

2023 Bi H1 Q14

Section: Metabolism and Survival

Topic: Metabolic Rate

Question Summary

A bar-tailed godwit migrates 11,000 km from Alaska to New Zealand in 9 days. Calculate its average speed in km/hr from the options provided.

Worked Solution

Average speed = distance / time.

Convert 9 days to hours: $9 \times 24 = 216$ hours.

Compute speed: $11,000 \text{ km} / 216 \text{ hr} = 50.93 \text{ km/hr}$ (to 2 dp).

■ Answer: B — 50.93 km/hr

Revision Tips

- Always convert time into the units asked for before calculating speed.
- Average speed formula: speed = distance / time.
- Quick check: $216 \times 50 = 10,800$; remainder 200 $\rightarrow$ about 0.93 more, so $\sim 50.93 \text{ km/hr}$.