the value added method may equal GDP calculated by the final product method.
   
   **False**, they must be the same using the two methods.

6. In calculating GDP from the expenditure side, economists add imports to other aggregate expenditure components.
   
   **False**, because GDP = C+I+G+(X-M), where imports are payments for purchasing goods and services from abroad.

7. If gross investment rose by $60 million there must be a replacement investment by the same amount.
   
   **False**, because if gross investment rose, there must be both replacement investment, for the capital that already exist and net investment to increase the economy's capital stock.

**Q 3**: Identify which of the following purchases is counted as a part of NI:

   a) Tata motors purchases tire from Good year to equip new Indica.
   b) Tata motors purchases tires from Good year to replace worn tires on executives’ company cars.
   c) An individual purchases 50 shares of Microsoft.
   d) You purchased a laptop from USA.
   e) Indian Statistical Institute gives Scholarship to the students.
   f) Employee contributes to retirement plan.
   g) Maruti sells Zen from its inventory.

**Q 4**: How each of the following events is likely to affect GDP?

   a) Environmental laws prohibit the firms from emitting pollution
   b) Strikes by trade unions.
   c) Discovery of new seed increases farm harvest.
Q 5: Answer the following:

A farmer grows a bushel of wheat and sells it to a miller for $1.00. The miller turns the wheat into flour and sells it to a baker for $3.00. The baker uses the flour to make a loaf of bread and sells it to an engineer for $6.00. The engineer eats the bread. Compute:

a. value added at each stage of production
b. GDP

Solution:

Value added - farmer = $1
Value added - miller = $2
Value added - baker = $3
Total Value added = 1+2+3 = 6 = GDP

Q 6: Complete the following table

<table>
<thead>
<tr>
<th>Participants</th>
<th>Cost of Materials</th>
<th>Value of Sales</th>
<th>Value Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmer</td>
<td>$ 0</td>
<td>$ 100</td>
<td>$ 100</td>
</tr>
<tr>
<td>Cone factory and ice cream-maker</td>
<td>100</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Middleperson</td>
<td>400</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>Vendor</td>
<td>400</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td>$ 1,250</td>
<td></td>
</tr>
</tbody>
</table>

Solution:

1) 250, 2) 250, 3) $ 750 4) $500

Q 7: Use the following data to calculate GDP

- **Consumption**
  - Durable goods ...........$ 820
  - Nondurable goods ....... 2,010
  - Services .................. 3,929
  - Total C ..........................$6,759

- **Investment**
  - Plant & Equipment ......$ 1,361
  - Residential Housing ..... 416
  - Inventory change .......... 57
  - Total I ..........................1,834

- **Government Purchases**
Federal .........................$  595
State and Local ..............  1,148

- Total G ............................$1,743

- Net Exports (Xn)
  Exports .........................$ 1,099
  Imports ..........................- 1,466

- NX  ..............................$ - 370

- GDP  .............................$...........................

Solution

\[
\text{GDP} = C + I + G + Xn
\]
\[
\text{GDP} = 6,759 + 1,834 + 1,743 + (-370)
\]
\[
\text{GDP} = 9,966
\]