

MASTER OF ARTS EXAMINATION, 2023

(2nd Year, 2nd Semester)

ECONOMICS

[**INTERNATIONAL ECONOMICS A II**]

(**MONEY, BOP AND EXCHANGE RATE**)

(**PRE REQUISITE INTERNATIONAL ECONOMICS A I**)

Time : Two Hours

Full Marks : 30

Answer any *two* questions.

1. Consider a small country inhabited by identical citizens with a two-period lifetime and representative household's preferences over consumption given by:

$$U(C_1, C_2) = \log(C_1) + \beta \log(C_2) \text{ with } 0 < \beta < 1.$$

Each consumer may allocate its income between consumption and foreign bonds. $C_1 + B_1 - B_0 = rB_0 + Y_1$ where B stands for foreign bonds, r is domestic interest rate. $CA_1 = B_1 - B_0$

Finally, assume that domestic interest rate equals world's interest rate and the economy starts with no foreign assets ($B_0 = 0$).

- a) Derive the intertemporal budget constraint. Solve the households' maximization problem and determine the optimal consumption in period 1 and period 2.

[Turn over

[2]

- b) Assume that intertemporal production possibility frontier for this country is symmetric against the 45° line (maximum level of present and future production is equal). What will happen to the present and future production and consumption if we open the economy and the world's interest rate is higher than the autarky's interest rate? Show the changes in the diagram. Comment on the current account balance in present and future?
- c) Suppose that $\beta(1+r)=1$ and that $Y_1 = Y_2 = Y$. There is a now a government that runs a balanced budget in both periods, i.e. $G_i = T_i$ where $i = 1, 2$. Determine the new budget constraint of the consumer. Derive what happens to consumption levels in both periods and CA_1 if $G_1 > 0$ and $G_2 = 0$. What would happen to consumption and the current account if $G_1 = G_2 = G > 0$? Is there any evidence of Ricardian Equivalence here? 4+4+7
2. a) How does the portfolio balance approach to exchange rate determination differ from the monetary model? Illustrate a simple model of exchange rate determination using the portfolio balance theory.
- b) If the home market increases money supply through open market operations, is it possible to arrive at a

[3]

- new equilibrium exchange rate using portfolio balance approach? Justify.
- c) How will the equilibrium change with decline in real income growth in the home economy following an economic crisis?
- d) Using Kouri (1983) model where long run equilibrium exchange rate prevails through the interaction of the current and the capital accounts, is it possible to show that an increase in exchange rate in the short run will lead to a complete adjustment in the long run? Justify. 4+3+3+5
3. Consider a small open economy with fixed exchange rate at initial underemployment equilibrium where trade is balanced.
- a) Show that an import tariff unambiguously creates a trade surplus while it has positive impact on output under certain conditions.
- b) Does an export subsidy have similar effects on output and trade balance? Justify your answer.
- c) There can be another commercial policy which will have unambiguous positive impact on output and trade balance? Explicate.
- d) Can this other commercial policy, as mentioned in (c), be an alternate to import tariff and export subsidy together? Justify. 4+4+4+3