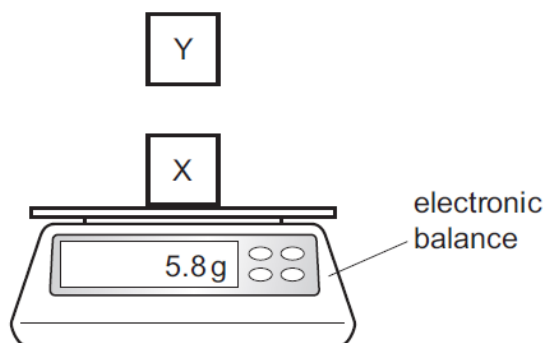


**Magnetism and Electromagnetic – 2021 O Level 5054****1. Nov/2021/Paper\_11/No.27**

Object X is on an electronic balance. Object Y is held above object X as shown.



The reading on the balance increases when Y is moved closer to X.

Why does this happen?

- A X and Y are both made of iron.
- B X and Y are both magnets.
- C Y is a magnet and X is made of iron.
- D Y is made of iron and X is a magnet.

**2. Nov/2021/Paper\_11/No.28**

A teacher wants to demagnetise a bar magnet and tries three different methods.

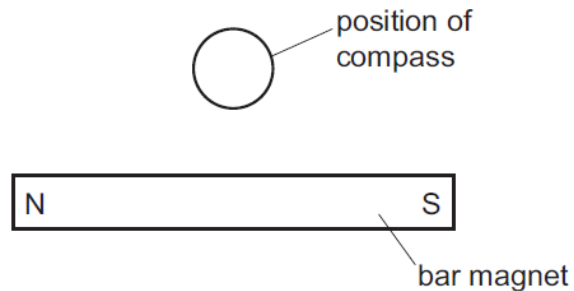
- 1 Heat the bar magnet to a high temperature and let it cool.
- 2 Place the bar magnet east to west and hammer it.
- 3 Place the bar magnet inside a coil that has a direct current in it and remove it from the coil slowly.

Which methods demagnetise the bar magnet?

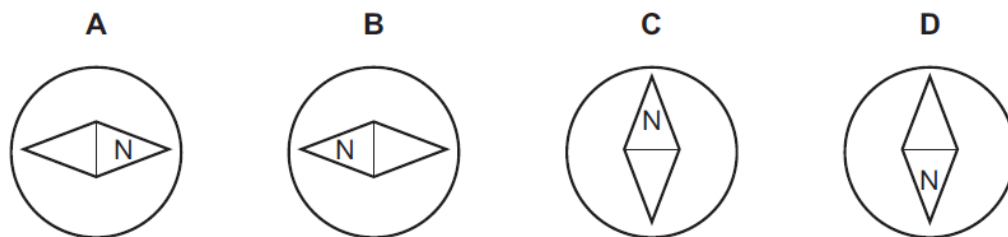
- A 1 only      B 1 and 2 only      C 2 and 3 only      D 1, 2 and 3

## 3. Nov/2021/Paper\_12/No.30

A small plotting compass is placed near to a bar magnet as shown.



Which diagram shows the direction in which the compass needle points?



## 4. June/2021/Paper\_11/No.26

End X of a metal rod attracts the North pole of a compass needle.

Which statement about the rod is correct?

- A It is made of copper that is not initially magnetised.
- B It is made of copper with a South pole at X.
- C It is made of steel that is not initially magnetised.
- D It is made of steel with a North pole at X.

**5. June/2021/Paper\_12/No.30**

End X of a metal rod attracts the North pole of a compass needle.

Which statement about the rod is correct?

- A** It is made of copper that is not initially magnetised.
- B** It is made of copper with a South pole at X.
- C** It is made of steel that is not initially magnetised.
- D** It is made of steel with a North pole at X.