**KEY CONCEPTS AND SKILLS: Unit 1.3 – Government Intervention**

**Definitions:**

* **Indirect Tax**: a tax imposed by a government on expenditures or levied on goods and services
  + **Excise Tax**: indirect tax imposed on a specific good or service (e.g., cigarettes, petrol)
    - **Specific Tax**: an excise tax of a fixed amount per unit (e.g., $3 per liter of petrol)
    - **Ad Valorem Tax**: an excise tax equal to a specified percentage of the price of a good or service
  + *The other type of indirect tax is a tax on all (or most) goods and services, such as sales tax (in the US) or value-added tax (EU, Canada).*
* **Direct Tax:** a tax paid by a taxpayer directly to the government (e.g., income tax)
* **Tax Incidence**: refers to the burden of a tax, or who ultimately pays it
* **Welfare Loss** (or **Deadweight Loss**): welfare benefits lost to society because resources are not allocated efficiently
* **Subsidy:** A payment made by a government to producers in order to reduce costs of production or to increase output
* **Price Controls**: Setting of minimum or maximum prices by the government (or a private organization) so that prices are unable to adjust to the levels determined by supply and demand equilibrium.
  + **Price Ceiling**: A maximum price set by the government for a particular good – selling above that price would be illegal.
  + **Price Floor**: A minimum price set by the government for a particular good – selling below that price would be illegal.
  + **Minimum Wage**: A price floor determining the minimum price of labor (the wage rate), intended to guarantee an adequate income to low-income workers.
* **Underground** (or **parallel**) **market**: A market in which buying and selling is unrecorded. This could occur in response to a shortage of a good due to price ceilings. (It could also occur in the case of illegal goods or legal goods when a supplier does not want to record income for tax purposes.)
* **Disequilibrium:** a situation in which a market cannot reach equilibrium – if there is disequilibrium, there will be a shortage (excess demand) or a surplus (excess supply).

**Concepts and Applications:**

***A. Indirect Taxes (Ch. 13)***

1. Outline the reasons that governments impose *excise taxes*.
2. Explain how *specific* and *ad valorem* taxes affect supply and/or demand in the market for the good taxed.
3. Draw diagrams illustrating the effect of *specific* and *ad valorem* taxes on market supply.
4. With reference to a diagram, analyze the impacts of an indirect tax (specific or ad valorem) on market outcomes.
5. With reference to a diagram, discuss the consequences of imposing an *indirect tax* on the stakeholders in a market
6. Explain whether *excise taxes* tend to increase or decrease allocative efficiency in an economy.
7. (HL) Given linear demand and supply equations and a level of tax per unit:
   * Plot the original and new supply and demand curves/equilibriums
   * Illustrate and/or calculate changes in price, quantity, consumer expenditure, producer revenue and government revenue
   * Illustrate and/or calculate changes in consumer surplus, producer surplus and deadweight loss.
8. (HL) Explain, using diagrams, how the *incidence* of *indirect taxes* on consumers and firms differs depending on the price elasticities of demand and supply (PED and PES).

***B. Subsidies (Ch. 14)***

1. Outline the reasons the governments grant *subsidies*, and describe examples of *subsidies*.
2. With reference to a diagram, analyze the impacts of a subsidy on market outcomes.
3. With reference to a diagram, discuss the consequences of a subsidy on the stakeholders in a market
4. (HL) Given linear demand and supply equations and a level of subsidy per unit:
   * Plot the original and new supply and demand equilibriums
   * Illustrate and/or calculate changes in price (paid by consumers vs. received by producers), quantity, consumer expenditure, producer revenue and government expenditure
   * Illustrate and/or calculate changes in consumer surplus, producer surplus and deadweight loss.

***C. Price Controls – Price Ceilings (Ch. 15, pgs. 125-130)***

1. Explain why governments impose *price ceilings,* and describe examples including food price controls and rent controls.
2. Draw a diagram of a price ceiling, and analyze the impacts on market outcomes.
3. Analyze the possible consequences of a price ceiling, including shortages, inefficient resource allocation, welfare impacts, underground parallel markets, and non-price rationing mechanisms.
4. Discuss the consequences of price ceilings on the stakeholders in a market.
5. (HL) Given linear demand and supply equations and a price ceiling:
   * Calculate the resulting shortage.
   * Calculate the reduction in consumer expenditure (which equals the reduction in producer revenue).

***D. Price Controls – Price Floors (Ch. 15, pgs. 130-135)***

1. Explain why governments impose *price floors,* and describe examples including agricultural price controls and minimum wages.
2. Minimum Wages:
   * Draw a diagram of a *minimum wage*, and analyze the impacts on market outcomes.
   * Analyze the possible consequences of a *minimum wage*, including unemployment, inefficient resource allocation and welfare impacts.
   * Discuss the consequences of *minimum wages* on the stakeholders in the labor market.
3. Agricultural price support:
   * Draw a diagram of an *agricultural price support program*, and analyze the impacts on market outcomes.
   * Analyze the possible consequences of an *agricultural support program*, including government expenditure, inefficient resource allocation and welfare impacts.
   * Discuss the consequences of an *agricultural price support program* on the stakeholders in the market.
4. (HL) Given linear demand and supply equations and a price floor:
   * Calculate the resulting surplus.
   * Calculate government spending and changes in consumer expenditure and producer revenue.