

# DEDAN KIMATHI UNIVERSITY OF TECHNOLOGY UNIVERSITY EXAMINATION 2014/2015 FIRST YEAR EXAMINATION FOR THE DEGREE OF MASTER OF SCIENCE IN ECONOMICS

### **BEC 4101: MACROECONOMIC THEORY**

TIME 3 HOURS

Instructions: Answer ALL QUESTIONS Each question carries 15 marks Write your registration number clearly, show your workings where vital, be neat and to the point

### **QUESTION ONE**

**APRIL 2015** 

The production function for the Kenyan economy is presented as:

 $Y = AK^{\beta}L^{1-\beta}$ , where  $\beta < 1$ 

Let  $g_A$  be the growth rate of A,  $g_N$  be the growth rate of N, and  $\delta$  be the rate of depreciation in this economy

a) Use the above function to show the Inada conditions (4 marks)
b) Interpret the parameter A (2 marks)
c) Verify that the above production function has the property of constant returns to scale (3 marks)
d) What is effective labor in this economy (4 marks)
e) Explain the Neo Classical Growth Theory (2 marks)

# **QUESTION TWO**

- a) Explain the assumptions of the Solow-Swan growth model (3 marks)
  b) Derive and analyze the requirements of a steady growth in an economy using the Solow-Swan growth model (8 marks)
- c) Are these requirements applicable to your economy? Explain (4 marks)

# **QUESTION THREE**

- a) Discuss the potential reasons for a firm paying efficiency wages (8 marks)
- b) Graphically show the effects of a fall in labor demand in the Shapiro-Stiglitz model (7 marks)

# **QUESTION FOUR**

a) Why is monetary policy transparency important (5 marks)
 b) Discuss the structuralist view on the sources of inflation and its applicability to developing economies. (10 marks)