MBA(FT) March/April 2018

MBAFT-6203

Economic Environment of Business

Time : 3 Hours

Max. Marks : 50

Question 1 in Part I is compulsory. Attempt any one question from Part II. Attempt any two questions from Part III.

Part I: Compulsory Question. 15 marks.

1. Consider a standard constant returns to scale Cobb Douglas aggregate production function valid for long-run economic analysis of *Youtopia*. Assume that the economy is on a steady state.

   (a) *Youtopia* is forced into a short war with its neighbour, *Facibil*. As a result, *Youtopia* looses part of its labor force, but capital is not hampered. What will happen to *Youtopia*'s total output for that year? What happens to output per worker? (*3 marks*)

   (b) How does *Youtopia*'s capital per worker compare to steady-state level? What will happen to capital per worker over time? Explain qualitatively using a graph. (*5 marks*)

   Consider *Youtopia*, again. Use the same Cobb Douglas function, with the share of capital as 0.3. The system is in steady state with growth rate of 3% and depreciation of $\delta = 0.4$. The capital output ratio is 2.5.

   (c) Find out the marginal product of capital at steady state. (*2 marks*)

   (d) Golden Rule refers to the idea of maximizing consumption, which is what individual agents and policymakers want. "The steady-state value of *k* that maximizes consumption is called the Golden Rule level of capital and is denoted k^*_{gold}." Find the relationship that defines the Golden Rule. (*Hint*: First find an expression for consumption. Then see how you can maximize that.) What is the marginal product of capital at the Golden Rule steady state? How is the marginal product in Golden Rule steady state value different from marginal product of capital obtained in part (c). Use appropriate graphs to show both.(*5 marks*)

Part II: Any one question from this part. 15 marks.

2. Consider the open economy of *Syldavia* in which the real exchange rate is fixed and equal to one. Consumption, investment, government spending, and taxes are given by

$C = 10 + 0.8(Y - T), I = 10, G = 10, T = 10$

Imports and exports are given by:

$IM = 0.3Y$ and $X = 0.3Y^*$

where Y^* denotes foreign output.

   (a) Solve for the goods market equilibrium output both numerically and graphically. What is the Government expenditure multiplier in this economy? What happens to Government expenditure multiplier when the economy is closed (no trade)? Why is it different? Explain. (*3 marks*)

   (b) Assume that the only foreign country *Syldavia* is dealing with, is described by the same equations. Use the two sets of equations to solve for the equilibrium output of each country. What is the government expenditure multiplier for *Sylvania* now? Is it same or different from your answer in part a? Explain. (*5 marks*)

   (c) Suppose each Government has a target level of output of 125. The two Governments coordinate and change Government expenditure by the same amount. What is the common change in G needed to achieve that? Solve for net exports and budget deficit in each country. (*5 marks*)

(d) Why is such fiscal coordination difficult to achieve in practice? Discuss. (2 *marks*)

3. There is some evidence that CPI and WPI series are diverging in India. Refer to the graph attached.

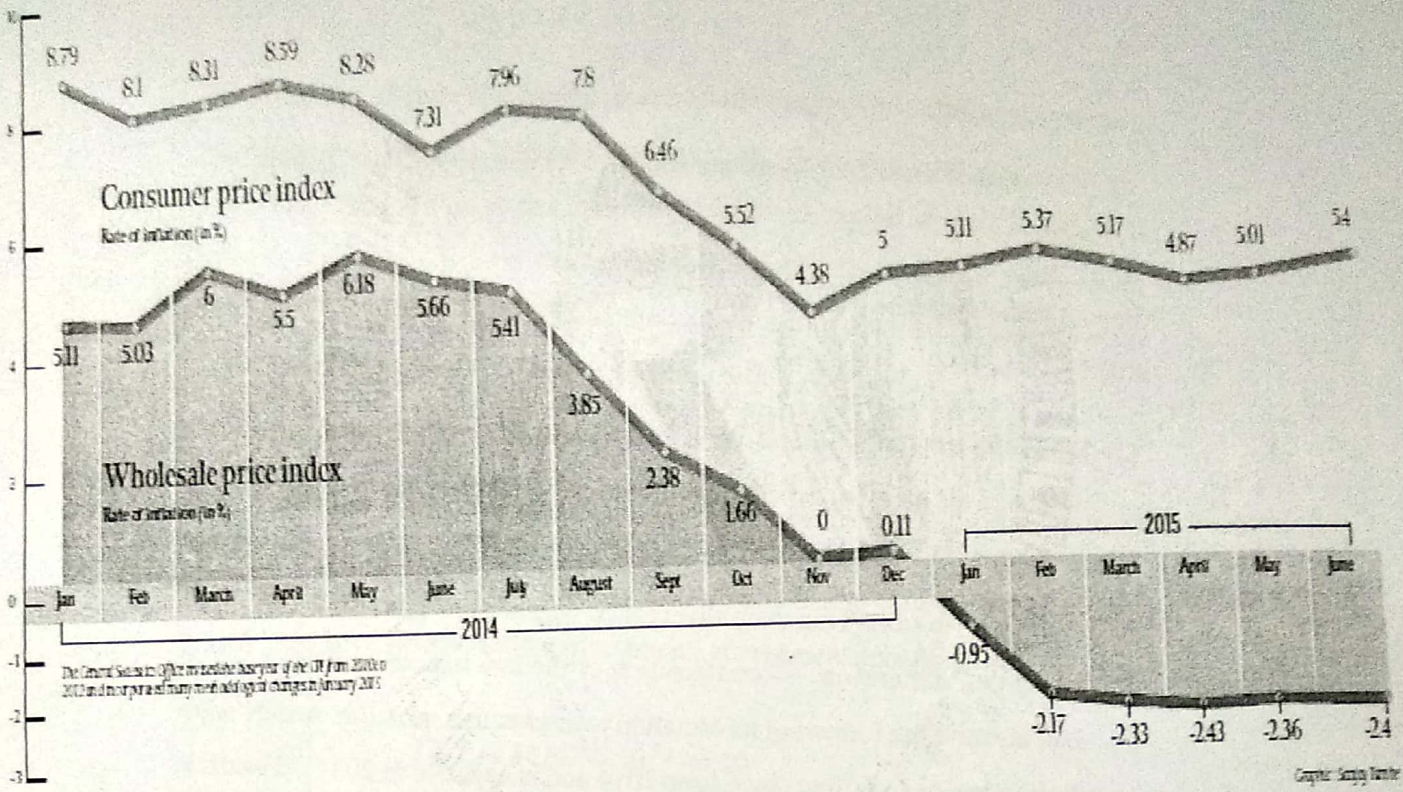
   (a) Study the trend of CPI and WPI. What should be the optimal interest rate policy based on inflation data only? Assume that there are no measurement problems. (*3 marks*)

   (b) Why are we observing such divergence over a prolonged period? Think along two dimensions — composition of the two baskets and prices. You can also use the following information to answer this question: *headline inflation* has been falling since June 2014 and is negative in 2015. "Headline inflation is a measure of the total inflation within an economy, including commodities such as food and energy prices."(*5 marks*)

   (c) Let us assume that the weightage for food are the same in both CPI and WPI, about 25% (they are not in real life). Is it possible that food inflation as reported by CPI will be different than that of WPI? Discuss. (*4 marks*)

   (d) Price of crude oil has started going up from the middle of 2017. Which price index is more impacted by changes in foreign commodity prices? Discuss. (*3 marks*)

Figure for Question 3



Part III: Any two questions from this part. 10 marks each.

4. Write short notes on:
   (a) Crowding-out effect (*5 marks*)
   (b) Determinants of natural rate of unemployment (*5 marks*)

5. Discuss the effects of expansionary monetary and fiscal policy in *Mundell-Flemming* Model under fixed exchange rate in a small open economy. (*10 marks*)

6. (i) Distinguish between the current account and the capital account of the balance of payments of a country. (*3 marks*)
   (ii) Distinguish between partial and full convertibility and also explain why full capital account convertibility is still a distant dream. (*7 marks*)