Solutions

Marking: **M1** a correct method, **A1** the correct answer, **B1** an independent mark.

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

2.1

- mouth, oesophagus, stomach
- small intestine, large intestine

2.2

- removal of **undigested food** as faeces through the anus

2.3

- A **liver**: makes bile
- B **pancreas**: makes digestive enzymes
- C **stomach**: acid kills microbes / protein digestion
- D **gall bladder**: stores bile

2.4

- **assimilation**

2.5

- **oral rehydration solution** (water with salts and glucose)
- replaces the **water and ions** lost / prevents dehydration

3.1

B

3.2

C

3.3

(a) **bacterium**

(b)

- the bacteria release a **toxin**
- the toxin causes **chloride ions** to be secreted into the small intestine
- water moves into the gut by **osmosis**, so faeces are watery

(c)

- large loss of **water** and **ions** / **dehydration**
- blood volume falls; cells and organs cannot work

(d)

- **salts** replace lost ions
- **glucose** gives energy / helps the gut absorb salts and water

(e) any two: treat **sewage**; drink **clean** (boiled, chlorinated) water; **wash hands**; cook food well