

1. Knowing the GDP deflator from 2015 and the nominal GDP from 2015, it is possible to calculate
  - (a) the inflation rate of 2015.
  - (b) the real interest rate of 2015.
  - (c) the real GDP of 2015.
  - (d) None of the above
2. If net private savings  $S - I$  equal zero and imports equal exports,
  - (a) there is a budget surplus (public savings are positive).
  - (b) there is a budget deficit (public savings are negative).
  - (c) the economy has financial need.
  - (d) None of the above
3. The interest rate has risen. A possible explanation is that
  - (a) there are more banks and fewer firms.
  - (b) there are fewer banks and more firms.
  - (c) there are fewer banks and fewer firms.
  - (d) None of the above
4. What could explain a fall in the money multiplier?
  - (a) A reduction in the liquidity ratio
  - (b) A rise in the reserve ratio
  - (c) That liquidity ratio and reserve ratio both remain constant
  - (d) A reduction in both the liquidity ratio and the reserve ratio
5. If the central bank conducts an expansionary open market operation and, simultaneously, the government issues bonds to finance an increase in the government expenditure, the equilibrium interest rate in the liquidity market model necessarily
  - (a) rises.
  - (b) remains constant.
  - (c) falls.
  - (d) None of the above
6. The Fisher effect relates
  - (a) the GDP growth rate and the nominal interest rate.
  - (b) the GDP growth rate and the inflation rate.
  - (c) the government budget surplus and the nominal interest rate.
  - (d) the inflation rate and the nominal interest rate.
7. If the European Central Bank executes a contractionary monetary policy, then it is likely that, in the currency market,
  - (a) the euro will appreciate against the dollar.
  - (b) the dollar will appreciate against the euro.
  - (c) the supply of euros function will shift to the right.
  - (d) None of the above
8. The competitiveness of the eurozone improves when, other things being equal,
  - (a) the euro depreciates against the dollar.
  - (b) the eurozone CPI rises.
  - (c) the US CPI falls.
  - (d) None of the above
9. In the AS-AD model, both the AS function and the AD function shift to the right. As a result,
  - (a) the inflation rate necessarily rises.
  - (b) the economy enters into a recession.
  - (c) it is likely that real GDP will rise.
  - (d) it is impossible that a disinflation occurs.
10. Characteristically, in a booming economy
  - (a) GDP and inflation rate both tend to rise.
  - (b) the inflation rate is falling.
  - (c) the economy approaches the trough of the business cycle.
  - (d) countercyclical variables become cyclical variables and coincident indicators turn into lagging indicators.
11. An expansionary fiscal policy aims at rising
  - (a) the money stock.
  - (b) foreign real GDP.
  - (c) the unemployment rate.
  - (d) None of the above
12. To neutralize, using monetary policy, the effect on the inflation rate caused by a contractionary shift of the AS function, what function and in what direction will have to shift?
  - (a) The AD function, to the right.
  - (b) The AD function, to the left.
  - (c) The AS function, to the left.
  - (d) None of the above
13. What is typically not an economic policy tool?
  - (a) Open market operations
  - (b) The liquidity ratio
  - (c) Taxes
  - (d) None of the above
14. If people wish to increase the amount of cash they hold and, simultaneously, reduce their deposits, then bank reserves
  - (a) increase and the monetary base does not change.
  - (b) increase and the money stock does not change.
  - (c) decrease and the money multiplier increases.
  - (d) decrease and the money multiplier also decreases.
15. What intervention in the currency market by the Bank of England will make the pound sterling tend to appreciate against the euro?
  - (a) Buy pounds and sell euros
  - (b) Sell pounds and buy euros
  - (c) An expansionary monetary policy
  - (d) None of the above
16. If banks decide to lower their voluntary reserves, then
  - (a) the interest rate will diminish and liquidity will expand.
  - (b) the interest rate will rise and liquidity will contract.
  - (c) a contractionary monetary policy is being conducted.
  - (d) None of the above
17. Real GDP is 500. Nominal GDP is 450. The GDP deflator
  - (a) is  $\frac{450}{500}$ .
  - (b) is  $500 - 450$ .
  - (c) is  $\frac{500}{450}$ .
  - (d) is  $\frac{500-450}{450}$ .
18. Suppose there is a fixed exchange rate  $\bar{e}$  between the euro and the dollar that the European Central Bank is entrusted to preserve. The equilibrium exchange rate in the currency market is initially  $\bar{e}$ . If the supply of euros function shifts to the right, then the European Central Bank
  - (a) will necessarily increase the demand for dollars.
  - (b) will sell dollars, thereby accumulating dollars.
  - (c) will sell dollars, thereby decumulating dollars.
  - (d) will carry out no intervention in the currency market.
19. As a rule, economies with a high inflation rate are prone
  - (a) to have a low nominal interest rate.
  - (b) to have a very high money multiplier.
  - (c) to have a high nominal interest rate.
  - (d) to have a very low money multiplier.
20. When  $P = 200$ ,  $P^* = 400$ , and  $e = 1$  \$/€, the euro is, with respect to its purchasing power parity value,
  - (a) overvalued.
  - (b) undervalued.
  - (c) at its purchasing power parity level.
  - (d) None of the above

### ANSWERS TO THE MULTIPLE CHOICE QUESTIONS

No answer: no penalty · Incorrect answer:  $-1/3$  of the value of a correct answer · Weight: 30%

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

DNI number \_\_\_\_\_ Surnames \_\_\_\_\_ Name \_\_\_\_\_

<b>1. [2%]</b> Explain the difference between a stock variable and a flow variable. Give an example of each type.	
<b>2. [2%]</b> Define “disinflation”.	
<b>3. [2%]</b> Explain three functions of money.	
<b>4. [2%]</b> What is a contractionary open market operation?	
<b>5. [2%]</b> Define “liquidity ratio”.	
<b>6. [2%]</b> Define “real interest rate”.	
<b>7. [2%]</b> What is Goodhart’s law?	
<b>8. [2%]</b> Define “business cycle”.	
<b>9. [2%]</b> Define “real exchange rate”.	
<b>10. [2%]</b> What is an instrument of fiscal policy? Indicate two examples.	

**11. [5%]** The velocity of circulation of money does not change. Real GDP remains constant. The money stock increases by 50%. **(i)** What is likely to happen with the inflation rate? **(ii)** Will the domestic currency tend to appreciate or depreciate?

[Justify your answers using the quantity equation and the purchasing power parity theory.]

**12. [5%]** Explain how the money creation process and the money multiplier are likely to be affected by the decision of banks to increase voluntarily their reserve ratio.

**13. [5%]** Can an appreciation or a depreciation cause an increase in the domestic GDP? If so, explain how.

**14. [5%]** Explain the interest rate channel of monetary policy.

**15. [10%]** The reserve ratio is 30%. The liquidity ratio is 20%. The money stock is 24,000. **(i)** Find the monetary base. **(ii)** Explain what kind of open market operation would increase (and explain also how the operation would increase) the money stock by 48,000. **(iii)** Calculate the amount involved in the open market operation.

**16. [10%]** Let DKK stand for “Danish crown” and SKK for “Swedish crown”.

**(i)** Explain and analyze graphically the effect on the exchange rate DKK/SEK of a reduction in the Danish GDP.

**(ii)** The central bank of Sweden, the Riksbanken, is the oldest bank of the world. Explain and analyze graphically the effect on the exchange rate DKK/SEK of a contractionary monetary policy implemented by the Riksbanken.

**17. [10%]** Let A be an economy that imports oil (petroleum) and B an economy that exports oil.

**(i)** Explain, and analyze graphically in the AS-AD model, the impact on A’s macroeconomic equilibrium of a sharp increase in the international price of oil.

**(ii)** How could a government make use of fiscal policy to try to neutralize the impact found in **(i)**?

**(iii)** Explain, and analyze graphically in the AS-AD model, the impact on B’s macroeconomic equilibrium of a sharp increase in the international price of oil.