Oxford Cambridge and RSA

GCSE Chemistry A (Gateway Science)

J248/02 C4-C6 and C7 Foundation (Foundation Tier)

Question Set 23

1 This question is about the corrosion of metals.

(a) A student investigates the rusting of iron.

Fig. 1.1 shows the experiments she sets up.

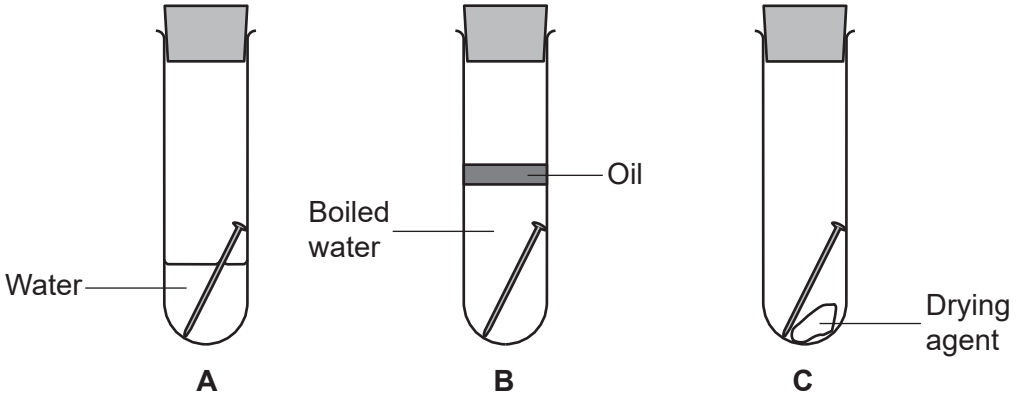

Fig. 1.1

Write about what the student would observe in each tube after one week.

Explain the observations.

Tube **A** .....

Tube **B** .....

Tube **C** .....

[3]

(b) Another student buys a new bicycle. The bicycle chain is made of iron.

The student decides to oil the chain to prevent it from rusting, as shown in **Fig. 1.2**.

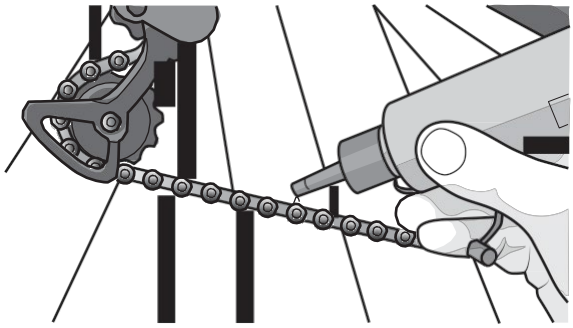

Fig. 1.2

Explain why oiling the chain will prevent the iron from rusting. **[2]**

(c) A galvanised iron bucket is made of iron coated with a layer of zinc.

After years of use, the zinc coating has become scratched.

The iron below the zinc has been exposed but the iron has not rusted.

Explain why the iron has not rusted. **[2]**

Total Marks for Question Set 23: 7

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