MACHAKOS UNIVERSITY

University Examinations for 2019/2020 Academic Year

SCHOOL OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

FOURTH YEAR FIRST SEMESTER EXAMINATION FOR

BACHELOR OF ECONOMICS AND STATISTICS

BACHELOR OF ECONOMICS AND FINANCE

BACHELOR OF ECONOMICS

EAE 408: ECONOMICS OF INDUSTRY

DATE: 5/12/2019 **TIME:2.00-4.00 PM**

INSTRUCTIONS:

(i) Answer question one (Compulsory) and any other two questions

(ii) Do not write on the question paper

(iii) Show your working clearly

QUESTION ONE (COMPULSORY) (30 MARKS)

a) Clearly explain the differences between Industrial Economics and Microeconomics (4 marks)

b) Explain two sources of economic problem in firms and industries (4 marks)

c) Thika motors sell its auto mobiles in both Canada and London. Due to trade restrictions, a vehicle sold in one country cannot be resold in the other. The demand functions of the two countries are

Canada = 30,000 – 0.40Q

London = 20,000 – 0.20Q

The firms total cost function is TC = 10,000,000 + 12,000Q. What price should Thika motors charge in each country in order to maximize profit? What will be the total profit? (6 marks)

d) Suppose there is a perfectly competitive industry where all the firms are identical with identical cost curves. Furthermore, suppose that a representative firm's total cost is given by the equation TC = 100 + q2 + q where q is the quantity of output produced by the firm. You

also know that the market demand for this product is given by the equation P = 1000 – 2Q where Q is the market quantity. In addition you are told that the market supply curve is given by the equation P = 100 + Q

i. Determine the equilibrium quantity and price in this market (4 marks)

ii. The firm's MC equation based upon its TC equation is MC = 2q + 1. Given this information and your answer in part (i), what is the firm's profit maximizing level of production, total revenue, total cost and profit at this market equilibrium? Is this a short-run or long-run equilibrium? Explain your answer (6 marks)

e) With aid of a well labeled diagram explain input-oriented measure of efficiency level (6 marks)

QUESTION TWO (20 MARKS)

a) Explain how market structure affects the conduct of firms in an industry, and in turn how the conduct affects performance (8 marks)

b) The demand function of a monopolist is given by P = 50-2Q and the marginal cost is sh.10;

Required

i. Compute the deadweight loss related with monopoly pricing (3 marks)

ii. If P = 50-4Q, what is the dead weight loss (3 marks)

c) Explain three main types of a merger (6 marks)

QUESTION THREE (20 MARKS)

a) Using a well labeled diagram explain the kinked demand curve equilibrium for an oligopoly (6 marks)

b) Demonstrate that the optimal division of a pie (π) of a random size (the profit) between a risk neutral party (the shareholders) and a risk averse one (the manager), has the risk neutral party bear all the risk if the incentive issues are not taken into consideration. (8 marks)

c) With aid of a diagram explain the Neoclassical theory of the firm (6 marks)

QUESTION FOUR (20 MARKS)

a) The actual sales for 8 firma is as given in the table below:

Firm	Actual sales made in millions	Market share for firms
1	2	-
2	4	-
3	8	-
4	1	-
5	5	-
6	6	-
7	10	-
8	12	-

(i) Calculate the firm's respective market share (4 marks)

(ii) Calculate the cumulative market share starting from largest to smallest and show the information on the concentration curve (6 marks)

b) Using a well labeled diagram explain the output-oriented measure of efficiency (5 marks)

c) Explain why firms engage in vertical integration (5 marks)

QUESTION FIVE (20 MARKS)

a) With aid of well labeled diagram, show and explain economic profit in the short-run for a monopolistic competition market. Also using a diagram show and explain the long-run equilibrium for a monopolistic competition market. (10 marks)

b) Explain two basic methods by which a society can make its economic decisions (4 marks)

c) Explain the planning process at the firm level based on its main elements (6 marks)