# Assignment in micro economics 

Literature, Russian Literature

## ASSIGN BUSTER

Micro economics Microeconomics Introduction The concept of microeconomics relates to the demand and supply and the market forces that are determined through interaction at the micro-level. Unlike macroeconomics, microeconomics focuses on the decisions made by individuals and firms in deciding on the expenditure and supply capacity. Microeconomics is therefore the study of how firms, individual, and households allocate the resources at their disposal to satisfy their limitless and recurrent need. Since resources are limited, it is important for the consumers to rank their demands and wants in the order of preferences. Macroeconomics concept is also important in the market structure as it determines the price at which each market structure trades. In the labor market, macroeconomics is essential in the determination of the trade-off between labor and wage rates. In summary, microeconomics is all about studying the behaviour of firms and individual with respect to demand, supply, and market forces. Question One Answers The firm produces at average and marginal cost of $A C=M C=10$ and a market demand of $Q=60-P$ (a)Profit maximizing price and quantity as well as profits may be determined as follows; $\mathrm{MR}=\mathrm{MC}=10 \mathrm{P}=60-\mathrm{Q}$ Profits maximizing price $=? \mathrm{Q}=60-\mathrm{P} \mathrm{MR}=$ $60-2 \mathrm{Q}=10 \mathrm{P}=60-25 \mathrm{P}=\$ 35$ Profit maximizing quantity $=\mathrm{Q} 60-2 \mathrm{Q}=102 \mathrm{Q}=$ $5060-10=2 \mathrm{Q} Q=50 / 2 \mathrm{Q}=25$ units Firm profits= ? ? = TR-TC TC=P? MC TR= P ? Q TC= 25? $10 \mathrm{TC}=\$ 250 \mathrm{TR}=25 ? 35 \mathrm{TR}=\$ 875 ?=\mathrm{TR}-\mathrm{TC} ?=\$ 875-\$ 250$ ? $=\$ 625$ (b) Given that by $\mathrm{Q}=45-5 \mathrm{P}$, and that market demand curve become steeper, price, quantity and price may be as follows. Profits maximizing price $=P Q=45-5 P$ Profit maximizing quantity $=Q 5 P=45-Q M R=45-2 Q=10$ $\mathrm{P}=(45-17.5) ? 545-2 \mathrm{Q}=10 \mathrm{P}=5.545-10=2 \mathrm{Q} \mathrm{Q}=17.5$ Firm profits=?
$\mathrm{TC}=5.5 ? 10 \mathrm{TR}=\mathrm{P}$ ? $\mathrm{Q} \mathrm{TC}=\$ 50 \mathrm{TR}=5.5 ? 17.5 ?=\mathrm{TR}-\mathrm{TC} \mathrm{TR}=\$ 96.25 ?=\mathrm{TR}-$ TC $?=96.25-50 ?=\$ 46.25$ (c)If market demand curve become flatter and is given by $\mathrm{Q}=100-2 \mathrm{P}$. The firm maximizing price and quantity may be as follows Price $=P$ Quantity $=Q M R=M C=10 M R=50-Q=102 P=100-Q P=50-$ $\mathrm{Q} / 250-\mathrm{Q}=10 \mathrm{Q}=40$ Unit $\mathrm{P}=50-\mathrm{Q} / 2 \mathrm{P}=50-20=3 \mathrm{P}=50-40 / 2 \mathrm{P}=\$ 30 \mathrm{MR}=$ $50-2 \mathrm{Q} / 2=10 \mathrm{MR}=50-\mathrm{Q}=10$ Firms profits $=? ?=\mathrm{TR}-\mathrm{TC}$ TR= $=30 ? 40=\$ 1200$ $\mathrm{TR}=\mathrm{P} ? \mathrm{Q} ?=\$ 1200-\$ 300 \mathrm{TC}=30 ? 10 ?=\$ 900 \mathrm{TC} \mathrm{TC}=\mathrm{P} ? \mathrm{MC}=\$ 300$ Revenues and Cost MC3 MC1 P3 MC2 P1 P2 AR=D O Q3 Q1 Q2 Out put Source: Author MR Graph of relationship between the three situations above, Where $M R=$ Marginal Revenue, $A R=$ Average Revenue and $M C=$ Marginal Cost. The output is represented by Q while price by P . A monopoly may want to reduce out put from $\mathrm{Q} 1=17$. 5units to $\mathrm{Q} 3=25$ units so that he can sell at a higher price $P 3=\$ 35$ (Asian Development Bank, 2002). However, economies of scale substitution may arise leading to a shift in marginal cost from MC1 to MC2 (Pirayoff, 2004). This shift may cause an increase in monopolist out put from $\mathrm{Q} 1=17.5$ Units to $\mathrm{Q} 2=40$ units. Leading to a decrease in price from a competitive price to a lower price $\mathrm{P} 2=\$ 30$ despite the availability of a monopoly price $=\$ 35$ (Brakman and Heijdra, 2004). Reason why there is no supply curve for monopoly is because monopoly market structure, falls under control of a single supplier, Therefore, no need for supply curve (Dwivedi, 2006). Questions 2 Answers 2. Given the fact that you have two goods ice cream and Kraft Macaroni and Cheese (an inferior to most people). (a) A graph showing what would happen if the price of ice cream decreases while in come increases. Kraft Macaroni and Cheese(X) B1 B0 A1 A2 I2 A3 I1 0 B0 B1 X1 X2 X3 Ice cream $(Y)$ Source: Author The graph
above shows that a shift in income from $\mathrm{B} 0, \mathrm{~B} 0$ to $\mathrm{B} 1, \mathrm{~B} 1$ leading to a negative substitution effect as shown above (Mukherjee, Mukherjee and Ghose, 2003). (b)A gardener states that for only $\$ 1$ in seeds, she has been able to grow over $\$ 20$ produce-enormous profits. Do you agree or disagree with her/ explain. Yes I agree with her because if she was operating in a monopolistic competition, it is possible to earn enormous profits in the short run as shown in the diagram below (Garner and Short, K2009). Revenue and Cost $\mathrm{P}=\$ 20$ C A D Enormous Profits MR AR Out put 0 Q Source: Author Question 3 Answers 3. John (who decided to take bear after losing for US presidency his Utility is defined as follows; $U(S A, C C)=10 L N(S A)+2 L N$ (CC) Whereby, SA= Pints of Adam Samuel bear and CC= bowls of Legal Seafood's famous clam cbowder The fraction that will maximize Sam Adam bear that will maximize Kerry's utility may be determined as shown below. U $(S A, C C)=10 \mathrm{LN}(S A)+2 \mathrm{LN}(C C)=\$ 100$ Therefore, $10 \mathrm{LN}(5)+2 \mathrm{LN}(\mathrm{CC})=$ 100 Where LN are constant $10(5)+2 C C=100,2 C C=100-50, C C=50 ? 2$, $C C=\$ 25$ Based on computations, it can be scrutinized that, a fraction of 50 Sam Adam bear: 50bowls of clam chowder will maximize Kerry's Utility which occurs as a result of consumption between Pints of Adam Samuel bear and bowls of Legal Seafood's famous clam cbowder (Frank, and Bernanke, 2003). $C C=$ bowls of Legal Seafood's famous clam cbowder(Y) Income Consumption Curve y3 I2 y2 I2 y1 I1 X1 x2 x3 SA= Pints of Adam Samuel Reference List Colander, David C. Microeconomics. 5th ed. Boston: McGraw-Hill/Irwin, 2004. Mankiw, N. Gregory. Principles of Microeconomics. 3d ed. Mason, Ohio: Thomson/South-Western, 2004.

