



# **MAASAI MARA UNIVERSITY**

## **REGULAR UNIVERSITY EXAMINATIONS 2020/2021 ACADEMIC YEAR THIRD YEAR SECOND SEMESTER**

### **SCHOOL OF BUSINESS & ECONOMICS BACHELOR OF SCIENCE IN ECONOMICS**

**COURSE CODE: ECO 3203**

**COURSE TITLE: ADVANCED MACROECONOMICS**

DATE: 14<sup>TH</sup> OCTOBER, 2021

TIME: 1100 – 1300HRS

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#### **INSTRUCTIONS TO CANDIDATES**

Answer question ONE and any THREE questions

### QUESTION ONE

- (a) Discuss the uncertainty and irreversibility model (real options approach) to investment. **(8mks)**
- (b) Derive the balanced budget multiplier and interpret. **(5mks)**
- (c) With an illustration, explain the relationship between the real wage and money wage the firm will offer to the labourers in a competitive market. **(6mks)**
- (d) Discuss the channels through which financial development affects economic growth. **(6mks)**

### QUESTION TWO

- (a) Show that the monopolists demand curve for labour is the competitive firm demand for labour shifted by the factor  $1+1/e$ , where  $e$  is the elasticity. **(5mks)**
- (b) The following structural equations describe a certain economy.  
 $C=100+0.8Y_d$ ,  $I=10-10r$ ,  $G=10$ ,  $T=0.25$ ,  $L=Y-100r$ ,  $M=295$ ; consumption function, investment function, government purchases, tax rate, real money demanded and real money supply respectively.  
Required:
- (i) IS and LM equation. **(6mks)**
- (ii)  $r$  and  $y$  pairs at which the two markets are in equilibrium. **(4mks)**

### QUESTION THREE

- (a) Derive and interpret the total factor productivity equation for an economy. **(6mks)**
- (b) Explain why growth in labour increases GDP but not the per capita GDP. **(3mks)**
- (c) Explain any other TWO factor inputs, not in the TFP model, that would enhance output growth. **(6mks)**

### QUESTION FOUR

- (a) Derive and sketch the steady-state equation. **(6mks)**
- (b) Explain the effect of an increase in the savings rate on the growth of output. **(3mks)**
- (c) What is the effect of an increase in population on the steady-state growth on aggregate output? **(3mks)**
- (d) Show that labour and capital each contribute an amount equal to their individual growth rates multiplied by the share of that input in income. **(3mks)**

### QUESTION FIVE

- (a) Discuss the work-leisure decision of an individual worker. **(3mks)**
- (b) Explain the meaning of fiscal and monetary policy mix and show effects on  $r$  and  $y$ . **(4mks)**
- (c) Prove that Harrods average propensity to save is Domars propensity to save. **(5mks)**
- (d) Discuss the flexible accelerator model of investment. **(3mks)**