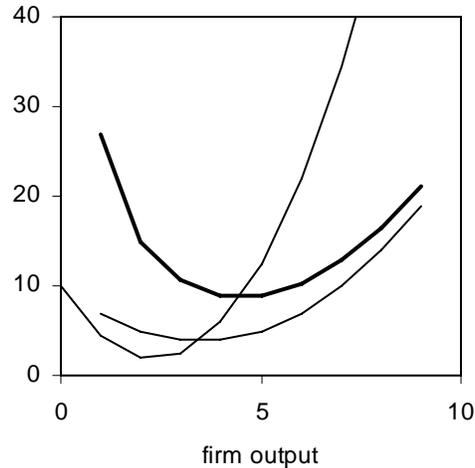




Part II: Please answer three (only 3) of the following four questions

- 1 The graph shows the marginal cost, the average total cost, and the average variable cost functions for a firm that sells its product in a competitive market.



- Label the average total cost, the average variable cost and the marginal cost curves on the graph.
- Label the Break Even Point and the Shut Down Point on the graph.
- If there is free entry and exit of firms in this industry (all with the same cost functions), what price will prevail in the long run? How much will each firm produce? Explain
- If the market demand curve for this competitive industry is  $Q = 600 - 10p$ , how many firms will survive in the industry in the long run?

2. Suppose that  $C = 50 + \frac{3}{4}Y_d$ ,

$$Y_d = \frac{2}{3}Y \text{ and}$$

$$Y = C + I + G + X - M.$$

- a. The exogenous variables of this multiplier model are:
- b. The endogenous variables are:
- c. The reduced form equation for Y as a function of the exogenous variables is

d.  $\partial Y / \partial G =$

e.  $\partial Y / \partial I =$

3. Suppose that  $C = 50 + \frac{3}{4}Y_d$ ,

$$I = 100 - 500i \quad (\text{thus if } i = 10\% \text{ investment will be } 50),$$

$$Y_d = \frac{2}{3}Y \text{ and}$$

$$Y = C + I + G + X - M.$$

- c. The exogenous variables of this IS model are:
- d. The endogenous variables are:
- c. The reduced form equation for Y as a function of the exogenous variables is

d.  $\partial Y / \partial G =$

e.  $\partial Y / \partial i =$



*Honors Option:* (Do not attempt to answer this question until you have checked over your answers to the standard questions - credit will not be given for a partial answer to the Honors Option.)

A profit maximizing firm operating in competitive markets has production function  $Q = L^{2/3} K^{1/3}$ .

Determine the long run total cost function for this firm if it hires workers for \$1.00 per day and rents machines for \$4.00 per day.