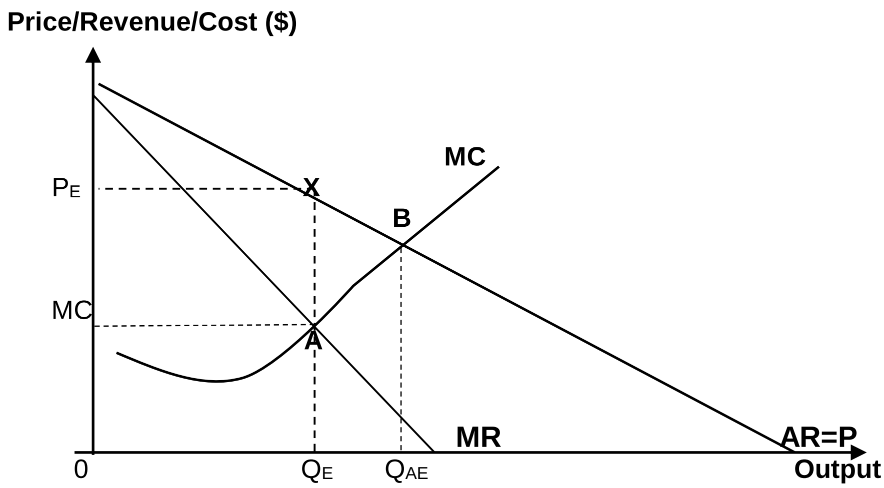
<u>Efficiency - Graph Drawing Exercise 3</u> [Total 5m] **Time: 10 mins**

Using a diagram, explain why a **monopoly/oligopolistic firm/monopolistic competitive firm** is allocative inefficient.

2m: Diagram

- **<u>A</u>ccurate**: consistent with explanation below
- **<u>W</u>ell-labelled**: Proper labeling of axis and curves
- **<u>E</u>asy on the eye** – big enough, neat, well-positioned

<u>Allocative Inefficiency of a Monopoly/Monopolistic Competitive Firm</u>



3m: Explanation of Diagram

Monopolies/Monopolistic Competitive firms are **allocatively INEFFICIENT** as their level of production is at the point where P>MC. This implies that if an additional unit of good is produced by the monopolist, the marginal benefit (Price) of this unit of good will exceed the marginal cost. Hence society will be better-off if this additional unit of good is produced. **[Allocative inefficient: 1m]**

With reference to the above diagram, at the equilibrium output Q_E at MR=MC, P_E > MC, this means the consumers place a higher value of additional units of the good produced than what it costs the firm to produce it. It is still possible to allocate resources in such a manner as to make someone (the consumer) better off without making someone else (the firm- as they are making excessive profits) worse off till the socially optimum output Q_{AE} where P = MC at point B. Hence there is underproduction Q_E-Q_{AE}. **[Underproduction: 1m]**

For the amount of goods Q_E-Q_{AE}, the incremental welfare gain is represented by the area BXQ_EQ_{AE} while the incremental cost is BAQ_EQ_{AE}. Since benefits outweigh costs, the society suffers from a welfare loss of ABX for Q_E-Q_{AE} of goods not being produced. **[Deadweight loss: 1m]**