

**UNIVERSITY OF SWAZILAND  
FACULTY OF SOCIAL SCIENCE  
DEPARTMENT OF ECONOMICS  
MAIN EXAMINATION MAY 2017**

**TITLE OF PAPER: INTERMEDIATE MACROECONOMIC THEORY  
COURSE CODE: ECON 304  
TIME ALLOWED: TWO (2) HOURS**

**INSTRUCTIONS:**

- 1. THIS PAPER CONSISTS OF TWO SECTIONS.**
- 2. SECTION ONE IS COMPULSORY THEN CHOOSE ANY TWO (2) OTHER QUESTIONS FROM THE THREE PROVIDED IN SECTION TWO.**
- 3. ANSWER THREE (3) QUESTIONS IN TOTAL.**
- 4. SECTION ONE CARRIES 40 MARKS WHILE QUESTIONS IN SECTION TWO CARRY 30 MARKS EACH**

**THIS PAPER IS NOT SUPPOSED TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.**

## SECTION ONE

### Question1 (Compulsory and Carries 40 Marks)

**A.** Suppose the Kingdom of Zululand produces only two products: television and motorbikes.

Sales and price data for these two products for two different years are as follows:

Year	No. of Televisions sold	Price per television	No. of motorbikes Sold	Price per motorbikes
2000	500,000	R6,000	1,000,000	R12,000
2002	5,000,000	R2,000	1,500,000	R20,000

- i) Calculate nominal GDP in 2000 and 2002. [3]
- ii) Calculate real GDP in 2002 using 2000 as the base year. [2]
- iii) Calculate the GDP deflator in 2002. [1]
- iv) Calculate the CPI in 2002 using 2000 as the base year. [4]

**B.** Consider an economy described by the production function:

$$Y = F(K, L) = K^{3/10} L^{7/10}$$

- a.) What is the per-worker production function? [2]
- b.) Assuming no population growth or technological progress, using the given information above, find the steady-state capital stock per worker, output per worker, and consumption per worker as a function of the saving rate and the depreciation rate. [5]
- c.) Population growth gives us another explanation for why some countries are rich and others are poor. Show graphically and explain the implications of an increase in the population growth rate in the Solow model. [5]

**C.** Business sectors in all countries worldwide are presented using the International Standard Industrial Classification (ISIC) - a United Nations' industry classification system.

- a) What is the major advantage of using ISIC? [3]
- b) Which sectors of the economy should the government of Swaziland focus on in order to stimulate economic growth and why [5]
- c) When delivering the budget speech for FY2017/18, the Minister of Finance mentioned that Swaziland is facing widening deficit figures because of volatile SACU receipts and expansionary fiscal policies adopted in the past. Discuss any 5 possible measures that the government could explore to tackle the growing deficit and drive the economy to the right direction. [10]

## SECTION TWO

### Question 2

Stabilization of the economy is a prerequisite for economic growth. Empirical evidence shows that creating an environment that is conducive to higher rates of investment can lead to job creation, higher living standards and can reduce the likelihood of violence.

- a) What is macroeconomic stabilization? [2]
- b) Achieving macroeconomic stabilization requires that eight (8) conditions be met. What are these conditions? Discuss [24]
- c) Is Swaziland's economy conforming to these requirements? Discuss [4]

### Question 4

Consider a simple dynamic (two period) model of the economy where the government will purchase good  $G_1$  in the current period and  $G_2$  in the future period. These purchases are partially funded by taxes today  $T_1$  and taxes tomorrow  $T_2$ . Just like the households, the government can borrow in the current period by issuing bonds at the real interest rate  $r$  and that  $B$  is the quantity of government bonds.

- a) What is the idea behind the inter-temporal budget constraint? [6]
- b) The consumer's objective is to maximise lifetime utility. With an aid of a diagram, elaborate on the three assumptions or properties of the consumer's preferences? [9]
- c) Using the information above, formulate the government's life time budget constraint. [15]

### Question 4

Financial markets are important for the macro-economy. Ignoring them is a dangerous mistake, as the lead-up to the global financial crisis and the Great Recession has made us painfully aware. It is therefore important to know how financial markets affect macroeconomic outcomes.

- a) What is a financial market? [2]
- b) Financial markets serve six basic functions, discuss. [12]
- c) Every market has its own major players who perform different roles. Giving examples identify the major players in financial markets and discuss their roles. [16]