Over-provision of Demerit goods (negative externalities of production and consumption):

1. **Corrective Taxes**: A tax on the production of a demerit good increases the costs faced by producers, reducing the supply, raising the price and reducing the equilibrium quantity produced and consumed in the market. Example: Petrol taxes

   Research and explain three additional examples:

   i. Example 1:

   ii. Example 2:

   iii. Example 3:

2. **Negative Advertising**: Raising awareness among consumers of the negative effects of a good’s production or consumption will reduce the marginal private benefit to consumers of the the good and thus its demand. Less demand means a lower equilibrium quantity in produced and consumed in the market. Example: Billboards showing the effects of cigarettes on health.

   Research and explain three additional examples:

   i. Example 1:

   ii. Example 2:

   iii. Example 3:
3. **Legislation:** Passing laws limiting the quantity of a harmful good produced or banning its production, combined with harsh penalties for violators of the legal limits should reduce the equilibrium quantity in the market. However, if a good can be produced and sold on the black market, legislation may not halt its consumption, only criminalize it. Examples: Criminalization of Marijuana.

**Research and explain three additional examples:**

i. **Example 1:**

ii. **Example 2:**

iii. **Example 3:**

4. **Regulation:** Government regulations requiring firms to adhere to certain standards in the production of harmful goods will add to the private costs of production and reduce the supply of harmful goods, forcing the price up and reducing the equilibrium quantity demanded. Example: The CAFE (Corporate Average Fuel Economy) standards established by the US government requiring US auto manufacturers to achieve a certain average fuel efficiency among the cars in their fleets.

**Research and explain three additional examples:**

i. **Example 1:**

ii. **Example 2:**
iii. Example 3:

5. Tradable permits: Permits issued to or sold to firms by the government allowing them to pollute a certain amount. Firms may buy or sell permits as needed. Firms that pollute less may sell their permits to firms that pollute more. “Greener” firms therefore have a lower marginal private costs, while “dirty” firms have higher costs. The supply of “green” goods increases and the supply of “dirty” goods decreases. Example: The European Union Emission Trading Scheme (or EU ETS) is the largest multi-national, greenhouse gas emissions trading scheme in the world.

Research and explain three additional examples:

i. Example 1:

ii. Example 2:

iii. Example 3:

Under-provision of Merit Goods and Public Goods (positive externalities of consumption):

1. Subsidies: A subsidy to the producer of a merit good reduces the private costs of production, increasing the good’s supply, lowering its price and increasing the equilibrium quantity produced and consumed in the market. Example: Solar panel subsidies in Germany.

Research and explain three additional examples:

i. Example 1:
ii. **Example 2:**

iii. **Example 3:**

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2. **Positive advertising:** Raising awareness among consumers of the benefits of using a merit good will increase the marginal private benefits among consumers and thus demand, leading to a greater equilibrium quantity being consumed in the market. Example: “Safe sex” campaigns and condom use.

   Research and explain three additional examples:

   i. **Example 1:**

   ii. **Example 2:**

   iii. **Example 3:**

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3. **Legislation:** Government may legally mandate the production or consumption of certain goods in order to increase the quantity produced and consumed in the market. Example: In Switzerland, it is illegal NOT to have health insurance.

   Research and explain three additional examples:

   i. **Example 1:**

   ii. **Example 2:**
iii. Example 3:

4. **State provision**: In the case of purely public goods, those that are non-rivalrous in consumption and non-excludable by the producer, the government may have to provide the good. Example: National defense.

Research and explain three additional examples:

i. Example 1:

ii. Example 2:

iii. Example 3: