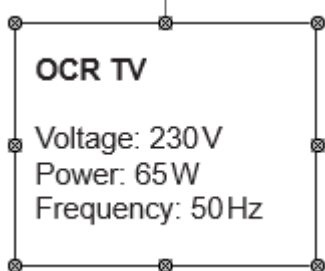


## **GCSE Physics A (Gateway)**

**J249/01 Physics A P1-P4 and P9 (Foundation Tier)**

### **Question Set 16**

1 A TV has the label below on it.



(a) Calculate the **current** in the TV when it is turned on.

Use the equation: power = potential difference  $\times$  current

Give your answer to **2** significant figures.

$$\frac{\text{Power}}{\text{P.D}} = I$$

$$I = \frac{65}{230} = 0.2826 \dots$$

$$= 0.283$$

(3 sf)

Current =  $\frac{0.283}{\dots}$  A [4]

(b) The TV is turned on for 30 minutes.

$$P = \frac{E}{t} \rightarrow 65 = \frac{E}{60 \times 30}$$

Calculate the energy transferred by the TV.

$$E = 117000$$

Energy used =  $\frac{11.7 \times 10^4}{\dots}$  J [4]

(3 sf)

## Total Marks for Question Set 16: 8

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