



"Investing in Africa's Future"

COLLEGE OF BUSINESS AND MANAGEMENT SCIENCES

NMEC 406: ADVANCED MACROECONOMICS

SECOND SEMESTER EXAMINATIONS

APRIL 2026

LECTURER: MR G MANDEWO

TIME: 3 HOURS

INSTRUCTIONS

ANSWER ANY **FOUR QUESTIONS** FROM THIS PAPER
MARKS ALLOTTED TO EACH QUESTION ARE SHOWN

CLEAR AND NEATLY PRESENTED WORK WILL BE AWARDED MARKS FOR PRESENTATION

Question 1

Consider a small open economy with perfect capital mobility. Domestic and foreign bonds are imperfect substitutes, and investors care about both interest rates and expected exchange rate movements.

- (a) Distinguish between domestic bonds and foreign bonds. Explain the role of the exchange rate and expected depreciation in investors' portfolio choices. **[7 marks]**
- (b) Explain how equilibrium in the goods market and equilibrium in the financial market are jointly determined in an open economy. **[7 marks]**
- (c) Analyze the effects of an expansionary fiscal policy on output, the interest rate, and the exchange rate in the short run. **[7 marks]**
- (d) Suppose the central bank implements an expansionary monetary policy. Explain, step by step, the effects on:
 - (i) the domestic interest rate **[2 marks]**
 - (ii) capital flows **[2 marks]**

Question 2

Real Business Cycle (RBC) theory explains economic fluctuations as the efficient response of the economy to real shocks.

- (a) Describe the main business cycle facts that any macroeconomic theory seeks to explain. **[8 marks]**
- (b) Outline the baseline RBC model, identifying its key assumptions about markets, prices, and expectations. **[8 marks]**
- (c) Explain how households behave and optimize under uncertainty in the RBC framework. What role do intertemporal choices play in consumption and labour supply decisions? **[9 marks]**

Question 3

Economic growth models explain the long-run increase in output and living standards.

- (a) Briefly outline the main features of the Solow growth model. What determines the long-run steady-state level of output per worker? **[7 marks]**
- (b) Explain the concept of the balanced growth path in the Solow model. How do savings and population growth affect this path? **[8 marks]**

(c) Contrast the Solow model with endogenous growth theory. How does endogenous growth theory explain persistent growth without diminishing returns? **[10 marks]**

Question 4

Firms' decisions on whether to undertake investment depend on their expectations of future after-tax profits. Tobin's q theory explains investment behaviour by comparing the expected benefits from expanding the capital stock with the costs of doing so.

(a) Explain, using Tobin's q theory, what factors determine a firm's investment decisions and identify the condition under which investment should occur. **[8 marks]**

c. Discuss the main difficulty associated with measuring marginal q and explain what alternative measure is commonly used in practice. **[8 marks]**

d. In the context of an open economy, evaluate the potential effects of increasing output through an expansionary fiscal policy based on higher government expenditure.

[9 marks]

Question 5

(a) The permanent income hypothesis (PIH) argues that individuals choose their level of consumption by optimally allocating resources over their lifetime, taking expectations about future income into account.

(i) Explain and outline the permanent income hypothesis, highlighting the role of expectations in consumption behaviour. **[7 marks]**

(ii) Compare the permanent income hypothesis with the Keynesian current income hypothesis, clearly explaining how the two approaches differ. **[8 marks]**

(b) What life lessons can you infer from the life cycle hypothesis? **[10 marks]**

END OF EXAMINATION