1.4.1 Government intervention in markets

a) Purpose of intervention with reference to market failure and using diagrams in various contexts:
   - *indirect taxation (ad valorem and specific)*
   - *subsidies*
   - *maximum and minimum prices*

b) Other methods of government intervention:
   - *trade pollution permits*
   - *state provision of public goods*
   - *provision of information*
   - *regulation*

- Government policy to tackle positive externalities:
  - Provision of information
  - Regulation
  - Subsidies
  - Direct provision
- Government policy to tackle negative externalities:
  - Regulation
  - Taxes
  - Provision of information
  - Permits
  - Personal carbon allowances
- The aim of indirect taxes is to internalise the negative externality by taxing the product so that output and consumption will be at a level which SMB=SMC. It causes a leftward shift in the supply curve so consumption and output fall to the socially optimum level.
- Tax is represented on a supply curve by the distance between the two curves. Ad valorem causes a non-parallel shift with the biggest shift at higher prices
- Advantages of indirect taxes:
  1. incentive to reduce pollution
  2. low costs
  3. source of revenue for government
- Disadvantages of indirect taxes:
  1. ineffective if demand is inelastic
  2. difficult to set level as external costs difficult to quantify
  3. increases costs reducing international competitiveness
  4. firms may relocate
- Subsidies aim to encourage consumption so it is at the socially optimum level
- Advantages of subsidies:
  1. reduction in cost enables producer to reduce price
  2. Incentive to increase consumption
  3. Companies can benefit from economies of scale increasing international competitiveness
- Disadvantages of subsidies:
  1. Cost to taxpayer - opportunity cost
  2. Ineffective if demand is inelastic
  3. Difficulty quantifying benefit

4. Product quality may be worse
5. Firms inefficient and reliant on subsidies and have less incentive

- Maximum price: A price which makes it illegal for firms to change more than a certain price for a given quantity of a product
- A maximum price must be set below the normal free market equilibrium price to have an effect on price and output
- If quantity is restricted by a maximum price, then some consumers will be willing to pay a higher "unofficial price". This means producers can extract more consumer surplus
- a demand-supply curve: If it's set below the equilibrium there will be excess demand and shortage in supply as producers are less willing to manufacture products
- Advantages of a maximum price:
    1. Enables low income customers to afford products
    2. Increases demand for merit goods
    3. Lower prices mean higher consumer welfare
    4. Incentivises firms to cut costs to maintain profits
    5. Helps prevent an increase in inflation
    6. Prevent monopolies from exploiting customers
- Disadvantages of a maximum price:
    1. Shortages mean some may not be able to a buy a product
    2. Producers may exit the market as it isn't profitable so subsidies are needed which is expensive
    3. Firms might raise prices in other ways
    4. Excess demand can lead to black markets
- Minimum price: A price, usually set by the government, which is guaranteed for producers to make sure they receive a fair price
- Minimum price on the demand-supply graph: If the minimum price is above the equilibrium, it will reduce demand but increase supply leading to excess supply which has to be stockpiled or destroyed
- Standard minimum wage diagram suggests a minimum wage leads to a contraction in employment but this depends on the minimum wage level
- If labour demand is inelastic, a higher minimum wage, will cause only a limited contraction in the level of labour demand
- A minimum wage is a statutory pay floor that cannot be undercut
- To be effective a minimum price must be set above the free market equilibrium- it will have no impact if it is set below
- Advantages of a minimum price:
    1. Producers know in advance the price they will receive for their product
    2. Greater certainty enables producers to plan investment and output
    3. Stock piles can be used when demand is reduced
    4. Can reduce demand for demerit goods
    5. May benefit other industries from reduced competition
- Disadvantages of a minimum price:
    1. Excess supply is likely to be wasted which is a waste of resources
    2. Costs of storage are borne by taxpayer
    3. Intervention buying may be necessary to maintain a minimum price which involves an opportunity cost
    4. Higher costs for consumers
    5. Producers could join cartels

- Advantages of a minimum wage:
  1. Ensures a more equal pay distribution- normative judgement
  2. Boosts income of minimum wage earners
  3. Encourages firms to up-skill their workers
  4. Improves incentives to look for paid work
  5. Can be used to tackle discrimination
  6. Decreases the costs of social welfare programs
  7. Easily to implement as workers will report violations
  8. No significant effect after its introduction in1998
  9. Extra tax revenue for governments
- Disadvantages of a minimum wage:
  1. Adds to the costs of employing workers which might cause higher employment
  2. Small business may struggle to make a profit and fall
  3. May make UK firms less competitive so businesses may outsource production
  4. May encourage illegal employment of immigrants
  5. Higher labour costs might increase inflation which then lowers real incomes
  6. May be influenced by political pressure
- Tradable pollution permits: Rights to sell and buy actual or potential pollution in artificially created markets in the form of permits to pollute to a certain level or face fines. They can be traded with more polluting firms
- The cap for carbon dioxide on a tradeable pollution permit is decreasing so the price increases which creates a greater incentive to reduce emissions
- Advantages of tradable pollution permits:
  1. They work through the market mechanism allowing low polluting firms to grow and expand
  2. They are an incentive to reduce pollution
  3. The costs are low compared to those of other systems of regulation
  4. Government can use revenue to protect the environment
- Disadvantages of tradable pollution permits:
  1. Pollution continues albeit at a lower level
  2. Large efficient firms might buy up permits and continue to pollute
  3. There are administrative costs
- The EU emissions trading system (ETS) is a tradeable pollution permit scheme, with permits called emissions allowances which are distributed between the EU's member governments, who then allocate them to firms
- Advantages of nationalisation (direct provision):
  1. Industry provides goods and services people need better
  2. Governments can set output levels at the most beneficial standard
  3. They can easily be regulated
  4. They pay workers a fair wage
  5. They have greater economies of scale
  6. They can pay suppliers fair prices
- Disadvantages of nationalisation:
  1. Inefficient as they are not driven by market forces
  2. There is little incentive to act prudently leading to a modern hazard as they know governments will bail them out
  3. Can fail to meet consumer demands

4. Opportunity cost of other services that can't be supplied
5. Can reduce people's self-reliance

- State provision of public goods: The response to a lack of provision of a public good by the free market is for the government to provide them financed through taxation.
- State provision overcomes market failure as it increases the production of merit goods and reduce inequalities in access. They also redistribute income from wealthy tax payers
- Provision of information: Publications designed to inform consumers about issues surrounding products and services to increase demand for beneficial goods and vice versa
- Regulation:
    1. Bans on the production of certain products
    2. Limits on the production process or pollution allowed
    3. Protecting people from product consumption e.g smoking
- Advantages of regulation:
    1. It can limit an activity
    2. It can be an incentive to develop new products
- Disadvantages of regulation:
    1. The cost of enforcement
    2. Problems of determining the socially efficient level of the production process
    3. More negative externalities may be created e.g. drug gangs
- Property rights: The exclusive authority to determine how a resource is used by the owner to protect them from external costs
- Advantages of property rights:
    1. An incentive to take into account for private and external costs
    2. The opportunity to fine firms polluting and compensate those damaged
    3. Administration costs are low
- Disadvantages of property rights:
    1. Initial problem of assigning property rights
    2. Expensive legal procedures over issues
    3. May be difficult to agree on the monetary value of the external costs
- Personal carbon allowances: Individuals are allocated a maximum level of emissions with any surplus being tradeable
- Advantages of personal carbon allowances:
    - Rewards ‘green’ individuals
- Disadvantages:
    - Allows households to continue polluting
    - Politically unpopular
- PPP: Public Private Partnerships which is when a private firm works with the government to meet the publics needs. An example of a PPP is a Private Finance Initiative (PFI) which is contacted by the government to run a project