MACHAKOS UNIVERSITY

University Examinations 2021/2022 Academic Year

SCHOOL OF BUSINESS, ECONOMICS AND HOSPITALITY AND TOURISM MANAGEMENT

DEPARTMENT OF BUSINESS ADMINISTRATION AND FINANCE

FIFTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING

EMM 506: MANUFACTURING MANAGEMENT

DATE: 23/8/2022   **TIME: 11.00-1.00 PM**

INSTRUCTIONS

Answer question **ONE** (*Compulsory*) and any **other two** questions

QUESTION ONE (COMPULSORY) (30 MARKS)

In Microeconomics, the theory of demand and supply indicates that in a free market economy where buyers and sellers freely interact to sell their bargain, price is a key factor. In case of buyers they tend to buy from the cheapest sources. Suppliers on the other hand will be willing to produce and sell ore at higher prices. On this basis, buyers push prices downwards while suppliers push the price upwards. These two forces are termed as the market forces. The theory argues that at some point the quantity buyers will purchase at a given price is equal to the quantity suppliers are willing to sell at the same price. This point defines the Equilibrium price in the market.

a) In the light of the above discuss **six** factors other than price which determine the demand of a product   (12 marks)

b) State and explain **four** factors of production   (10 marks)

c) Discuss four types of utility for a product or service   (8 marks)

QUESTION TWO (20 MARKS)

a) Giving a relevant example to illustrate your answer explain the theory of **diminishing marginal utility**   (8 marks)

b) Discuss any **five** factors which influence the supply of a product.   (12 marks)

QUESTION THREE (20 MARKS)

UWEZO LIMITED is a registered company which manufactures and sells an industrial detergent The selling price per unit is 200/- The variable cost of producing 10 units was Ksh, 2,000/- Other costs included factory rent of Ksh. 80,000/- per month and office staff salary of Ksh. 24,000/- per month.

Required

a)   Determine the Break-Even point in Shillings   (8 marks)

b)   How many units of output does the company require to produce and sell to make a profit of Kshs, 520,000/-   (8 marks)

c)   Briefly discuss two assumptions of the BEP model   (4 marks)

QUESTION FOUR (20 MARKS)

a)   Using relevant examples to demonstrate, discuss three methods of computing depreciation.
                                                                                                      (10 marks)

b)   Mutinda an investor has borrowed Ksh. 10 million from a bank and wants to invest the money in a worthy business. The bank will be charging him interst at a flat rate of Ksh. 30,000/- per month. He can buy a house which will earn him a net monthly rent of Ksh. 85,000/- per month for 48 years. Alternatively with the same amount of money he can buy two buses which each bus will generate Ksh. 78,000/- per month for three years. Using the payback method advice him on the best investment option.   (10 marks)

QUESTION FIVE (20 MARKS)

a)   Briefly discuss Mc Gregors theory X and Y.   (8 marks)

b)   Discuss **three** leadership styles that a leader may adopt in an organization.   (12 marks)