

15 MEPP

INSTITUTE OF MANAGEMENT TECHNOLOGY – Ghaziabad

PGDM – End Term II (BATCH: 2015-17)

Exam Date: 24.10.2015, Section : ALL

Subject: Macroeconomic Principles and Policies (MEPP)

Faculty Name: Prof. Manas Paul/ Arif Billah Dar/ Boishampayan Chatterjee

Time allowed: 1 Hour 30 Minutes Max. Marks: 40

Section A: Do any three questions

(8 * 3 marks)

1. Monetary policy makers in the US are optimistic about the future of their economy now. They believe economy has come out of recession now and want to increase the interest rate. Explain the mechanism through which rate hike would impact the following macro and financial variables in developing economies like India:

Financial capital, Exchange rate, Stock prices, Exports, Imports

Given the low inflation and poor GDP growth in India, explain how this rate hike would affect the RBI's monetary policy?

2. You as an IMF staff have been deputed to analyse and suggest possible fiscal boosters to two economies run down by financial crisis. Both the economies had a nominal GDP of USD 800 and USD 900 in the previous year when it was hit by the crisis when its GDP deflator declined by 7% and 9% respectively from the base year. The details of the two economies for the current year are characterised by the following:

These are in real terms	These are in real terms
Economy 1	Economy 2
$C=50 + 0.65Y_D$	$C=50 + 0.7Y_D$
$\bar{I} = 70$	$\bar{I} = 70$
$\bar{G} = 200$	$\bar{G} = 200$
TR = 100	TR = 100
t=0.2	t=0.15

- i. Find the real growth for both the economies.
- ii. What are the values of autonomous spending for both these economies?
- iii. Are there major differences between autonomous spending components between the two economies?

- iv. What might have contributed to the higher growth in Economy 2 despite a higher base (i.e. previous year GDP)?
- v. Because of the rising dissent at the back of increased economic difficulties the finance ministers in both economies are strongly advocating transfers to the masses rather than government spending. Would you go ahead with their recommendation as a better method of pumping up GDP? Explain.
- vi. How does the budget deficit look for these two economies?
- vii. Finance ministers of both these countries were of the view that there can be a chance for them to fund an increase in government spending through rising tax collections, even if there is no increase in tax rate, just because of the manifold rise in income at the back of multiplier effect. Discuss what do you think?
3. There are three firms in an economy: X, Y, and Z. Firm X buys Rs 200 worth of goods from Y, and Rs 300 worth of goods from firm Z, and produces 250 units of output at Rs 4 per unit. Firm Y buys Rs 150 worth of goods from firm X, and Rs 250 worth of goods from firm Z, and produces 300 units of output at Rs 6 per unit. Firm Z buys Rs 75 worth of goods from firm X, and Rs 50 worth of goods from firm Y, and produces 500 units at Rs 2 per unit. Given this information, compute the GDP of this economy.
4. An economy is characterized by the following relationships:
- $$C=296+0.6YD$$
- $$T=0.2Y$$
- $$I=200+0.2Y-1000i$$
- $$G=200$$
- $$MD/P=0.5Y-2500i$$
- $$MS/P=500$$
- A. Find equilibrium interest rate and income.
- B. If the government wants to increase the income by 500, by how much will it have to raise government expenses?
- C. If government expenses rise from 200 to 400, how much will income rise? What will be the new interest rate? Will there be any crowding out effect? If so, by how much?
- D. If the government doesn't want private investment to crowd out, by how much should it increase money supply?
5. Let us consider an economy with flexible exchange rate system and perfect capital mobility. Explain with diagram the effectiveness of fiscal and monetary policies in this economy.
6. Let us consider this broad economy:

The bread economy, which has Farmer, Miller, Baker, Consumers.

The farmer grows wheat and sells it to the miller at Rs. 500. Assume that he incurs no cost for intermediate goods. Though there is a labour cost of Rs. 100.

The miller buys the wheat at Rs. 500 and turns it into flour. He incurs a labour cost of Rs. 50. He sells flour to the baker at Rs. 700.

The baker buys the flour and employs labour at a cost of Rs. 100 to make it into a nice dough and bake it to a bread which he sells to the consumer at Rs. 1000.

- I. What is the final good/s produced in the economy?
- II. What are the intermediate goods in the economy
- III. Find the value addition at each of the intermediate stages of production?
- IV. Calculate the different factor incomes generated in the economy at each level of production?
- V. Show the equivalence of GDP measured in (i) Value added terms (ii) Factor incomes and (iii) Output method
- VI. Suppose other things remaining constant the farmer sells the wheat to the miller at Rs. 700
 - a. What would be the value additions and factor income generated at each level of the production process?
 - b. Does negative value addition by the miller and his loss imply a reduction in the value of GDP in the economy? Why or why not?

Section B: Do any eight questions

(8 * 2 marks)

1. Consider an economy where investment is not sensitive to interest rate. What would be the effect on GDP and interest rate if the central bank in this economy does an open market operation of buying bonds? Explain your answer.
2. Explain the difference between crowding out in a closed economy and crowding out in an open economy with a flexible exchange rate regime.
3. Assume the government cuts its purchases by \$120 billion. As a result, the budget deficit shrinks by \$40 billion, disposable personal income decreases by \$80 billion, and private domestic saving decreases by \$10 billion, and the trade deficit decreases by \$15 billion. By how much have consumption (C), private domestic investment (I), and national income (Y) changed?
4. A country is in recession and the policy makers feel that the exchange rate devaluation will stimulate aggregate demand and bring country out of recession.
 - a. What can be done to trigger this devaluation?
 - b. How might other countries with fixed exchange rate systems react to it?

5. What is fiscal multiplier? Why is fiscal multiplier stronger and effective in rural areas compared to the urban areas?
6. Explain the concept of liquidity trap? If the economy was stuck in one, would you advise the use of fiscal or monetary policy.

Use the Mundell-Fleming model to predict what would happen to aggregate income, the exchange rate, and the trade balance under both floating and fixed exchange rates in response to each of the following circumstances assuming perfect capital mobility. Use graphs to illustrate your answers.

7. The central bank decreases money supply.
8. A stock market boom.
9. A wave of credit-card fraud increases the frequency with which people make transactions in cash.

Given below are the data on Indian GDP

Table 1

CONSTANT (2011-12) prices	Quarter4 2014	Quarter1 2015	Quarter4 2015	Quarter1 2016
GVA at basic prices from				
1. AGRICULTURE	421193	359258	415228	366124
2. INDUSTRY	780694	777070	824727	827660
3. SERVICES	1184795	1273442	1293459	1386271
4. TOTAL GVA (1+2+3)	2386683	2409770	2533415	2580055
5. NET TAXES ON PRODUCTS	286764	124884	340823	132942
GDP (4+5)	2673447	2534654	2874237	2712997

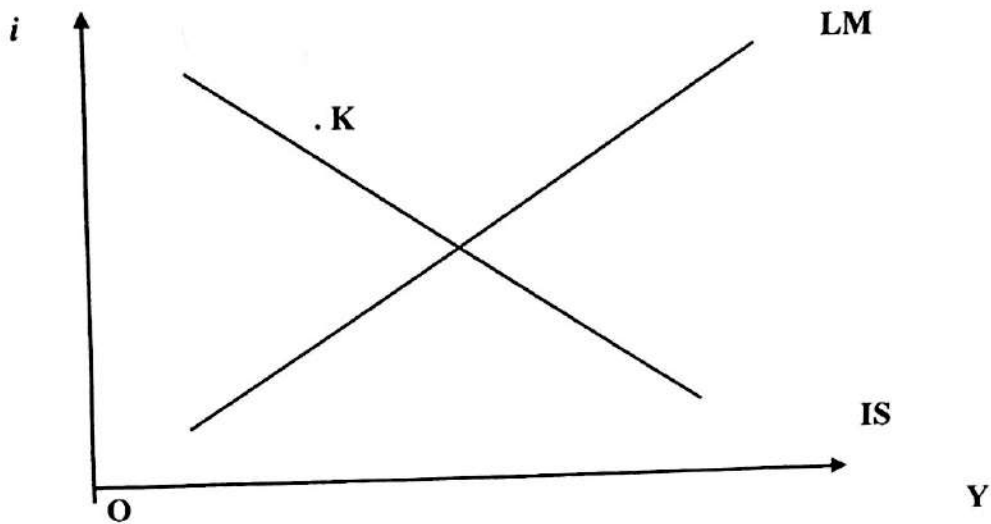
GVA = Gross value added

10. From the table 1 find the year on year growth of Indian GDP in 4Quarter 2015 and 1Quarter 2016. How do they compare?
11. Refer to table 1. How has the contribution to growth from Agriculture, Industry, Services and Taxes changed over these two quarters?
12. Based on the data in table 1 discuss how does the quality of growth compare between 4Quarter 2015 and 4Quarter 2015?
13. The following represents an incorrect sequence of events in the unfolding of an EFP (expansionary fiscal policy) in a closed economy:
 - (i) Increase in government expenditure, (ii) Y declines, (iii) demand for money increases, (iv) Y increases, (v) i increases, (vi) excess demand in the goods market, (vii) net increase in Y is moderated due to the decline in investment spending, (viii) investment spending declines

Write the correct sequence and explain your answer diagrammatically.

Consider a point K in the following figure

Figure 1



14. With reference to figure 1 what kind of disequilibrium does this signify in terms of goods market and money market? What would be the adjustment in interest rate and income? Explain your answer.
15. Based on figure 1 explain in proper sequence how increase in money supply by a central bank would affect the money and goods markets.

QUIZ 1
Macroeconomics Principles and Policies
PGDM-I (Term II), (Set 1)
IMT, Ghaziabad
10th September, 2015

A

Time: 10 minutes

Answer *all* questions. Please put in your section, name and roll no. Avoid discussions please.

Section: A

Name: Saarthak Mittal

Roll Number: 150102085

1. Increases in unwanted business inventories are counted as

- A) a decrease in the capital stock
- B) an increase in consumption
- C) an increase in investment
- D) an increase in depreciation
- E) none of the above

XO

2. In the very long-run AD-AS model, if the AD-curve shifts to the left, then

- A) prices and output will both decrease
- B) prices and output will both increase
- C) prices will decrease but output will remain the same
- D) output will decrease but prices will remain the same
- E) output will increase but prices will decrease

SO

3. Government intervention into economic activity will NOT lead to a change in the price level

- A) in the very short-run model
- B) in the medium-run model
- C) in the very long-run model
- D) in the classical model
- E) assuming a macro-model that focuses on the growth of productive capacity

SO

4. Assume a U.S. dealer bought 100 TVs from South Korea for \$250 each in 2012. He subsequently sold (exported) 80 of them in 2012 for \$450 each, and the rest in 2013 for \$400 each. By how much was the U.S. GDP affected in 2012?

- A) \$45,000
- B) \$36,000
- C) \$19,000
- D) \$16,000
- E) \$11,000

XO

250000
36000
80000

Sum (02)

(1)

5. Assume nominal GDP increased by 4.2% in the U.S. but by only 3.4% in Germany. We can definitely conclude that

- A) the standard of living of the people in the U.S. went up more than the standard of living of the people in Germany
- B) real economic growth in the U.S. was higher than in Germany
- C) inflation in the U.S. was 0.8% higher than in Germany
- D) productivity growth in the U.S. was higher than in Germany
- E) none of the above

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6. If nominal GDP increased from \$8,000 billion in the base year to \$8,400 billion in the following year and real GDP stayed the same, which is true?

- A) the GDP-deflator increased from 100 to 110
- B) the GDP-deflator increased from 80 to 100
- C) the GDP-deflator increased from 100 to 120
- D) prices increased on average by 5 percent
- E) prices increased on average by 10 percent

00 $\frac{\text{nominal}}{\text{real}}$

7. If imports increase by \$15 billion, which of the following has to happen for GDP to rise?

- A) consumption has to increase by more than \$15 billion
- B) government purchases have to increase by more than \$15 billion
- C) private domestic investment has to increase by more than \$15 billion
- D) private domestic saving has to increase by more than \$15 billion
- E) either A), B), or C) would be sufficient to increase GDP

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8. Which of the following is or are true

- A) There is no difference between headline and core inflation
- B) Headline inflation is core inflation without the volatile items
- C) Core inflation is underlying inflation excluding the volatile elements
- D) Most of the countries use core inflation only neglecting headline inflation.
- E) Headline inflation is volatile item plus core inflation

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9. Which of the following is/are true

- A) There is no difference between GVA factor cost and basic price
- B) GVA at basic price includes net product taxes
- C) GVA at basic price includes net production taxes but not (net) product taxes
- D) GDP at market prices includes both (net) production and (net) product taxes
- E) GDP at market prices include net production tax but not the net product taxes

01

Sum 1

2

10. Which of the following with respect to the following data is/are not true

INDIAN GDP CONSTANT (2011-12) prices Rs. Crore	Q1 FY13	Q1FY14
Agri	340922	350052
Industry	688750	721740
Services	1063392	1171598
Total GVA	2093064	2243389
GDP market prices	2220616	2201517

- A) Net indirect taxes has +ve contribution to Q1 FY13 growth
- B) GDP growth is greater than growth in GVA
- C) Services has the largest share in GDP
- D) Net indirect taxes have increased yoy in Q1FY14
- E) Year on year agriculture growth is lower than its contribution to overall GDP growth

(0.5)

Sm (0.5)

Pg-1 A 02

Pg-2 → 1

Pg-3 → 0.5

3.5