Solutions

Marking: **K** knowledge, **App** application to the case, **An** analysis (a developed chain of reasoning), **Ev** evaluation (a justified judgement); calculations earn **M1** for the method and **A1** for the answer.

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

2.1

any two: builds **reputation**; customer **loyalty** / repeat sales; allows **higher prices**; less **waste**; fewer returns and complaints; avoids legal action

2.2

- $75 \div 2500 \times 100$
- $= \mathbf{3}\ \%$

2.3

- workers are given **responsibility** for quality (1)
- they are trusted and their ideas are valued, which meets **esteem** needs / is a Herzberg motivator (1)
- so they take pride in their work and motivation rises (1)

3.1

A

3.2

(a)

- a product or service that **meets customers' expectations** / is fit for purpose and free from faults

(b)

- $50\,000 \times 0.02 = 1000$ bottles
- $1000 \times 0.40 = \$\mathbf{400}$ a day

(c) two costs, each outlined (K + App each):

- **wasted** water and bottles: $400 a day
- losing the **supermarket**, a major customer
- damage to **reputation**, so other buyers leave
- extra inspection and rework costs

(d) two benefits, each explained (K, App, An each):

- faults are **prevented** at each stage, so fewer leaking bottles are made and waste falls
- **reassures** the supermarket that quality is checked throughout, so it keeps buying
- lower costs than finding faults at the end
- quality standards can be shown to new customers

(e) for TQM: (An)

- every worker checks quality, so leaks are stopped where they start; less waste; workers motivated by responsibility; saves inspectors' wages

against: (An)

- **training** costs and time; needs commitment from all; risky to remove inspectors while a key customer is threatening to leave

decision: (Ev) for example, introduce TQM gradually but keep some final checks until the leak rate falls, because losing the supermarket would cost far more than the inspectors.

Level 3 (5–6): a justified decision for this business, weighing both sides. Level 2 (3–4): points explained and applied. Level 1 (1–2): points identified.