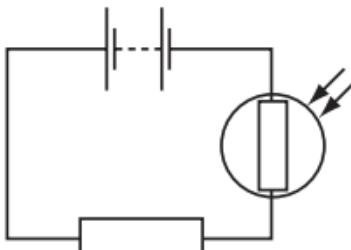


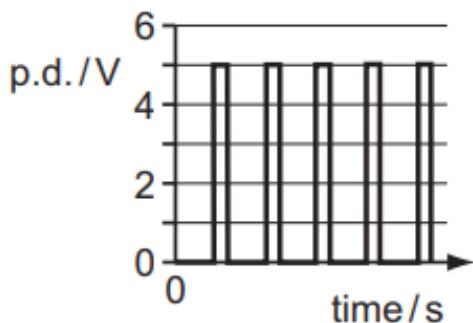
21

- The resistance of a light-dependent resistor (LDR) is $5\text{ M}\Omega$ in the dark and $1\text{ k}\Omega$ when light shines on it. The LDR is connected in series with a 6 V battery with negligible internal resistance and a $5\text{ k}\Omega$ resistor. The circuit is placed in a dark room and the LDR is then illuminated by a flashing lamp

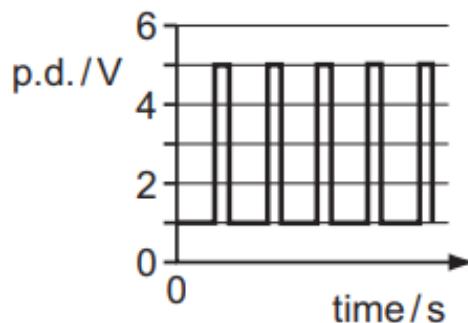


Which diagram shows how the p.d. across the $5\text{k}\Omega$ resistor varies with time?

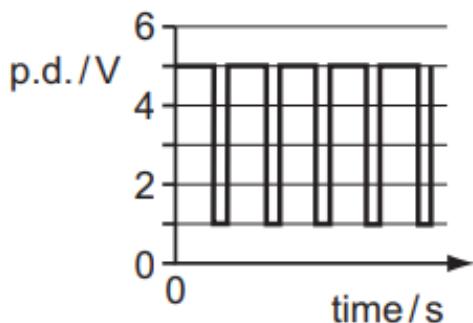
A



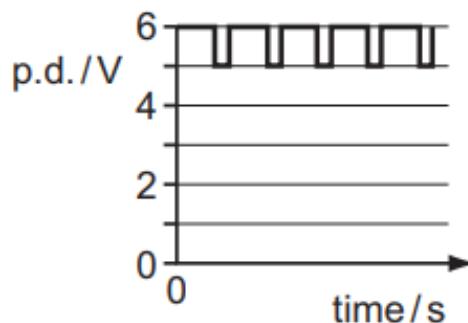
B



C



D



- 22 A steady current I dissipates a certain power in a variable resistor. When a sinusoidal