



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ACCOUNTING BANKING AND FINANCE

FOURTH YEAR SPECIAL/SUPPLEMENTARY EXAMINATION FOR

BACHELOR OF ECONOMICS AND FINANCE

EET 401: MACROECONOMIC THEORY IV

DATE: 7/8/2019

TIME:

INSTRUCTIONS:

- (i) Answer question one (Compulsory) and any other two questions
- (ii) Do not write on the question paper
- (iii) Show your workings clearly

QUESTION ONE (COMPULSORY)

- a) Differentiate between Absolute income hypothesis and Relative income hypothesis (10 marks)
- b) Explain the transactions demand for money theory (10 Marks)
- c) Explain five methods which the government can use to finance budget deficits (10 Marks)

QUESTION TWO (20 MARKS)

- a) Explain Harrod Domar's theory of economic growth (10 marks)

- b) Derive the money multiplier and explain the determinants of money supply
(10 Marks)

QUESTION THREE (20 MARKS)

- a) Given the following intertemporal optimizing model of consumption patterns:

$$\max_{c_t} \sum_0^T \frac{\ln c_t}{(1 + \delta)^t},$$

Subject to the constraint that

$$\sum_0^T \frac{c_t}{(1 + r)^t} = \sum_0^T \frac{y_t}{(1 + r)^t}.$$

Show that whether consumption rises, falls or remains constant over time depends on whether the market rate of return is larger or smaller than the individual's discount rate (10 Marks)

- b) Explain using the neoclassical growth Model how the following changes affect variables in the steady-state:

- a) A decrease in the savings rate
b) An decrease in Population growth (10 Marks)

QUESTION FOUR (20 MARKS)

- a) Given the following production function

$$Y = Af(K, L)$$

Where: A is the level of technology; K represents units of capital; L represents units of labour.

Let (1-θ) and θ be weights equal to labour's share of income and capital's share of income, respectively.

Obtain the Solow residual and state the three key determinants of output growth according to Solow. (10 Marks)

- b) Explain using the quantity theory of money and fishers equation the relationship between money supply and inflation (10 Marks)

QUESTION FIVE**(20 MARKS)**

Given that a firm faces a production function of the form $y_t = y_t(N_t, K_t)$. If the firm maximizes the present value of future flows of profit streams subject to a technological constraint given by the capital evolution equation as $K_{t+1} = K_t + i_t - \delta K_t$.

Where y – Output

N – Labor units

K – Capital stock

i – Investment

δ – Depreciation rate.

Required

- i. Derive the expression for the flexible accelerator model of investment demand. **(12 marks)**
- ii. Given a Cobb Douglas production function of the form $y = AK^\alpha L^{1-\alpha}$. Show the corresponding investment demand function. **(8 marks)**