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 good that is non-rival (one person's use does not reduce the amount for others) and non-excludable (non-payers cannot be stopped from using it) (2 for both features; 1 for one)

2.2

- rivalry and excludability (1 + 1)

2.3

- a merit good is under-consumed because people undervalue its benefit; a demerit good is over-consumed because people underestimate its harm (2 for a clear difference; 1 for a partial idea)

3.1 C

- Non-rival and non-excludable defines a public good

3.2

- *[6]* AO1 1–2 + AO3 up to 4 — because a public good is non-excludable, people can enjoy it without paying (free riders)
- a firm cannot make buyers pay
- it earns no revenue
- it cannot make a profit, so it will not supply the good
- the government must provide it

3.3

- *[12]* AO1/AO2/AO3 up to 8 + AO4 up to 4. **For:** free provision raises consumption of under-consumed merit goods (education, health), giving large external benefits to society. **Against:** it is costly (high opportunity cost and taxes), may be over-used or wasted, and some can afford to pay. Judgement: free provision is justified where external benefits are large and access matters, but full free provision of *all* merit goods may be unaffordable — targeting or subsidies may be better; it depends on the good and the budget