N. Das

Economics 152
Solution to Sample Midterm 1

PART 1 (81 POINTS):Answer the following 27 multiple choice questions on the scan sheet. Each question is worth 3 points).

1. 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).

2. 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.

3. 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 of that product.
D) all of the above.

4. In 1933 net private domestic investment was a *minus* $6.0 billion. This meant 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.

5. 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.

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

7. 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.

8. 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.

9. 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.

10. Suppose nominal GDP in 1996 was $100 billion and in 1998 it was $260 billion. The general price index in 1996 was 100 and in 1998 it was 180. Between 1996 and 1998 the real GDP rose by:
A) 160 percent. B) 44 percent. C) 37 percent. D) 12 percent.

11. Net exports are negative when:
A) a nation's imports exceed its exports.
B) a nation's exports exceed its imports.
C) the economy's stock of capital goods is declining.
D) depreciation exceeds domestic investment.

12. Which of the following constitute the unemployment occurring when the natural rate of unemployment exists?
A) frictional and cyclical unemployment
B) structural and frictional unemployment
C) cyclical and structural unemployment
D) frictional, structural, and cyclical unemployment.

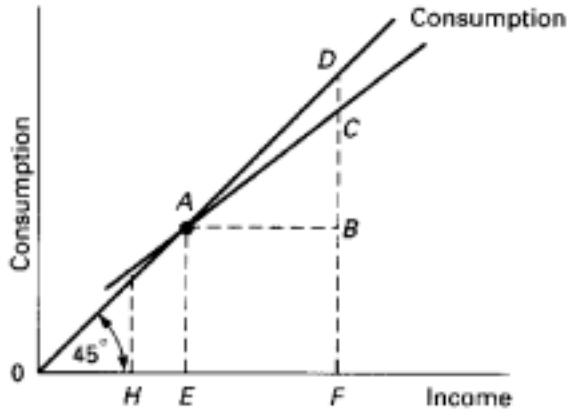
13. Okun's law:
A) measures the tradeoff between the rate of inflation and the rate of unemployment.
B) indicates the number of years it will take for a constant rate of inflation to cause the price level to double.
C) quantifies the relationship between nominal and real incomes.
D) shows the relationship between the unemployment rate and the size of the GDP gap.

14. Inflation initiated by increases in wages or other resource prices is labeled:
A) demand-pull inflation. B) demand-push inflation. C) cost-push inflation. D) cost-pull inflation.

15. In 1994 Ortega's nominal income rose by 8 percent and the price level rose by 5 percent. We can conclude that Ortega's real income:
A) rose by 13 percent
B) fell by 3 percent.
C) rose by 3 percent
D) fell by 13 percent

16. If the nominal interest rate is 12 percent and the real interest rate is 8 percent, then the inflation premium is:
A) 8 percent. B) 12 percent. C) 4 percent. D) 20 percent.

Use the following to answer questions 17-21:



17. Refer to the above diagram. The average propensity to consume is 1 at point:
A) *F*. B) *A*. C) *D*. D) *B*.

18. Refer to the above diagram. The marginal propensity to consume is equal to:
A) *AE*/0*E*. B) *DC/AB*. C) *CB/AB*. D) *DB/AB*. E) *CF/OF*.

19. Refer to the above diagram. At income level *F* the volume of saving is:
A) *BD*. B) *AB*. C) *CF-BF*. D) *CD*.

20. Refer to the above diagram. Consumption will be equal to income at:
A) an income of *E*. B) an income of *F*. C) point *C*. D) point *D*.

21. Refer to the above diagram. The economy is dissaving:
A) in the amount *CD*.
B) at all income levels greater than *E*.
C) at income level *H*.
D) at income level *E*.

Use the following to answer questions 22 - 27:

Answer the following two questions on the basis of the following information for a private open economy:

$C = 40 + .8Y$

$I_g = \bar{I}_g = 40$

$X = \bar{X} = 20$

$M = \bar{M} = 30$

$Y = C + I_g + Xn$

22. The equilibrium level of GDP (=Y) in the above economy is:
A) $200. B) $245. C) $320. D) $350.

23. Refer to the above information. In equilibrium the level of saving is:
A) $20. B) $30. C) $40. D) $50.

24. A $1 increase in government spending on goods and services will have a greater impact on the equilibrium GDP than will a $1 decline in taxes because:
A) government spending is more employment-intensive than is either consumption or investment spending.
B) government spending increases the money supply and a tax reduction does not.
C) a portion of a tax cut will be saved.
D) taxes vary directly with income.

25. The multiplier associated with a change in government purchases is:
A) always equal to 1.
B) smaller than that associated with an equal change in taxes.
C) the same as that associated with a change in investment.
D) less than that associated with a change in investment.
E) greater than that associated with a change in investment.

26. An increase in taxes will have a greater effect on the equilibrium GDP:
A) if the tax revenues are redistributed through transfer payments.
B) the larger the MPS.
C) the smaller the MPC.
D) the larger the MPC.

27. The effect of imposing a lump-sum tax is to:
A) reduce the absolute levels of consumption and saving at each level of GDP and to reduce the size of the multiplier.
B) reduce the absolute levels of consumption and saving at each level of GDP, but to not change the size of the multiplier.
C) reduce the absolute levels of consumption and saving at each level of GDP and to increase the size of the multiplier.
D) increase the absolute levels of consumption and saving at each level of GDP and to increase the size of the multiplier.

PART 2 (9 POINTS): **Answer the following 3 questions. Each question is worth 3 points.**

Suppose you have an economy with no government and no foreign sector. This economy is characterized by the following equations. (C, I and Y are all in billions (bn) of dollars).

$C = 60 + 0.8Y$
$I = 60$
$Y = C + I$

Answer the following questions on the basis of the above information.

1) Compute the equilibrium level of income or GDP (Y).

Answer: $ 600 bn

2) Suppose that private domestic investment increases to 100. What would be the new equilibrium GDP?

Answer: $ 800 bn

3) Show the initial equilibrium and the new equilibrium using the "Keynesian Cross" diagram.

<u>PART 3 (10 POINTS)</u>: **Answer the following 5 questions. Each question is worth 2 points.**

Suppose you now have a government sector in the economy so that the economy is described by the following set of equations. (C, I, Y_D, and G are all in dollars).
(Y_D is disposable income).

$C = 300 + 0.8\ Y_D$
$Y_D = Y + 50 - 30$
$I = 80$
$G = 40$
$Y = C + I + G$

1) Compute the equilibrium level of income or GDP (Y).

Answer: $ 2180 bn

2) Calculate the multiplier for this economy.

Answer: 5

3) Suppose that lump sum taxes increase from $30 to $60. Recompute the equilibrium level of GDP.

Answer: $ 2060 bn

4) Show the initial and new equilibrium using the "Keynesian Cross" diagram.

5) Assume that the lump sum tax is $30 and suppose that the MPC fell from 0.8 to 0.6. Show the initial and new equilibrium using the “Keynesian Cross” diagram.

Answer: The GDP corresponding to the initial equilibrium (with MPC = 0.8) is $ 2180 bn.

The GDP corresponding to the new equilibrium (with MPC = 0.6) is $ 1080 bn.

Answer Key –Midterm1_01S

1. C
2. C
3. D
4. C
5. B
6. B
7. C
8. D
9. D
10. B
11. A
12. B
13. D
14. C
15. C
16. C
17. B
18. C
19. D
20. A
21. C
22. D
23. B
24. C
25. C
26. D
27. B