Market Failure: absence of EE is known as market failure

1. ***Monopoly:*** neither it is Allocatively nor productively efficient
2. ***Externalities:*** how are externalities a market failure? Which component of EE is missing?

When optimal quantities of the good are not produced. It is known as Allocative inefficiency.

Negative externalities both consumption and production related are always over-consumed and produced in a free market without govt intervention.

Positive externalities are always under-consumed / under-produced when left to market forces.

Cost - Benefit Analysis (CBA)

CBA is a tool used by governments across the world to make smarter economic decisions. In CBA will find the social costs and social benefits related to a project and then decide on the basis of this information if the project should be executed or not.

SOCIAL BENEFIT = ***PRIVATE BENEFIT*** + EXTERNAL BENEFIT
SOCIAL COST = ***PRIVATE COST*** + EXTERNAL COST

How is this different from how private sector makes decisions?

Private sector only considers private costs and private benefits while making their decisions and they ignore any positive or negative externality associated with their actions.

SOCIAL BENEFIT > SOCIAL COST ---------------- Economically Feasible

How the government transfer the external cost to private producers?

By imposing taxes the government makes the people responsible for a negative externality to pay for it. And this is how the market failure of negative externality is solved.

For positive externalities the government compensates the people who are responsible for producing a positive effect in the society by giving them incentives like subsidies which reduces the price of the product and therefore encourages individuals to use more of that product.

5 units in A2 Economics

Unit 2: PRICE SYSTEM

- Utility - how consumers maximize their utility
- Cost Minimization - how producers minimize their cost of production
- Types of Cost - classification of costs
- Market Structures - ***Perfect Competition, Monopoly***, Oligopoly, Monopolistic Competition

Utility: how do consumers maximize their utility?
How do consumers allocate their income / spending.?

Utility refers to the satisfaction / pleasure that people extract from consuming a product.

Can you measure that satisfaction? There is no globally accepted measure for utility unlike quantities like height, weight, strength etc etc. Utility cannot be objectively measured but it can be subjectively measured.

However, an individual can compare/ rank between different products based on the satisfaction that he / she extract from each product.

1. Clothes
2. Phone Credit
3. Hair products
4. New Laptop

I will prioritize. How will I decide which products to prioritize?

Based on the utility / satisfaction that each product provides a consumer will decide which products to buy.

Utility Maximization Model / Consumer Equilibrium Model

Objective of a consumer is always to maximize his utility from the <u>available amount of income</u>

Purpose of the model is to predict how consumers allocate their income between different goods.

Assumptions:

1. Income is fixed
2. A consumer has only 2 products to choose between - unrealistic
3. The prices of each of these products is fixed
4. A consumer spends all of his income and does not save anything for later - unrealistic

<u>Budget Line:</u> is a graph that show how much of the 2 products can a consumer afford

Indifference curve: is the graph that shows ***consumer's preferences*** between the 2 products.

It is a ***downward sloping curve bending towards the origin and it shows all possible bundles that yield the same level of satisfaction for the consumer.***

One a given indifference curve the total utility of a consumer is constant.

Hence any point on the same indifference curve will be equally preferred by the consumer.

The indifference that is further away from the origin is most preferred because it allows a consumer to consume larger quantities of both the goods.

Shifts in Budget Line

1. Change in consumer's income - a) in case of increase in consumer's income there will be a parallel shift outward in the budget line
   b) decrease in income will cause a parallel shift inwards in the budget line

2. Change in product prices: budget line pivots outwards from the axis on which the product prices decrease.

   When 2 lines are tangent to each other their gradients are equal.

   Gradient of Budget Line = ***- Px / Py***

   Gradient of Indifference Curve = ***- MUx / MUy***

   Marginal Utility: is the additional utility / satisfaction extracted by consuming one more unit of good.

   MUx = Change in Utility / Change in consumption of X

   MUy = Change in Utility / Change in consumption of Y

   MUX / Px = MUy / Py ---------------------------------- Equi Marginal Principle

At the point where the budget line is tangent to indifference curve the equi-marginal principle holds true.

Nature of Marginal Utility: is dimishing

Unit of Good		Marginal Utility
1	-	10 utile
2	-	8 utile
3	-	6 utile
4	-	4 utile
5	-	2 utile

This is known as the ***law of diminishing marginal utility***. This law states that consumer will derives highest level of satisfaction from the 1st unit of the good which starts decreases as a consumer consumes more units of the good.

Explanation of Equi- Marginal Principle:

$$MUx / Px = MUy / Py$$

Product		***Utility***	***Prices***	
Tea	-	50 Utile	\$ 2	50 utile / \$2 = 25 Utile per \$
Coffee	-	100 Utile	\$ 4.5	100 utile / \$4.5 = 22.2 Utile per \$

If a consumer chooses to buy coffee over tea given the fact that coffee is giving him more utility, then according to Consumer Equilibrium Model this consumer is making an irrational decision. Why?

Based on the calculator of Equi-Marginal Principle we know that Tea should be preferred by the consumer because it provides more satisfaction against each \$ spent on the product compared to Coffee.