

- 26** A transformer has a turns ratio of primary to secondary coil of 10 : 1. It is 92% efficient due to joule heating losses.

A 240 V r.m.s. alternating voltage is applied to the primary coil, and a  $6.0\ \Omega$  resistor is connected to the secondary coil.

What is the r.m.s. current flowing in the primary coil?

- A** 0.25 A
- B** 0.37 A
- C** 0.43 A
- D** 0.62 A

- 27** When electromagnetic radiation of frequency  $f$  irradiates a metal surface, electrons are