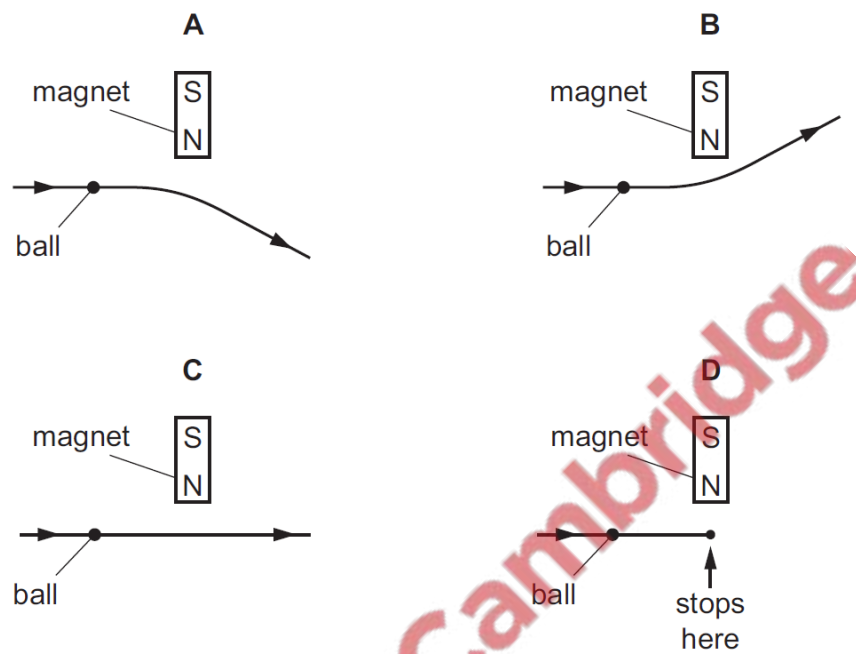


Magnetism – 2019 June

1. 0625/11\$12\$13/M/J/19/No.29

An iron ball on a horizontal wooden table rolls near the north pole of a bar magnet which is lying on the table.

Which diagram shows the most likely path of the ball, as seen from above the table?



2. 0625/12,22/M/J/19/No.28,26

A soft iron bar is a long way from any magnetic field.

How can the material of the bar be described?

- A It is magnetic and strongly magnetised.
- B It is magnetic and unmagnetised.
- C It is non-magnetic and strongly magnetised.
- D It is non-magnetic and unmagnetised.

3. 0625/21/M/J/19/No.26

Why is soft iron used for the core of an electromagnet?

- A Soft iron easily becomes a permanent magnet.
- B Soft iron is a good electrical conductor.
- C Soft iron is a poor thermal conductor.
- D Soft iron loses its magnetism when the current in the coil is switched off.

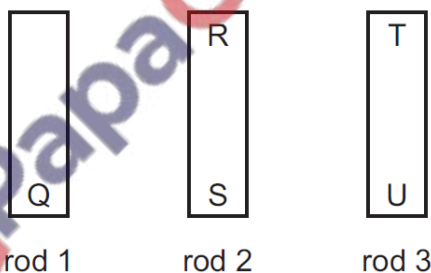
4. 0625/12/F/M/19/No.26

Which action will **not** magnetise a rod?

- A placing a copper rod inside a coil carrying a direct current
- B stroking a steel rod with a permanent magnet
- C hammering a steel rod aligned with the Earth's magnetic field
- D placing a soft-iron rod close to a permanent magnet

5. 0625/12, 22/F/M/19/No.27, 28

The ends of three metal rods are tested by holding end Q of rod 1 close to the others in turn.



The results are as follows.

End Q attracts end R.

End Q attracts end S.

End Q attracts end T.

End Q repels end U.

Which of the metal rods is a magnet?

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