Mark schemes

Q1.

B

decreasing the frequency of the ac input voltage

[1]

Q2.

C

2.5 V div^{-1}

[1]

Q3.

D

25 0.15π

[1]

Q4.

A

doubling the transmission voltage of the cable

[1]

Q5.

D

$$\frac{Be}{2\pi m_e}$$

[1]

Q6.

B

6.0 × 10^{-3} T

[1]

Q7.

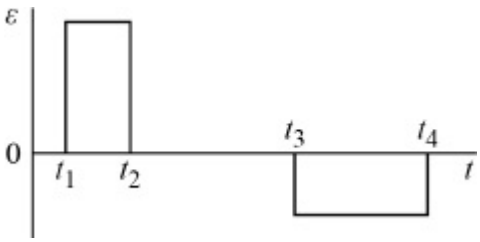
B

The radius of the path followed by an ion is different for each isotope.

[1]

Q8.

A



[1]

Q9.

D

600 μV

[1]

Q10.

D

395 V

[1]

Q11.

C

0.174 A

[1]

Q12.

A

[1]

Q13.

B

[1]

Q14.

B

[1]

Q15.

B

[1]