OPEN UNIVERSITY OF TANZANIA
FACULTY OF BUSINESS MANGEMENT

MBA DISTANCE PROGRAM

OBS 602: MANAGERIAL ECONOMICS

ASSIGNMENT ONE

Instructions:

- **Answer all questions**
- **All questions carry equal marks .**
- **Your answers must be comprehensive and show all your workings.**
- **To be submitted before 29th March 2008**

Question one.

Distinguish the following concepts as used in Managerial economics:

(i) Value/Wealth maximization and principal agent problem

(ii) Economies of scale and economies of scope

(iii) Producer equilibrium in the short and long run

(iv) Consumer interviews and regression analysis

(v) Incremental and sunk cost

Question 2.

(i) What are the possible constraints that can limit the extent to which the firm's value can be increased?

(ii) Mujuni's Inc marketing department, using regression analysis, estimates the firm's demand function, the result being as follows:

$Q = -104 - 2.1P + 3.21I + 1.5A + 1.6Z$

$R^2 = .89$ SEE =108

Where, Q is the quantity demanded of the firm's product(in tons), P is the price of the firm's product(in shs per ton), I is per capita income(in shs), A is the firm's advertising expenditure (in thousand of shillings), and Z is the price in (shs) for a competing product. The regression is based on 200 observations.

(a) If I =5000, A=20, and Z= 1000. What is Mujun's corporation demand curve?
(b) If P=500 (and the condition in part (a) holds, estimate the quantity demanded of the Mujuni product.
(c) Determine and interpret cross price elasticity of demand at Z=1000.
(d) Interpret the coefficient of determination.

Question 3

(i) Mujuni Corporation, a producer of pocket calculators that has fixed amount of plant and equipment, but that can vary the number of workers it hires per day. The relationship between the numbers of calculators produced per day (Q) and the number of workers hired per day (L) is: $Q=98L- 3L^2$.

Mujuni Corporation can sell all the calculators it can produce (with its current plant and equipment) for $20 per calculator, so its marginal revenue equals $20. It can also hire as many workers as it likes for $40 per day. How many workers should it hire per day if the firm is to maximize profits?

(ii) Explain the economic rationale of the three stages of production.