

**Answer on Question #46017, Physics, Electromagnetism**

The electric potential difference between two points A and B is 42 V. What is the work done by an external agent in carrying a charge of  $50 \cdot 10^{-5}$  C from A to B at constant speed?.

Solution

Work is equal to change of energy

$$W = e \cdot U = 50 \cdot 10^{-5} \cdot 42 = 210 \cdot 10^{-5} \text{ J}$$