

Summer 2020 – Final Assessment – (20%)

ECON252 – Macroeconomics-

Name	ID

Final assessment *submission* deadline is 5 days. The deadline for submission is 27 September.

A delay in assessment submission will result in the following grade deduction:

- Delay of 1 Day: 10% Deduction
- Delay of 2 Days: 20% Deduction
- Delay of 3 Days: 40% Deduction
- Delay of 4 Days: 50% Deduction
- Delay of 5 Days: 100% Deduction



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Multiple Choice answer sheet

Questions	Choice of answer			
1	A	B	C	D
2	A	B	C	D
3	A	B	C	D
4	A	B	C	D
5	A	B	C	D
6	A	B	C	D
7	A	B	C	D
8	A	B	C	D
9	A	B	C	D
10	A	B	C	D



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SECTION [1] MULTIPLE CHOICE QUESTIONS [20%]

INSTRUCTIONS:

1- ANSWER ALL QUESTIONS.

2- EACH QUESTION IS WORTH TWO MARKS.

- 1) The multiplier effect exists because a change in autonomous expenditure
A) leaves the economy in the form of imports.
B) leads to changes in income, which generate further spending.
C) will undergo its complete effect in one round.
D) prompts further exports.
- 2) Fiscal policy is defined as changes in _____ and _____ to achieve macroeconomic objectives such as price stability, high rates of economic growth, and high employment.
A) taxes; expenditures B) interest rates; money supply C) taxes; the money supply D) taxes; interest rates
- 3) If the economy is growing beyond potential real GDP, which of the following would be an appropriate fiscal policy to bring the economy back to long-run aggregate supply? An increase in
A) the money supply and a decrease in interest rates.
B) oil prices.
C) taxes.
D) government purchases.
- 4) Saving equals
A) disposable income minus consumption expenditure.
B) consumption expenditure minus disposable income.
C) disposable income plus consumption expenditure.
D) disposable income minus taxes
- 5) Long-run macroeconomic equilibrium occurs when
A) structural and frictional unemployment equals zero.
B) output is above potential GDP.
C) aggregate demand equals short-run aggregate supply and they intersect at a point on the long-run supply curve.
D) aggregate demand equals short-run aggregate supply.
- 6) If the Central Bank and the government agree to apply contractionary policies simultaneously, what will be the unwanted effect?
A) severe deflation
C) very high unemployment
B) very high inflation
D) very low unemployment



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7) If the multiplier is 6 and exports decrease by \$30, what impact will that have on aggregate expenditure?

A) decrease by \$180

B) increase by \$180

C) increase by \$30

D) decrease by \$30

8) The level of aggregate supply in the long-run is *not* affected by

A) changes in technology.

B) changes in the number of workers.

C) changes in the capital stock.

D) changes in the price level.

9) An increase of the tax on business income will reduce aggregate demand because

A) consumption spending will fall B) government spending will fall C)

investment spending will fall D) wages will increase

10) When the price level in Kuwait rises relative to the price level of other countries, _____ will fall and _____ will fall.

A) exports; imports

B) exports; net exports

C) imports; net exports

D) net exports; imports



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SECTION [2] PROBLEM SOLVING [60%]

INSTRUCTIONS:

- 1- ANSWER ALL QUESTIONS.**
- 2- EACH QUESTION IS WORTH SEVEN AND HALF MARKS WITH TOTAL FIFTEEN MARKS FOR EACH PROBLEM.**

Problem 1 (15%)

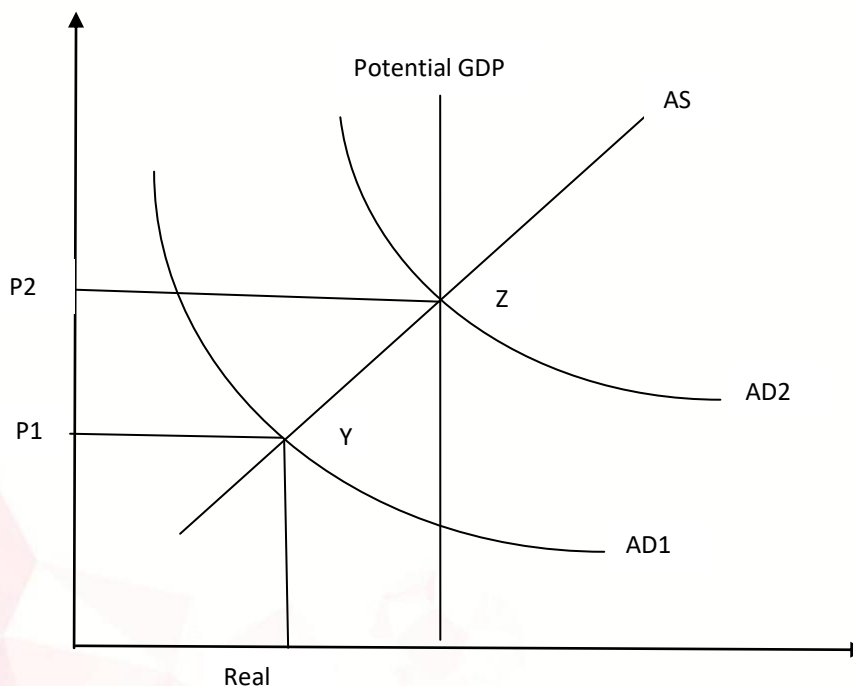
Government plans to apply fiscal policy in 2019.

Year	Actual Real GDP	Potential GDP	Price Level
2018	KD 16.0 billion	KD 16.0 billion	100
2019	KD 15.4 billion	KD 16.0 billion	90

Answer the below questions:

1. Which fiscal policy will be applied (contractionary or expansionary)? Explain why and discuss its effects on production, employment and prices (use a graph to better explain the mechanism).

The expansionary fiscal policy will be applied. The policy will put an upward pressure on the price and thus increase the levels of employment. Increased employment levels will result in increased production that will result in a shift to the right of the real GDP.



The expansionary fiscal policies like increase in government expenditure and reduction in taxes will increase aggregate demand from AD1 to AD2 hence real GDP will shift from Y to Z.

2. Calculate by how much government should change taxes to reach equilibrium, if tax multiplier is equal to -3 in this economy. Show your calculations.

$$\text{Tax multiplier} = \{- \text{MPC}/(1-\text{MPC})\}$$

$$\text{Thus MPC} = 3$$

$$\text{MPC} = [\text{change in consumption} / \text{change in income}]$$

$$3 = \{\text{consumption change} / (16\text{b} - 15.4\text{b})\}$$

$$\text{consumption change} = (0.6 * 3) \text{ billion}$$

$$= 1.8 \text{ billion}$$

The taxes should be reduced by 1.8 billion.

3. Will a change in Government purchases be a better or worse decision?

Why? **Explain** the mechanism.

A change in the government purchases will make a better decision.

an increase in the government purchases will reduce the cost of money by decreasing the rates of interest. Decreased interest rates will result in higher GDP due to increased aggregate demand.



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Problem 2 (15%)

Year	Actual Real GDP	Potential GDP	Price Level	Unemployment
2018	KD 13.4 billion	KD 13.4 billion	100	17 %
2019	KD 14 billion	KD 13.4 billion	106	6%

1. Describe country macroeconomic condition in these two years in terms of macroeconomic equilibrium and business cycle. What happened in the economy in 2019?

The country experienced a macroeconomic equilibrium in 2018 since the potential GDP was equal to actual real GDP. In 2019, the country was operating at an inflationary gap since the real GDP was more than the potential GDP and the level of price had increased from 100 in 2018 to 106 in 2019. Since the real GDP in 2019 was more than the potential GDP, the production levels were high thus the decrease in unemployment rates from 17% in 2018 to 6% in 2019. In 2019, the economy experienced increased price levels.

2. If the government purchases multiplier is 4 and the tax multiplier is -2,
 - a) By how much will government purchases need to be changed to bring the economy to equilibrium at potential GDP?

Government purchases multiplier = $1/(1-MPC)$

$$4 = 1/(1-MPC)$$

$$4 - 4MPC = 1$$

$$MPC = 0.75$$

$$4 = \text{government purchases change} / 0.6$$

The purchases made by the government will change by 2.4billion.

- b) By how much will taxes have to be changed to bring the economy to equilibrium at potential GDP?

When the tax multiplier, $MPC = 0.75$

$0.75 = \text{change in taxes} / 0.6$

Taxes will change by 0.45 billion.

Problem 3 (15%)

The below information shows that economy needs corrective actions by the Central Bank, which decided to use monetary policy.

Year	Actual Real GDP	Potential GDP	Price Level
2020	KD 15.2 billion	KD 15.6 billion	104

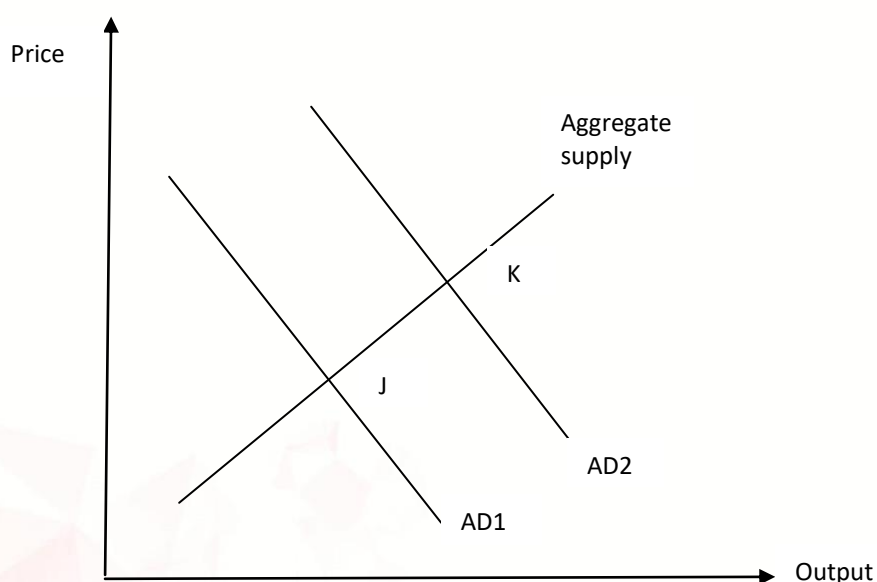
Answer the below questions:

1. Define what is a monetary policy, how is it conducted and who is responsible of its implementation.

A monetary policy is a tool that the central bank of a country uses to control the supply and demand of money. The major monetary policy tools are the reserve requirements and the interest rates. To increase production, expansionary monetary policies are used while contractionary monetary policies are used to lower inflation rates. The central bank is responsible for the implementation of the monetary policies.

2. If the Central Bank wants to keep real GDP at its potential level, should it use an expansionary or a contractionary monetary policy? Use a graph with aggregate demand and aggregate supply to explain answer.

The central bank should use expansionary monetary policies.



The expansionary monetary policy will shift the aggregate demand curve from AD1 to AD2 hence the equilibrium point from J to K.

3. Explain the mechanism of that policy. (explain how tools need to be applied)

The central bank should lower the interest rates and reserve requirements to attract borrowing which will encourage investments thus production. The real GDP will hence increase to the potential level.



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Problem 4 (15%)

AE	GDP
8520	8400
	8600
8840	
9000	9000
	9200
9320	
9480	9600

- 1) Using the information given in the table above, calculate the MPC and MPS and the multiplier. Show your calculations.

$$\begin{aligned}\text{MPC} &= \{(9480-8520) / (9600-8400)\} \\ &= 960/1200 \\ &= 0.8\end{aligned}$$

$$\begin{aligned}\text{MPS} &= (1-\text{MPC}) \\ &= (1-0.8) \\ &= 0.2\end{aligned}$$

$$\begin{aligned}\text{Multiplier} &= [-\text{MPC} / (1-\text{MPC})] \\ &= [-0.8 / -0.2] \\ &= 4\end{aligned}$$

- 2) If the net export increases by 600, what will be the new equilibrium in the economy. Show your calculations.

Exports increasing by 600 will result in income increasing by 600 too.

Income = GDP + 600.

Equilibrium GDP = 9000

The new equilibrium is 9000+600= 9600.



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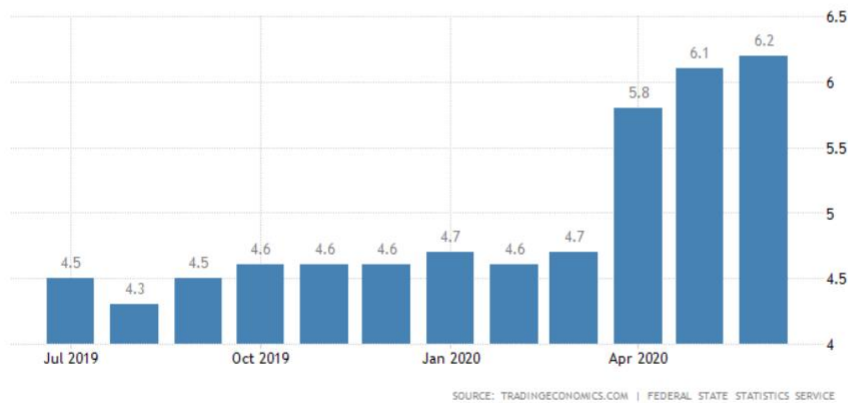
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SECTION [3] SHORT ESSAY [20%]

1- WRITE YOUR ANSWER IN THE SPACE PROVIDED WITH CLEAR ARGUMENTS.

2- THE FORMAT WITH INTRODUCTION, BODY TEXT AND CONCLUSION

Below is the graph from Trading economics on the unemployment rate in Russia:



Now, if Russia wants to control inflation, your task is to:

1. Define the phase of the business cycle that Russia is going through.
2. To choose the appropriate monetary and fiscal policies.
3. To provide clear arguments using, AD and AS analysis, to show what are the similarities and difference between the selected monetary and fiscal policy (***Use the format with introduction, body text and conclusion***)



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Answer:

- 1. The economy of Russia is undergoing recession business cycle. The economy is contracting and the economic activities have reduced. The production levels are minimal and most resources are unexploited. The contraction is evidenced by an increase in the rates of unemployment.**
- 2. The Russian central bank should employ the expansionary monetary policies as the government also puts the expansionary fiscal policies in place. The central bank should lower the interest rates to attract borrowing by both the private and the public sector. The borrowing will increase investments that will result in increased production and employment levels. The government should increase its expenditure to boost aggregate demand. Increased aggregate demand will transform to high levels of employment.**
- 3. Both the expansionary monetary and fiscal policies will result into increased aggregate demand and thus reduced unemployment levels. The expansionary fiscal policies are used by the government to encourage consumption and investments while the expansionary monetary policies are used by the central bank to encourage investments and consumption. The main fiscal policy tools are the government expenditure and the taxes while the major monetary policies are the interest rates and the reserve requirements.**