UNIVERSITY OF FORT HARE
DEPARTMENT OF ECONOMICS

ALICE CAMPUS

ECO 512

JUNE EXAMINATION 2023

Time: 3 Hours

Subject: Macroeconomics (Honours) **Marks: 100**

This paper consists of 3 pages including the cover page

Internal Examiners

Ms D Hunter

External Examiner

Dr R Garidzirai

Instructions

Answer any **FOUR** questions
All questions carry EQUAL marks.
Use clearly labelled diagrams
Show any workings

(ANSWER any FOUR QUESTIONS)

Question 1 [25 Marks]

(a) Robinson (2009) analysed the case of Botswana, a highly successful African country in terms of growth performance.

(i) What was the main hypothesis the author elaborated on to explain Botswana's relative success? Discuss. (5)

(ii) Can you connect the paper hypothesis to macroeconomic growth theories? Is the Solow model enough to explain growth in this context? (5)

(b) The average income of farmers is less than the average income of non-farmers, but fluctuates more from year to year. Given this, how does the permanent-income hypothesis predict that estimated consumption functions for farmers and non-farmers differ? Make use of relevant equations to support your answer. (15)

Question 2 [25 Marks]

(a) Briefly define hysteresis. How do insider-outsider models explain hysteresis? (4)

(b) Making use of relevant illustrations, describe how each of the following affect equilibrium employment and the wage in the Shapiro–Stiglitz model:

(i) An increase in workers' discount rate, ρ. (7)
(ii) An increase in the job breakup rate, b. (7)
(iii)An increase in the size of the labor force, L. (7)

Question 3 [25 Marks]

(a) Why is sustained per capita growth possible in the Romer model but not in the Solow model? (5)

(b) Consider an economy with technological progress but without population growth that is on its balanced growth path. Now suppose there is a one-time jump in the number of workers.

(i) At the time of the jump, does output per unit of effective labour rise, fall, or stay the same? Why? Use the Solow diagram to substantiate your discussion. (10)

(ii) After the initial change (if any) in output per unit of effective labour when the new workers appear, is there any further change in output per unit of effective labour? If so, does it rise or fall? Why? Explain in relation to your diagram demonstrated in (a) above. (5)

(iii)Once the economy has again reached a balanced growth path, is output per unit of effective labour higher, lower, or the same as it was before the new workers appeared? Why? (5)

Question 4 [25 Marks]

(a) If the tax rate follows a random walk (and if the variance of its innovations is bounded from below by a strictly positive number), then with probability 1 it will eventually exceed 100 percent or be negative. Does this observation suggest that the tax-smoothing model with quadratic distortion costs is not useful in fiscal policy, since it has an implication that is both

clearly incorrect as a description of the world and clearly undesirable as a prescription for policy? Explain your answer. (10)

(b) "James Tobin, a Nobel Prize winner in Economic Sciences, founded Tobin's q (1969)."
(i) Briefly explain Tobin's q. Be sure to give the equilibrium condition and an intuitive explanation of why it is an equilibrium condition. (12)
(ii) Does it matter if the firm has outstanding debt? (3)

Question 5 [25 Marks]

Provide an overview of each of the various South African growth-enhancing policies that have been introduced post-1994, commenting on their effectiveness and/or failures. (25)

Question 6 [25 Marks]

(a) "The basic RBC model, first introduced by Kydland and Prescott (1982), is built around a typical NGM framework of intertemporal maximisation."

(i) In the context of the real business cycle model, explain why technological shocks are the main source of business cycle fluctuations. (6)
(ii) Are declines in this exogenous variable welfare improving or welfare reducing? Why? (4)

(b) "Understanding the costs of inflation is a significant challenge. In many models, steady inflation just adds an equal amount to the growth rate of all prices and wages and to nominal interest rates on all assets. As a result, it has few easily identifiable costs." Discuss the costs associated with inflation. (15)

END OF EXAMINATION GOOD LUCK