



MACHAKOS UNIVERSITY

University Examinations for 2018/2019 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF BUSINESS ADMINISTRATION

SECOND YEAR FIRST SEMESTER EXAMINATION FOR

DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION

BBA 920: ECONOMICS ANALYSIS FOR BUSINESS DECISIONS

DATE: 16/5/2019

TIME: 9.00-12.00 PM

INSTRUCTIONS

Answer Question One (1) and Any Other Three

QUESTION ONE (24 MARKS)

- a) An Ice Cream manufacturing firm in Machakos town is in the process of expanding to meet market demand for Ice Cream. Its Branch Manager has insisted on optimal labour input usage. The following table illustrates a series of labour input used and the resulting output from the firm's operations.

Labour units (L)	Total Output (Q)
0	0
1	10000
2	28000
3	40000
4	50000
5	58000
6	68000
7	76000
8	79500
9	84500
10	81800

- i. Distinguish between short run and long run concepts. In your view, is the Ice Cream manufacturing firm in its short run or long run? Explain your answer. (3 marks)
- ii. Assuming the price per unit of Ice Cream is Kshs. 4 and the marginal cost of labour is Kshs. 20,000, determine the optimal amount of labour that should be employed by the firm. Convince the firm management why it should not employ less or more than the optimal level. (7 marks)
- iii. Distinguish between
 - I. a demand function and a demand curve (2 marks)
 - II. a shift in demand and movement along the demand curve (2 marks)
 - III. Production Elasticity and Demand Elasticity (2 marks)
 - IV. Marginal cost and Marginal factor cost (2 marks)
 - V. A Recession and Recovery (2 marks)
- b) State Okun's law and discuss the extent to which it can guide policy in developing countries. (4 marks)

QUESTION TWO (12 MARKS)

- a) Machakos Carpets, a carpet manufacturing and exporting firm, has to supply an order for 5000 pieces of woolen carpets of two varieties X and Y to Machakos University Hotel for its conference rooms. The joint cost function for the two varieties of the carpets is given as:

$$C = 100X^2 + 150Y^2$$

The quantity of X and Y are not specified and so the firm is forced to supply any combination. The firm wishes to minimize the cost of producing the carpets but meet the demand by Machakos University Hotel. Determine how many of each type of carpet the firm will produce to minimize costs. What will be the minimum cost of production? (6 marks)
- b) Globalization is a policy prescription aimed at remedying problems facing developing economies". Fully discuss this statement. (6 marks)

QUESTION THREE (12 MARKS)

An economy has a high rate of open unemployment and very low levels of investment. The planning commission of this economy has sought the services of a consultant who has superior knowledge on the application of the Hicksian IS-LM framework of a macro economy. Using the

model, the consultant has recommended expansionary monetary and fiscal policies for the economy. Would your recommendations be any different from those of the consultant? Why or why not? Explain your answer in detail using well-labelled diagrams

QUESTION FOUR (12 MARKS)

- a) The total cost of a firm that produces its product on two assembly lines is give as $TC = 3x^2 + 6y^2 - xy$. The firm seeks to determine the least cost combination of output on assembly lines x and y subject to the side condition that output equals to 20.
- i. Algebraically, state the problem facing the firm (2 marks)
 - ii. Solve for optimal values of x , y and the multiplier (λ) using crammer's rule (3 marks)
- b) i Describe the distinguishing characteristics of perfect competition and monopoly Market structures (3 marks)
- ii With clear diagrams, explain the short run and long run equilibrium for a firm in perfect competition (4 marks)

QUESTION FIVE (12 MARKS)

- a) Explain the meaning of macroeconomic models and discuss the major types of macroeconomic models (3 marks)
- b) Suppose aggregate demand and potential output are respectively given as:
Aggregate demand: $Y = 4000 + 2000/P$ where Y = Actual Output and P = Price level
Potential Output : $Y^* = 5000$.
- i. Assuming prices are sticky at $P=1$, what is the level of actual output? Is there pressure on prices to move upwards or downwards? (2 marks)
 - ii. What is the level of prices P if prices are flexible? (2 marks)
 - iii. Suppose prices are sticky at $P=3$, what is the level of actual output? Is it above or below potential output? What pressure is on the prices? (3 marks)
- c) Carefully distinguish between the consumer price index (CPI) and the GDP deflator. (2 marks)