EXAM TWO REVIEW:

A. Explicit Cost vs. Implicit Cost and Accounting Costs vs. Economic Costs:

Economic Cost: the monetary value of all inputs used in a particular activity or enterprise over a given period.

→ Economic costs reflect the opportunity cost of resources.

Explicit Costs: paid directly in money - money costs. A firm incurs explicit costs when it pays for a factor of production at the same time it uses it.

- Explicit Cost = payments by a firm to purchase the service of productive resources (wages, interest, rent, capital)

Implicit Costs: measured in units of money, but are not paid for directly in money. The costs of nonpurchased inputs, to which a cash value must be imputed because the inputs are not purchased in a market transaction. A firm incurs implicit costs when it uses capital, inventories or owner’s resources.

- Implicit Costs = opportunity costs associated with a firm’s use of resources that it owns (wages foregone by owner, interest rates loss through purchases)

Accounting Costs: Measures the explicit costs of operating a business - RESULTS FROM PURCHASES OF INPUT SERVICES.

Economic Profit: the difference between the total revenue and the cost of all inputs used by a firm over a given period. It is the TR - OC. OC are the explicit and implicit costs of the best alternative actions forgone. (TR-TC)

→ From now on, if I refer to “profit” that is referring to economic profit.

B. Production and Costs:

COST CURVES:

- Fixed Costs (TFC) = costs that do not vary with output (present even when output, q, = 0)
- Variable Costs (TVC) = costs that vary with the rate of output
- Total costs (TC) = TFC + TVC
- Average Variable Cost (AVC) = total variable cost/ number of units produced
- Average Fixed Cost (AFC) = fixed costs/ output (units produced)
- Average Total Cost (ATC) = total cost (variable and fixed) / number of units produced
- Marginal Cost (MC) = the change in total cost required to produce an additional unit of output.
- Explicit Cost = payments by a firm to purchase the service of productive resources (wages, interest, rent, capital)
- Implicit Costs = opportunity costs associated with a firm’s use of resources that it owns (wages foregone by owner, interest rates loss through purchases)

C. Pure Competition:

a. Homogenous product (all making the EXACT same thing)
b. Large numbers Firms
c. Firms are small in size (they cannot affect price)
d. NO barriers to entry

These characteristics are important they allow you to differentiate between types of industry.

The profit maximizing purely competitive firm chooses q where MC=MR=P (demand). To determine if there is a profit or a loss, you can find the per unit profit, which is found from the quantity line and the
If ATC>P the firm is making an economic loss (IT WILL ONLY PRODUCE IF P>AVC). If ATC<P the firm is making an economic loss.

The pure competitor MAXIMIZES TOTAL NET BENEFIT.... why because MC=MB (demand).

**Profit Maximizing (output decision)**

If firms are pure competitors there will be no economic profit (in the long run): they will produce at q₀ and be price takers. Since P=MR =MC economic profit = 0.

The profit maximizing rule is to choose q₀ where MR = MC, in pure competition P = MR. To NOT confuse yourself.... all types of firms produce where MC = MR, in pure competition P = MR (however, with MONOPOLIES, monopolists STILL choose q₀ where MC = MR but no longer is P = MR).

Be able to determine what happens in the long run.
- If there are economic profits firms will enter and the industry S will increase (shift right).
- If there are economic losses, firms will exit and the industry S will decrease (shift left).
- These both happen until we are at zero (“normal”) profit.

**D. Long-Run Equilibrium in Perfectly Competitive Markets:**

How do we find the LONG RUN (LR) average supply curve? Assume INCREASING COSTS: Draw in shifts in Demand: To understand that this is a process label each move sequentially ie. the first move you make call 1,... (D to D')

Be able to do the same thing with the constant cost industry.
E. **Monopoly:**
Characteristics:
- a. Heterogeneous product (all things are different)
- b. Small number of Firms
- c. Firms are large in size (they are price-makers)
- d. Large barriers to entry.

Notice these characteristics are exactly opposite to pure competition.

The profit maximizing MONOPOLIST chooses q where MC=MR, and then charges what the demand line dictates. (so P>MR). To determine economic profits, use your quantity line and follow to the ATC.

The MONOPOLIST does not maximize TOTAL NET BENEFIT because they are choosing q where MC=MR and MR is not demand and therefore is not equal to MB. Consumers with MB > MC are not able to buy since the monopolist restricts the quantity sold to charge a higher price.

MONOPOLY:

\[
\begin{align*}
\text{Price} & \quad \text{D} & \quad \text{MC} & \quad \text{ATC} \\
P^M & \quad & & \\
\text{q}^M & \quad \text{MR} & \quad \text{Quantity} \\
\end{align*}
\]

The Profit Maximizing rule again is to produce where MR = MC (and MR is no longer equal to P)

F. Comparing Pure Competition to Monopolies: \(\rightarrow\) or the results of breaking up a PURE monopolist into perfectly competitive firms!

\[
\begin{align*}
\text{Price} & \quad \text{D} & \quad \text{MC} = \text{LATC} = S^{LR} \\
\text{Q}^M & \quad \text{MR} & \quad \text{Q}^{PC} & \quad \text{Quantity} \\
\text{Profit monopolist} & \quad \text{DWL (for Monopolist)} \\
\text{P}^{PC} & \quad & & \\
\end{align*}
\]

Equilibrium for monopolist has resource misallocation (DWL)

With Pure Monopolies:
- Prices are higher than under Pure Competition
- Quantities are lower than under Pure Competition
- There are economic profits to be made (shaded area above) ...results from barriers to entry
There is a dead weight loss associated with monopolies (there is a profit made at the expense of the consumers)

G. Labor Market

Know why Labor Demand slopes downward and why Labor Supply slopes upward.

Again - the law of supply and demand hold in this market as well. The COMPETITIVE INPUT MARKET is one in which neither the buyers nor the sellers can influence the prices of input services. Both buyers (companies…) and sellers (us, the workers) cannot influence the prices (or wages)

Input markets are competitive and have the following properties.
1) Price takers
2) Free Entry and exit of sellers in the market
3) Owners of economic resources can transfer their resources from one use or location to another in response to differences in prices.

This implies that men and women with the same skill and education would have the same wages.

For example:
In increase in demand in the manufacturing market will raise the wages in these occupations. Workers from other sectors (the agriculture sector) will seek employment in the manufacturing industry. Both workers gains since the increase in demand in the manufacturing market will increase wages as well as the decrease in supply in the agriculture industry.

Understand the implication of perfectly competitive labor markets and the compensating wage differential.

H. Economic Efficiency and the Role of the Government
Pareto improvements – an action that makes at least one person better off, and harms no one.

1. EXTERNALITY:
Know what is a MEC and what is a MEB. Why are these inefficient and how can government intervene to reach the efficient solution? (i.e. tax or subsidy?)

\[ MSC = S + MEC \]

\[ MSB = D + MEB \]

2. PUBLIC GOOD:
Non-Rival and Non-Exclusion

Free-Rider: when you don’t offer to pay for the good but you get away with benefits.
Know the differences between public good, toll good, common property resources, and private good.

3. Four Types of Goods:

1) Private
   \( \Rightarrow \) Private Goods are basically the good we’ve been talking about all along.

These are **Rival** (if one person uses it takes away from anyone else being able to use) and **Exclusive** (this means there are property right - one person alone can use).

2) Common Pool Resource
   \( \Rightarrow \) Common Pool Resources: Natural resources whose use is not priced because no ownership has been established.

These are **Rival** (if one person uses it takes away from anyone else being able to use) and **NonExclusive** (this means that no one can be prevented from using the good).

3) Public
   \( \Rightarrow \) Public Goods: a good that provides benefits to all members of a community as soon as it is made available to any one person.

These are **NonRival** (if one person uses, it doesn’t take away from any one else being able to use) and **NonExclusive** (this means that no one can be prevented from using the good).

4) Toll Goods
   \( \Rightarrow \) Toll Goods: are public goods that you have to pay to use.

These are **NonRival** (if one person uses, it doesn’t take away from any one else being able to use) and **Excludable** (this means there are property right - one person alone can use).