AFRICA UNIVERSITY

(A United Methodist-Related Institution)

"Investing in Africa's Future"

FACULTY OF MANAGEMENT AND ADMINISTRATION

COURSE TITLE: MEC 501- ECONOMICS

SEMESTER 1: FINAL EXAMINATION DECEMBER 2016

LECTURER: MR. L. NGENDAKUMANA

TIME: 3 HOURS

INSTRUCTIONS

Answer **any FIVE questions**
Total possible mark is **100.**

Start **each** question on a new page in your answer booklet.

The marks allocated to **each** question are shown at the end of the section.

Show all your workings.

Credit will be awarded for logical, systematic and neat presentations.

Question 1

Assume that a hypothetical country central bank decides that the growth of the money supply is greater than the economic growth. What policy prescription would you recommend and what tools are there open to it to overcome such a situation? [20]

Question 2

(a) A hypothetical government decides that its economy is facing a recession which is causing high levels of unemployment. What options are there open to it to overcome such a situation? [10]

(b) State and outline another scenario which would call for a fiscal policy intervention and provide the various tools that can be used and how they can used to overcome such a situation. [10]

Question 3

(a) What are the main objectives of monetary policy? [5]

(b) State and explain the instruments used by monetary authorities and how they are used to achieve the objectives in (a) [10]

(c) Distinguish between discretionary and monetary rules [5]

Question 4

(a) Macroeconomic analysis evolves from the two sector model of income determination' Demonstrate. [6]

(b) Using a two sector model and a numerical example outline the concept of equilibrium income, the spending multiplier and show how a change in investment affect the level of income. [8]

(c) Illustrate and explain the concepts of:

i. Real Gross Domestic product [2]

ii Nominal Gross national product [2]

iii Spending multiplier [2]

(d) Making all necessary assumptions state and briefly outline the two important conditions that you may use in determining the bundle of good X and Y that a consumer can choose among many others. Use a numerical example in your illustration. [4]

Question 5

(i) The Zambian Electricity Supply Company (ZESCO)'s demand for electricity is given by $\mathbf{Q = 45 - 0.125P}$. Given that ZESCO is a regulated monopoly and given its total cost function $TC = 4Q^2$:

a. At what price and quantity should ZESCO operate? [3]

b. Can economic profit be determined from the information given? Why or why not? [3]

c. Using your result in (b) explain the concept of economic profit [2]

(ii) The marginal product of labour function for central milling Inc. is given by the equation: $MP_L = 10(\frac{K}{L})^{0.5}$

Currently, the firm is using 100 units of capital and 121 units of labour.
Given the very specialized nature of the capital equipment, it takes six to nine months to increase the capital stock, but the rate of labour input can be varied daily. If the price of labour is $ 10 per unit and the price of output is $2 per unit,

a. Is the firm operating efficiently in the short –run? [3]
b. If not explain why, and determine the optimal rate of input. [3]

(iii) "Firms operate in the short run but make their decisions in the long run." Do you agree or disagree? Use logical illustrations in your arguments [6]

Question 6

(i) The demand for an IBM server machine in the U.S is given by
Q = 350 000 - 200P
The book is initially priced at $1500

(1) Compute the point elasticity of demand at P = $1500.Interpret your result [3]

(2) Assess the probable impact of the server price increase on the total revenue. Explain your answer. [2]

(3) Distinguish between normal and inferior goods on one hand and between luxury and necessity goods [4]

(ii) The demand and supply for beef in Mozambique are given by the following equations:
$Q_D = 48000 - 1000P$ and $Q_S = 12000 + 2000P$ Where P is measured in US dollars ($) and Q is the number of beef kilograms (kgs).

(i) Find the equilibrium price and quantity algebraically. [3]

(ii) If, two new butcheries that sell beef are open up in town, which of the following might be the new supply function? $Q_S = 6000 + 2000P$ and $Q_S = 18000 + 2000P$? Compute the new equilibrium price and quantity [4]

(iii)If people in that country decide they do not really like beef too much, which of the following might be the new demand function? $Q_D = 42000 - 1000P$ and $Q_D = 54000 - 1000P$. Find the new equilibrium levels of price and quantity[4]

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