Solutions

Economics answers are marked by **level of response** against the assessment objectives: award **AO1** knowledge, **AO2** application, **AO3** analysis and **AO4** evaluation.

Each answer shows the steps, then the **result**.

2.1

- a tax on spending that raises a firm's costs and so shifts the supply curve to the left (2 for a clear definition; 1 for a partial idea)

2.2

- a shortage (excess demand), because quantity demanded exceeds quantity supplied (1)

2.3

- consumers bear most of the tax (1)

3.1 B

- A subsidy shifts supply right and lowers the price

3.2

- *[8]* AO1 1 + **AO3 diagram up to 4** (supply shifts up to $S+\text{tax}$, new higher price, lower quantity) + AO2/AO3 up to 3 — the tax raises producers' costs
- supply shifts left
- price rises and quantity falls
- consumption of the demerit good falls; the burden splits by elasticity

3.3

- *[12]* AO1/AO2/AO3 up to 8 + AO4 up to 4. **For tax:** cuts consumption, raises revenue, internalises the external cost. **Against:** if demand is inelastic (addiction), consumption falls little; it is regressive, and a black market may form. **Alternatives:** regulation, education, advertising bans. Judgement: a tax helps but works best combined with information and regulation — its success depends on the PED of the good