

**40** A nucleus of carbon-11 contains 6 protons and 5 neutrons.

The nucleus of carbon-11 decays by  $\beta^+$  emission.

What is the total number of up and down quarks in the product of the decay of this nucleus?

	up quarks	down quarks
<b>A</b>	15	18
<b>B</b>	16	17
<b>C</b>	17	16
<b>D</b>	18	15